

Submission 2071 (Brian Stanke, City of San Jose Airport Department, July 1, 2020)

City of San Jose Airport Department Comments

Draft EIR/EIS for California High-Speed Rail, San Jose to Merced Project Section

Appendix 3.11-B Airport Obstructions

2071-2122

1. **General Comment.** The text, starting on pages B-1 & B-2, should more clearly differentiate between State-required CLUPs and Federal Aviation Regulations (FAR)/Part 77 governing airport obstructions. FAR Part 77 applies to airport vicinities irrespective of CLUP airport influence areas (AIAs) and policies, and the Part 77 imaginary surfaces cover a much wider area than CLUP AIAs.

2071-2123

2. **Pages B-3 – B-6.** The Analysis discussion would be more accurate and complete if revised to reflect the following information:

- The appropriate official source map for FAR Part 77 obstruction surfaces are the Airport Airspace drawings contained within an FAA-approved Airport Layout Plan, not CLUP exhibits (which, in the case of the CLUP for San Jose Airport, are not necessarily correct).
- Nevertheless, what’s most relevant is the FAR Part 77 “notification surface”, not typically depicted in an Airport Layout Plan or CLUP, but which is the imaginary surface which triggers the requirement for filing a proposed structure for FAA obstruction evaluation. The San Jose Airport Department has previously informed the HSRA that the Part 77 notification surface over the project alignment ranges from approximately 70 feet NAVD88 at the Santa Clara Caltrain Station to 140 feet NAVD88 at Diridon Station.
- Proposed project structures that may exceed a Part 77 notification surface potentially include not just the identified “radio towers”, but also lighting/communication poles and catenary lines, power substations, station roofs, and elevated grade crossing structures, unless an analysis has already been conducted to find that only the proposed radio towers would exceed the notification surface, even in the viaduct alternatives in the Diridon Station approach segment.
- Proposed structures, if any, that would exceed a Part 77 obstruction surface may be determined acceptable by the FAA through issuance of a “Determination of No Hazard to Air Navigation” subject to mitigating conditions such as installation of top-point obstruction lighting and notifications of completed construction.

2071-2124

Section 3.11 Safety and Security

1. **Page 3.11-6.** In the heading for the paragraph on FAR Part 77 (middle of page), the word “Administration” should be corrected to Regulations.

2071-2125

2. **Page 3.11-34.** In the 3rd and 4th paragraphs (begins with “FAA Regulation...”), the following revisions should be made:

- In the 3rd paragraph, 1st sentence, “FAA Regulation” should be corrected to Federal Aviation Regulations.
- The 3rd paragraph, 4th sentence (begins with “Any penetrations...”) should more precisely state that any penetrations of the FAR Part 77 notification surface are subject to FAA review.

2071-2125

- The 4th paragraph, 2nd sentence should clarify that CLUPs only address FAR Part 77 obstruction surfaces within the AIA. See General Comment above on Appendix 3.11-B regarding the need to differentiate between the applicability of FAR Part 77 vs CLUP policies.
- The 4th paragraph, 5th sentence (begins with “Airport master plans...”) can be revised to expressly state that Compliance with FAR Part 77 and ALUC CLUPs serves to minimize airport hazards and risk of accidents.

2071-2126

3. **Page 3.11-62.** In the 1st and 2nd paragraphs under “Impact S&S#9”, the following revisions should be made:
- In the 1st paragraph, 2nd sentence, delete the incorrect reference to “and in airport land use planning documents”. CLUPs have no relevance to FAA implementation of FAR Part 77.
 - In the 2nd paragraph, 1st sentence, the reference to FAR Part 77 “height limit contours” should be corrected to notification surface.
 - The 2nd paragraph, 2nd sentence should be revised to reflect the fact that CLUPs are not the official source for FAR Part 77 surfaces (as noted in the comment above on Appendix 3.11-B, pp. B-3 – B-6).

2071-2127

4. **Page 3.11-63.** As a general comment regarding the discussion of impacts, the text should be revised for consistency with the above comments on Appendix 3.11-B and Page 3.11-34, 4th paragraph. Such revisions would better align the analysis with the “CEQA Conclusion” text on Page 3.11-64.

2071-2128

5. **Page 3.11-87.** The tabular text for “Impact S&S#9” is correct *if* an analysis has already been conducted to find that only the proposed radio towers, even for the viaduct alternatives in the Diridon Station approach segment, would exceed the FAR Part 77 notification surface.

2071-2129

6. **Page 3.11-95.** See comment for “Impact S&S#9” as immediately above.

Prepared 5/26/2020

Response to Submission 2071 (Brian Stanke, City of San Jose Airport Department, July 1, 2020)

2071-2122

In response to this comment, the Authority has revised the discussion of the FAR Part 77 assessment, the descriptions of the applicability of FAR Part 77, and the applicability of airport CLUPs in Section 3.11, Safety and Security, and Appendix 3.11-B, Airport Obstructions, in the Final EIR/EIS. The revisions clarify the FAR Part 77 assessment process and FAA reference maps. In addition, the revisions clarify that the FAR Part 77 assessment for the communications towers in Section 3.11 and Appendix 3.11-B of the Draft EIR/EIS was conducted using the FAA's FAR Part 77 Online Notice Criteria Tool (FAA 2018), and not the FAA reference maps or CLUP maps.

2071-2123

Regarding the FAR Part 77 assessment, please refer to the response to submission SJM-2071, comment 2122. The Authority has not conducted additional FAR Part 77 analyses for the Final EIR/EIS but would submit regulatory filings to FAA during the final design and construction process. Section 3.11, Safety and Security, and Appendix 3.11-B, Airport Obstructions, of the Final EIR/EIS have been revised to incorporate information provided by the commenter. Please see references to FAR Part 77 Online Notice Criteria Tool (FAA 2018), ACLPs, and AIA maps. The text was also revised in the Final EIR/EIS to refer to other types of structures that may require Part 77 notification. The FAR Part 77 assessment discussion in the Draft EIR/EIS was developed to identify required compliance with FAR Part 77 regulations and to illustrate potential construction impacts of the alternatives with respect to CEQA significance criteria. The analysis in the Draft EIR/EIS is not intended to emulate the FAR Part 77 regulatory filing and FAA review process that would be required as part of final project design and construction. The Authority conducted a preliminary evaluation of communications towers for each alternative to illustrate potential impacts, as communications towers are the tallest structures that would be constructed for the alternatives. The Authority has revised the FAR Part 77 assessment discussion in the Final EIR/EIS to clarify that the assessment was conducted using the FAR Part 77 Online Notice Criteria Tool (FAA 2018) and that the purpose of the analysis in the Draft EIR/EIS is to provide a preliminary assessment of which communications towers would require FAR Part 77 notification for each alternative. The Authority would submit FAR Part 77 regulatory filings to FAA for all communications towers and other types of structures (e.g., station roofs, viaducts) during the final design process.

2071-2124

In response to this comment, the heading of the subsection in Section 3.11.2.1, Federal, of the Final EIR/EIS has been corrected to read "Federal Aviation Regulations (14 C.F.R. Part 77)."

Response to Submission 2071 (Brian Stanke, City of San Jose Airport Department, July 1, 2020) - Continued

2071-2125

In response to this comment, Section 3.11.5.3, Community Safety, in the Final EIR/EIS has been revised to clarify application of the FAR Part 77 Notice Criteria Tool (FAA 2018) and airport land use commission CLUPs. Text has been added to the Final EIR/EIS to state: "Compliance with FAR Part 77 and airport land use commission CLUPs serves to minimize airport hazards and risk of accidents."

2071-2126

In response to this comment, text in Impact S&S#9 in the Final EIR/EIS has been revised.

2071-2127

Regarding the FAR Part 77 assessment, please refer to the response to submission SJM-2071, comment 2122. The Authority has not conducted additional FAR Part 77 analyses for the Final EIR/EIS but would submit regulatory filings to FAA during the final design and construction process. Section 3.11, Safety and Security, and Appendix 3.11-B, Airport Obstructions, have been revised in the Final EIR/EIS to incorporate information provided by the commenter in the response to submission SJM-2071 comments 2122, 2123, and 2125.

Text in Table 3.11-17 of the Final EIR/EIS has been revised to add "or other proposed structure."

Section 3.11 and Appendix 3.11-B in the Final EIR/EIS have been revised to incorporate information requested by the commenter.

2071-2128

The FAR Part 77 Notice Criteria Tool (FAA 2018) was utilized to assess the number of features that would exceed the FAR Part 77 notification surfaces. A statement has been added to Impact S&S#9 noting that this is the case.

2071-2129

The text referenced by the commenter remains correct and no change has been made at that location.

Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020)



June 23, 2020

Boris Lipkin, Northern California Regional Director
 Dave Shpak, Deputy Project Manager of San Jose to Merced
 ATTN: San Jose to Merced Project Section: Draft EIR/EIS,
 California High Speed Rail Authority
 100 Paseo De San Antonio, Suite 300
 San Jose, CA 95113

SUBJECT: City of San José Comments on the San José to Merced Project Section Draft EIR/EIS

On behalf of the City of San José (City), thank you for the opportunity to review and comment on the project-level Draft Environmental Impact Statement/Environmental Impact Report (DEIR) for the San José to Merced segment of the California High Speed Rail (HSR) program. The preparation of any joint National Environmental Policy Act/California Environmental Quality Act (NEPA/CEQA) document is a daunting task made even more so given the complexity of a more than 150-mile project boring through Pacheco Pass and crossing a variety of rural, suburban, and urban communities, including over 20 miles within the San José city limits. The level of effort and thoughtful analysis is apparent.

The development of High Speed Rail (HSR) across the State, and through Silicon Valley, is essential for our regional and local efforts to improve and connect the passenger rail network in the Bay Area with the rest of the State. The City continues to support the development of California's High Speed Rail system as an integral backbone of the Statewide rail network linking the capitol of Silicon Valley with the Central Valley and Southern California. At the same time the City of San José recognizes the importance of making the most of this project while minimizing its impacts, as articulated more fully throughout this letter.

The City looks forward to continued opportunities to partner with California High Speed Rail Authority (HSR Authority) to address the identified areas of concern, resolve the remaining issues, and collaborate in multi-agency initiatives to fully build out the stations, facilities, and infrastructure to deliver high-quality service and improved quality of life for residents along the corridor.

General Comments

The following discussion provides some general comments as a summary of the City's specific comments on the DEIR that are presented in Appendix A. There is no dispute about the purpose or need for the project. In general, the City believes the DEIR is lacking in the following respects:

- The descriptions of existing conditions and adopted plans is incomplete.
- The DEIR does not identify all significant impacts and cumulative impacts.
 - The most important of these are safety impacts associated with additional trains, higher speeds, and additional tracks in at-grade crossings.
- Mitigation measures identified by the DEIR are insufficient to address significant impacts.

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1654-1382

- Impacts that HSR could feasibility and practicably fully mitigate, but does not, include emergency response, noise, safety, and circulation.
- Disproportionate impacts to disadvantaged communities are not addressed fully in the proposed project design or mitigation measures.

1654-1383

The DEIR assesses a standalone HSR project that was scoped and developed by the HSR Authority. At the same time, multiple agencies in the San José to Gilroy South Bay rail corridor are developing long-range multi-agency strategic plans for transforming services and mobility across the corridor and beyond. These include the Diridon Integrated Station Concept (DISC) Plan and associated program of projects, Caltrain Business Plan, and Caltrain Grade Separation Policy. The HSR project is essential to many of these plans, especially the extension of tracks and electrification along Union Pacific Railroad (UPRR) right-of-way (ROW). The selection of the preferred alternative explicitly references how Alternative 4 advances expanded Caltrain service. When examining impacts, however, the DEIR does not disclose and analyze the reasonably foreseeable consequences and impacts of these adopted or on-going planning efforts that are either tied to the HSR project, or in conflict with it. This disconnect plays out at Diridon Station and its approaches, at-grade crossings, Caltrain stations, and other areas of the DEIR, as discussed in detail below and in Attachment A.

HSR and the Diridon Integrated Station Concept Plan

The City appreciates the HSR Authority's continued engagement in the DISC planning process. The City, Santa Clara Valley Transportation Authority (VTA), Caltrain, and the HSR Authority are partners in realizing a vision for Diridon Station as a grand destination for community and commerce where people seamlessly connect via all transportation modes.

1654-1384

At the same time, the design of San José Diridon Station and its approaches in Alternative 4 is incompatible with that in the adopted DISC Concept Layout. Construction of Alternative 4 followed by a subsequent construction of the Concept layout would involve hundreds of millions of dollars in wasted costs and years of additional construction disruption, including in the Gregory, Gardner, and other Diridon Area neighborhoods.

1654-1385

The City asks the HSR Authority to add a design variant to their Final EIR that minimizes the construction of project elements by HSR that would be removed to rebuild Diridon Station between Taylor Street and Bird Avenue. Further, between Bird Avenue and Tamien Caltrain Station and between Taylor Street and Control Point Coast in Santa Clara, the design variant should harmonize the preliminary design and footprint as much as possible with that of the DISC Concept Layout and associated engineering being undertaken in the coming months. The rationale for the new variant is to actualize a low build introduction of HSR into the corridor that minimizes the construction disruption and costs from any early HSR service before Diridon Station is reconstructed, per the Concept Plan.

1654-1386

The DEIR distinguishes the HSR project from the DISC Plan, stating that "DISC is a separate planning process and decisions about future changes to Diridon station and the surrounding, Caltrain-owned rail infrastructure and corridor are the subject of multiple planning and agreement processes that are proceeding independently from this environmental process." The City requests that HSR Authority leverage the work of DISC to resolve significant and unavoidable impacts of the HSR project. The City asks the HSR Authority, within the Final EIR or as part of its adoption, to commit that the HSR Authority will pursue funding for their proportionate contribution to the reconstruction of the Diridon Station, and

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1654-1386 | its related program of projects, concurrent with the construction of the San José to Merced segment of the HSR project. These commitments could be used as alternative mitigations to Diridon approach impacts from at-grade crossings, as detailed in this letter and Attachment A.

1654-1387 | Please refer to the memoranda by staff and City Councilmembers and action taken at the February 4, 2020 and August 20, 2019 San Jose City Council meetings for detailed descriptions and expectations of aesthetics, noise, and vibration treatments, partnership, and funding, including expectations of the HSR Authority during the environmental process.¹

1654-1388 | **Environmental impacts of At-Grade Crossings and suggested mitigations**

As further detailed in Attachment A, the decision of the HSR Authority to not include grade separation of the rail line in Alternative 4 leads to significant impacts in emergency response, noise, and circulation. Further, HSR and increased Caltrain operations through these crossings would pose an increased safety risk of collisions between trains and people walking, biking, and driving across these crossings. Grade separation between tracks and crossings at Auzerais Avenue, West Virginia Street, Skyway Drive, Branham Road, and Chynoweth Avenue, combined with the Caltrain stations design changes discussed in Attachment A, would eliminate noise impacts resulting from train horns that must be sounded at at-grade crossings and certain Caltrain stations. The same grade separations would also eliminate emergency response, vehicle/bike/pedestrian collision risks, and circulation impacts associated with at-grade crossings, as the streets would be separated.

1654-1389 | While adding grade separations along Monterey Road could increase costs and result in some additional visual and/or construction impacts, these grade separations have been shown to be feasible, practicable, and would result in overall lower environmental impacts. The City has prepared and delivered to the HSR Authority in October 2019 grade separation concepts that include conceptual designs, cost estimates and construction phasing (Attachment B). These show three grade separation configurations:
A) retained embankment
B) hybrid
C) trench

These grade separations could be constructed across Skyway, Branham, and Chynoweth. The very preliminary engineering cost estimates included in the conceptual designs are in the range of \$400 million (year of expenditure) for configurations A or B and \$1.4 billion for configuration C. Adding any of the configurations to Alternative 4 would still result in a cost billions of dollars below Alternatives 1, 2, or 3. Configurations A or B would introduce some level of visual impacts, but significantly less than those of Alternative 1 or 3. The impacts would be mitigated by AVQ-MM#4 and additional landscaping along the west side of Monterey Road. The emergency response, safety, noise, and circulation mitigations from grade separations would far outweigh any remaining visual impacts after mitigation.

The City asks the Authority to:

¹ The February 4, 2020 meeting materials can be found at <https://sanjose.legistar.com/LegislationDetail.aspx?ID=4311820&GUID=A390E029-8BCF-42D4-B5C8-161C43FB4ACE&Options=&Search=> and the August 20, 2019 meeting materials can be found at <https://sanjose.legistar.com/LegislationDetail.aspx?ID=4079644&GUID=28D0FEFB-F7FA-4B6E-B4CF-47D3E90FE229&Options=&Search=>

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1654-1390 | 1. Include grade separations in the project or as mitigation measures at Skyway Drive, Branham Road, and Chynoweth Avenue in the Final EIR

1654-1391 | 2. Begin inter-agency negotiations on an agreement on the proportionate share contributions of funding for construction of those grade separations with the City and other relevant state, regional and local agencies

1654-1392 | 3. Include a commitment to fund the grade separations at Auzerais Avenue and West Virginia Street, as part of DISC implementation, as alternative mitigations to the significant impacts at those crossings

1654-1393 | As with the Diridon Station issue, building a HSR project without grade separations, and asking other agencies to add grade separations after trains are running, would waste hundreds of millions of dollars and add new staging and construction costs and additional construction disruption.

1654-1394 | **Cumulative environmental impacts from adopted plans of other rail operators**

The DEIR does not include the Caltrain Service Vision, nor the related work around the Caltrain Business Plan, that has been developed over the last two years. By failing to mention the Caltrain Service Vision adopted in October 2019, or to examine the consequence of added train traffic, the DEIR does not disclose the reasonably foreseeable cumulative impacts of the additional Caltrain service that Alternative 4 was explicitly designed to enable. These foreseeable additional impacts, including noise, emergency response times, vibration, circulation, and safety, which are not disclosed in the DEIR would fall disproportionately on the low-income and minority populations in southern San José and minority populations in the Gregory and Gardner neighborhoods. Those areas would see the highest increase in Caltrain service under the adopted Caltrain Service Vision.

1654-1395 | Over the last two years the DISC Partner Agencies, through the work under the Caltrain Business Plan, and DISC, have expended considerable efforts to come to an agreement on defining the future facilities needed to enable all service providers through Central San José. Since the DEIR does not base the project description and footprint on that body of work, it raises multiple questions about the adequacy of the proposed project footprint and/or impacts on other rail operators. The DEIR is unclear on the future operations and availability of the Union Pacific Railroad tracks through the CP Coast to Gilroy Corridor. This could have impacts to other passenger rail operators and require additional rail infrastructure or the curtailment of planned passenger rail service increases.

1654-1396 | Please clarify how East Bay passenger rail operators would be accommodated under Alternative 4. If the UPRR track is dedicated to freight, explain whether the Altamont Corridor Express (ACE) and Amtrak Capitol Corridor will utilize Caltrain/HSR blended tracks or a separate track. If ACE and Capitol Corridor used blended tracks, detail the implications for all four operators and specifically, whether all rail operators' planned frequency increases can be achieved, or whether they will be curtailed. If an additional track is needed from CP Coast to Michael Yard to accommodate ACE and Capitol Corridor, this is not shown in the plans, nor are the additional impacts disclosed.

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1654-1397

Environmental Justice

The DEIR identifies disproportionate impacts to low-income and minority communities in San José. Page 5-83 states that the “population within the Monterey Corridor Subsection has a higher percentage of minority populations (73.7 percent) compared to the reference community (66.3 percent) and a higher percentage of low-income populations (28.8 percent) than the reference community (23.3 percent). The San José Diridon Station RSA has a higher percentage of low-income populations (32.7 percent) than the reference community.” The DEIR on page 5-3 further states in regard to USDOT Order 5610.2(a), “USDOT will not carry out any programs, policies, or activities that will have a disproportionately high and adverse effects on minority populations or low-income populations unless ‘further mitigation measures or alternatives that would avoid or reduce the disproportionately high and adverse effect are not practicable.’” This leads to the finding that “Mitigation with noise barriers would not fully address the concerns raised during the environmental justice engagement process regarding noise and vibration, and noise and vibration impacts would predominately be borne by communities with minority populations and low-income populations higher than those of the reference community. As a result, operational noise impacts would result in disproportionately high and adverse effects on minority populations and low-income populations under Alternatives 2 and 4.” The City and the affected communities have asked the HSR Authority to include grade separations as mitigations for these impacts and have provided conceptual designs to the HSR Authority (Attachments B, C, and D). The DEIR, however, does not examine grade separations as potential alternatives or mitigations for the disproportionate noise, safety, and other impacts.

1654-1398

Both the design of grade separations under Alternative 2 and the City’s preliminary designs (Attachment B) show that grade separations are feasible. Adding any of the grade separation configurations the City examined to Alternative 4 results in a capital cost which is still several billion dollars lower than Alternative 1, 2, or 3; thus, adding grade separations to Alternative 4 appears to be practicable. Therefore, the City requests the HSR Authority add a modified version of Alternative 4 that includes grade separations and/or a proportionate share contribution to grade separations at Skyway Drive, Branham Road, and Chynoweth Avenue as mitigation for noise, emergency response times, circulation, and safety impacts that disproportionately affect the minority and low-income populations along Monterey Road. The unmitigated significant impacts that disproportionately impact environmental justice and minority populations and low-income populations is unacceptable and contrary to State and Federal policies and guidance.

1654-1399

Station design and access at Capitol Station and Blossom Hill Station

The HSR project proposes to fully rebuild the Caltrain stations from Capitol Station through Gilroy. This includes relocating platforms and moving or adding new station entrances. The design of station access and egress should be considered with the planning and design of walking and bicycling routes, the local street network, pick-up/drop-off, parking, and future development on the adjacent properties. Therefore, joint design process between HSR, Caltrain, VTA, and the City of San José are needed to resolve station access design issues at San José Caltrain stations. The HSR Authority has not yet begun such joint planning processes.

1654-1400

Two situations that should be addressed through joint station-specific planning and station access coordination are at Capitol Station. First, in Alternative 4, the western entrance of the relocated Capitol Station is proposed to be located in middle of an existing drive-in theater with no public access. A

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1654-1400

publicly-accessible western station entrance should be provided, with a local access and circulation plan developed and funded to ensure easy walking, bicycling, transit, and drop-off access. Second, the adopted Communications Hill Area Development Policy requires the construction of a pedestrian pathway from the Communications Hill development to the Caltrain station. The Transportation Section of the Communications Hill EIR (now being implemented) requires a trail and bridge connection to the existing Capitol Caltrain Station. The DEIR does not show that related site, nor identify if a conflict might arise. Relocation of the station further south complicates design of the walkway and pedestrian over-crossing. In the absence of station-specific access planning, HSR is clearing footprints for multiples stations that may not be adequate for the eventual stations and related access facilities.

For directness of travel, customer experience, and visual reasons, the City asks the HSR Authority to analyze and clear designs for Capitol and Blossom Hill stations with passenger access to the platforms via undercrossings, consistent with the “City Preferred Options” attached to the City of Morgan Hill’s comment letter on the DEIR.²

Additional Comments

Please see Attachment A for additional comments organized by Chapter and Section.

Conclusion

In closing, we thank the HSR Authority for the opportunity to comment on the DEIR. The City is committed to the HSR program and our joint work through DISC as a full partner. We will make our staff available to work through the issues raised in this comment letter with HSR.

Connecting San José to the Central Valley and Southern California and transforming Caltrain service in southern San José are tremendous investments in our future. The project represents an unparalleled opportunity for people in the South Bay to connect to the rest of the California, reach new opportunities with greater mobility and less environmental impact, and live, work and play in great, transit-oriented communities. For the City of San José, the completion of High-Speed Rail, the Caltrain Service Vision, and the Diridon Integrated Station Concept Plan, together will advance the City’s vision of having connected and robust transportation options, embracing growth in the right places, and enjoying a thriving urban core. The City appreciates the partnership HSR has forged to date across these interrelated projects with the City and community, and looks forward to working together to make the most of this extraordinary opportunity.

Sincerely,



John Ristow
 Director
 Department of Transportation
 City of San José



Rosalynn Hughey
 Director
 Department of Planning Building and Code
 Enforcement
 City of San José

² “Caltrain Station Access” Perkins & Will, page 10
<http://morganhillca.iqm2.com/Citizens/FileOpen.aspx?Type=4&ID=6791>

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Attachments

- A. Additional Comments by Chapter
- B. Conceptual Designs, Cost Estimates, and Construction Phasing Plans for Grade Separations
- C. City Correspondence to HSR Authority April 14, 2016, May 7, 2018, August 22, 2019, and June 1, 2020
- D. Neighborhood letter to HSR Authority September 19, 2018
- E. Prior City Comments on Alternatives 1, 2, and 3 engineering drawings and potential impacts
- F. Information Memo on High Speed Rail Draft Environmental Impact Statement June 22, 2020

Attachment A: Additional Comments by Chapter

Specific Document Comments

1654-1401

Chapter 1 Project Purpose, Need, and Objectives

The Grade Separations in Santa Clara County mentioned in Subsection 1.4.3 are VTA projects, not Caltrain projects. The crossings are UPRR-owned, not Caltrain owned. While these grade separations were in the 2000 Measure A sales tax, they have no local funding allocated by VTA for construction. The grade separations are unfunded and should be identified as such.

1654-1402

In subsection 1.3 & 1.4 Relationship to Other Transportation Projects please include a sub-section on Diridon Integrated Station Concept Plan (DISC) in section 1.3 or 1.4. the HSR Authority is a multi-agency partner in this effort, along with Caltrain, VTA, and the City of San José.

1654-1403

Chapter 2 Alternatives

As described above, the at-grade crossings in the HSR blended corridor north of Coyote Valley are unacceptable to the City because of collision risks, circulation impacts, noise impacts, and environmental justice concerns. Alternative 4 needs to add the grade separation of the crossing at Auzerais Avenue, as either a project feature of mitigation. This crossing serves over 6,000 vehicles (average daily traffic or ADT) today and is projected to serve significantly more traffic with future station area development. It is only one of three streets to cross the train corridor between Diridon Station and I-280. The HSR 2018 Business Plan Phase I service plan indicates 160 HSR trains per day running south of Diridon Station. This would have major negative impacts to traffic, safety, noise, and emergency response. Adding a 3rd track exacerbates these concerns as it widens the crossing distance across the tracks and increases risk of exposure to train collision per FRA.³

1654-1404

As grade separation of Auzerais Avenue and West Virginia Street may not be possible with an at-grade Diridon Station, an alternate mitigation would be for the HSR Authority to commit its proportionate share contribution toward the grade separation of Auzerais Avenue and West Virginia Street, as part of the DISC Diridon Station reconstruction.

1654-1405

Sections 3.2 Transportation

Per City's letter to the HSR Authority on October 17, 2018, regarding Alternative 4, at-grade crossings on the High Speed Rail corridor are unacceptable. Currently, there are ten at-grade vehicular crossings on the proposed HSR corridor in the City of San José. These crossings have one to two tracks and serve 16 to 52 trains per day, up to a maximum train speed of 79 mph. In contrast, Alternative 4 proposes adding a third track, running high speed trains up to 110 mph, and serving up to 160 high speed trains per day. These

³ "In-Depth Data Analysis of Grade Crossing Accidents Resulting in Injuries and Fatalities" Final Report, May 2017. DOT/FRA/ORD-17/04. US Department of Transportation, Federal Railroad Administration. Pg. 12 – 16, 33 – 39 <https://railroads.dot.gov/eLibrary/depth-data-analysis-grade-crossing-accidents-resulting-injuries-and-fatalities>

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Attachment A

1654-1405 | conditions entirely contradict our City principles and policies for safety, in addition to state and national guidance⁴ and data⁵, and even the HSR Authority’s own Sustainability Vision/Commitment Policy.

1654-1406 | Caltrain Bridges
The Alternative 4 alignment from Taylor Street to Almaden Road proposes running primarily on existing railroad bridges many of which are around ninety years old. Please provide analysis of existing bridges that assesses any historic merit and demonstrates they do not need retrofits or reconstruction to meet the standard for Type 1 structures.

1654-1407 | Rather than building new railroad bridges next to the existing ones, full replacement of existing bridges with single bridge structures would reduce the project footprint and property impacts near the bridges at: Taylor, I-280, Prevost, SR 87, Guadalupe River, Willow, Alma, and Almaden Rd.

1654-1408 | 3.2.6.3 Parking
Impact TR#9 Permanent Effects Related to Parking
The City is considering a Parking and Transportation Management District as part of its ongoing update to the adopted Diridon Station Area Plan. The DEIR finds that HSR will add to overall parking demand in the area of the proposed district. In order to minimize the direct and indirect impacts, the City requests that the HSR Authority commit to joining the Diridon Area Parking and Transportation Management District and thus participate in the holistic solution to parking alongside other partners in the DISC.

1654-1409 | The reference to the San Jose Diridon Station Facilities Master Plan is outdated and should be replaced with references to the on-going update to the adopted Diridon Station Area Plan and the Diridon Integrated Station Concept Plan, of which the HSR Authority is one of four lead agencies.

1654-1410 | Impact TR#16: Continuous Permanent Impacts on Passenger Rail System Capacity
At Diridon Station, the Capitol Corridor trains use multiple tracks and platforms and is not limited to MT-1. Further Capitol Corridor currently stores and turns its trains in Diridon Station. The DEIR is unclear on if this activity would continue or be displaced under Alternative 4 changes to Diridon Station. If displaced the EIR needs to disclose where they would be relocated, as both the Caltrain Central Maintenance and Operations Facility and Michael Yard are fully occupied by Caltrain and ACE respectively and would not be available for Capitol Corridor trains.

1654-1411 | Impact TR#18: Permanent Impacts on Pedestrian and Bicycle Access
Impact TR#19: Continuous Permanent Impacts on Pedestrian and Bicycle Access
TR-MM#1 ... Address Traffic Delays
The appropriate and acceptable mitigation measures for traffic delay to the City of San José are:

- (1) grade-separate key locations (Skyway Drive, Branham Road, Chynoweth Avenue, Auzerias Avenue, and West Virginia Street), and
- (2) reconstruct the west side of Monterey Road with pedestrian/bike facilities specified by the San José Complete Streets Design Standards and Guidelines.

⁴ FHWA
⁵ "In-Depth Data Analysis of Grade Crossing Accidents Resulting in Injuries and Fatalities" Final Report, May 2017. DOT/FRA/ORD-17/04. US Department of Transportation, Federal Railroad Administration. Pg. 12 – 16, 33 – 39 <https://railroads.dot.gov/elibrary/depth-data-analysis-grade-crossing-accidents-resulting-injuries-and-fatalities>

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1654-1412 | Alternative 4 should construct pedestrian and bike facilities on Monterey Rd as laid out in the San José Complete Streets Design Standards and Guidelines. There is no existing pedestrian facility on the west side of Monterey Rd south of Southside Dr. The construction staging for HSR will disrupt the west side of Monterey Rd, potentially including the curb and gutters. When restoring the area, the HSR project should install in a sidewalk and/or multi-use path pedestrian/bike facilities consistent with the San José Complete Streets Design Standards and Guidelines designs for Monterey Rd and HSR.

1654-1413 | Permanent impacts should not affect road right-of-way for the planned and existing bikeways identified in San Jose Better Bike Plan 2025 (https://tooledesign.github.io/San_Jose_Bike_Plan/new/#map). Please review the referenced map and incorporate in the HSR area.

1654-1414 | Impact TR#17: Temporary Impacts on Pedestrian and Bicycle Access (Construction Impacts)
There will be significant impacts to pedestrian and bike access for years during construction. Add language requiring that any temporarily closed bike facility must include temporary signed detour route to accommodate bikes. The route must minimize detour length and bicycle traffic stress by providing a temporary route at least as "high a quality" as temporarily closed route. Class III equals lowest quality, Class II higher, Class I highest.

1654-1415 | **Sections 3.4 Noise and Vibration**
NV-MM#4: Support Potential Implementation of Quiet Zones by Local Jurisdictions
City staff does not support implementing quiet zones on the HSR corridor in San José, due to the safety impacts of train speeds up to 110 mph combined with train volumes over 200 per day and multi-track crossings which lengthen the distance of the crossing and increase the risk of collisions with second trains after a first train has passed. FRA in-depth data analysis shows that these features contribute to incidents at at-grade crossings. Additionally, FRA’s analysis showed that having a highway intersection near a grade crossing nearly doubles the risk for incidents; Skyway, Branham, and Chynoweth crossings are all located adjacent to intersections with Monterey Rd. Removing the train horn is removing the extra warning that a train provides to users that the train is approaching the at-grade crossing. The HSR DEIR references the 30 fatalities and injuries that have occurred at at-grade crossings in Santa Clara County from 2011 to 2016, these being on railroad corridors with much lower train speeds and lower train volumes. City staff have read some of these crash reports and understand that most of these incidents were not ruled suicides; many of the incidents were a result of imperfect human decisions, for example pedestrians and bicyclists opening pedestrian gates and proceeding through the crossing in order to chase after a dog, or assuming that all trains had already passed, etc. Thus, even though HSR proposes to install safety measures such as 4-quadrant vehicle gates and pedestrian gates at at-grade crossings, we understand that these measures will not prevent all collisions with trains. Given the significant safety concerns with at-grade crossings on the HSR corridor, the solution is not a quiet zone; the solution is the elimination of at-grade crossings.

1654-1416 | 3.4.7.1 Noise Mitigation Analysis – Horn Noise
Quiet zones should not be assumed as part of noise mitigations analysis. Per Code of Federal Regulations 49 Section 222. 51(c), the FRA can terminate any quiet zone even after it has been established, for example due to safety concerns at the at-grade crossings. Therefore, quiet zones cannot be relied upon to mitigate horn noise impacts as quiet zones are not permanent features.

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1654-1417 | To eliminate the noise impacts caused by train horns expressing through Caltrain stations, the HSR Authority should come to an agreement with Caltrain and other relevant public agencies to implement station design features at rebuilt or modified Caltrain stations that would allow HSR trains to express past the station platforms without blowing their horns. Such an agreement and station features would eliminate the noise impacts from blowing train horns at Caltrain stations in San José including College Park, Tamien, Capitol, and Blossom Hill stations.

1654-1418 | Impact NV#2: Intermittent Permanent Exposure of Sensitive Receptors to Noise from Train Operations
Grade separation of Skyway Drive, Branham Road, and Chynoweth Avenue streets, combined with the agreement between the HSR Authority and Caltrain over train horns, would eliminate noise impacts from train horns during normal operations. The same grade separations would also eliminate all emergency response, vehicle/bike/pedestrian collision risk, and circulation impacts associated with at-grade crossings.

1654-1419 | Inclusion of grade separations in the project could be coupled with inter-agency agreement on the proportionate share contributions of funding for construction of the grade separations by relevant state, regional and local agencies.

1654-1420 | **Section 3.6 Public Utilities & Energy**
Public Water Utilities and Energy, San Jose Municipal Water System
In the first paragraph, revise the last two sentences to read as:
"In the neighborhoods of Edenvale, and Coyote Valley, groundwater from the Santa Clara Sub-basin provides for most of the potable water use. The Evergreen service area receives both treated surface water and groundwater supply from SCVWD."

1654-1421 | Public Utilities
Under "No Project" alternative, it was concluded that development trends will be increased, and impact to aboveground and underground utilities will create pressure on public utilities. Please provide analysis to support this statement.

1654-1422 | Impact PUE#9: Continuous Permanent Impacts from Wastewater Generation - CEQA conclusion
CEQA conclusion for wastewater impact for Diridon station is "less than significant". This seems to be underestimated. The report projects Diridon Station will generate 24,200 gpd of wastewater and will assume an increase of 0.01% at the Treatment Plant. The 24,200 gpd amount is a 4 times increase in wastewater generation at Diridon Station. While the ultimate impact to the wastewater facility may be "less than significant," the impact on the existing localized wastewater infrastructure near the Station is significant. The project should include capital improvement funding to upsize the collection system infrastructure downstream of the Station.

1654-1423 | Impact HYD#2: Permanent Impacts on Drainage Patterns and Stormwater Runoff during Construction - Stormwater management
HYD-IAMF#1 and #2 both state that contractor shall prepare stormwater management plan and flood protection plan for review prior to construction and during design phase, stormwater capacity will be evaluated. Please add information to the FEIR that enables the City to know the impacts to City streets

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1654-1423 | and infrastructure.

1654-1424 | Please identify stormwater treatment facilities required within City public right-of-way. The project needs to provide treatment for any new or replaced travel lane area exceeding 10,000 square feet of impervious surface.

1654-1425 | **Section 3.8 Hydrology Water Resources**
Hydrogeology and Water Resources
Revise the first paragraph by adding the statement written in bold below:
All four alternatives would require the protection of public drinking water supply wells during construction, as described in Impact HYD#8, and potentially the relocation of public drinking water supply wells. Existing wells in the HSR track alignment, such as below a viaduct or embankment, and other permanent impact areas, such as below realigned Monterey Road, would likely be abandoned and relocated nearby. **As in the case of San Jose Municipal Water System, there are three domestic groundwater well production facilities of approximate 300 feet depth designed to pump approximately 2,000 GPM each of potable water to provide water supply to San José Municipal Water System customers. Replacing these wells would likely require land acquisition, environmental review, permitting and approval from State Department of Drinking Water, specialized construction to drill at least 600 feet depth, and installation of pumps, motors, and protective enclosures.** Table 3.8-24 shows the existing public drinking water supply wells in the footprint of each alternative and subsection and the project's requirements to protect or relocate these wells in coordination with the owner.....

1654-1426 | **Sections 3.11 Safety and Security**
CA HSR Program Safety and Security Management Plan
This section states that the HSR alignment would be fully access-controlled, meaning that the public would be able to access the system only at the station platforms, and that access-control barriers and railway/roadway vehicle barriers along the right-of-way would prevent intrusion into the right-of-way. This is not true for Alternative 4 which includes at-grade crossings through which people, animal, vehicles, etc. can enter and cross the rail right of way. For safety reasons, at-grade crossings on the HSR corridor are unacceptable to the City of San Jose.

1654-1427 | Impacts to San José Fire Department Services
The San José Fire Department is an "All Risk" fire department providing services that include structure fire, wildland fire, first responder paramedics, technical rescue, aircraft rescue, and hazardous material response services.

The HSR Authority's DEIR outlines four safety and security impacts that will affect emergency vehicle response times and one will result in a permanent increased risk to all crossing users (vehicles, pedestrians, bicyclists, trains, etc.).

- Impact S&S#1: Temporary Impacts on Emergency Access and Response Times from Temporary Roadway and Highway Closures, Relocations, and Modifications.
- Impact S&S#2: Temporary Impacts on Emergency Access and Response Times from Construction Vehicles.

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- Impact S&S#3: Permanent Impacts on Emergency Access and Response Times from Permanent Roadway and Highway Closures, Relocations, and Modifications.
- Impact S&S#4: Continuous Permanent Impacts on Emergency Access and Response.
- Impact S&S#12: Permanent Exposure to Rail-Related Hazards

Each of the proposed alternatives will result in emergency vehicle response time delays that may impact the Departments overall system performance. The narrowing of Monterey Rd from six to four lanes in alternatives 1, 2, and 3 will lead to increased traffic congestion during commute hours, impacting the effectiveness of the Departments Emergency Vehicle Preemption (EVP) system, which improves the right of way for fire apparatus. Furthermore, trains have priority over emergency vehicles at crossings; this means that railroad crossing gates stay down when trains are approaching regardless of EVP, resulting in increased emergency response times.

1654-1428

Impact S&S#3: Permanent Impacts on Emergency Access

This section glosses over the impact that Alternative 4 will have on travel time between the east and west sides of Monterey Rd due to increased gate down time at Skyway, Branham, and Chynoweth crossings. This is a significant impact that can be avoided or mitigated through grade separations.

1654-1429

Impact S&S#4: Continuous Permanent Impacts on Emergency Access and Response Times

Alternative 4 could increase response times in areas west of the rail corridor by 180 seconds, impacting Fire Station 18 and the Department’s contractual agreement with the Santa Clara County EMS Agency⁶. This agreement requires arrival within eight minutes 90 percent of the time for all EMS calls in urban areas excluding Medical Priority Dispatch System (MPDS) triage levels Omega⁷ and Alpha⁸, and arrival within 13 minutes 90 percent of the time for Alpha calls in urban areas. In addition to performing to these standards, liquidated damages are assessed when response time is exceeded (see Table 1). Furthermore, delayed response times have been associated with poor patient outcomes. A study conducted by the American Heart Association resulted in “lower odds of favorable functional outcomes...[for] each elapsed minute of resuscitation” of a patient in cardiac arrest⁹. In 2018, Fire Station 18 experienced 1,547 responses that resulted in a greater than 4-minute response time¹⁰.

Table 1: Liquidated Damages for Response Time Non-Performance

Response Time Performance Liquidated Damages Per Response			
Amount that Response Time is Exceeded		Rural Wilderness	Fine per response
Urban	Suburban		
Up to 2:59	Up to 2:59	Up to 2:59	\$50
3 to 4:59	3 to 4:59	3 to 4:59	\$100
5 – 9:59	5 – 9:59	5 – 9:59	\$250
10 – 14:59	10 – 14:59	10 – 14:59	\$500

⁶ 911 Emergency Medical Services Provider Agreement <https://www.sccgov.org/sites/ems/Documents/agreements/CityofSanJoseEMSAgreementAmendments20181231.pdf>

⁷ Omega MPDS triage determinant calls do not require an EMS response.

⁸ Alpha MPDS triage determinant calls require Basic Life Support (BLS) or Advanced Life Support (ALS) first responder resource within 13 minutes.

⁹ American Heart Association *Circulation*. <https://www.ahajournals.org/doi/pdf/10.1161/CIRCULATIONAHA.116.023309>

¹⁰ Measure T - New Fire Station Placement Prioritization <https://sanjose.legistar.com/LegislationDetail.aspx?ID=4145191&GUID=609965EF-0851-485C-A633-4681EAFB67E6>

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15 – 19:59	15 – 19:59	15 – 19:59	\$1,000
20 – 24:59	20 – 24:59	20 – 24:59	\$2,500
25 – 34:59	25 – 34:59	25 – 34:59	\$5,000
35+	35+	35+	\$7,500

Source: Table 6 of the 911 Emergency Medical Services Provider Agreement

1654-1430

Impact S&S#8: Permanent Exposure to Traffic Hazards

This section does not sufficiently cover hazards to users at at-grade crossings which is a significant impact. This section states only that at-grade crossings would be controlled by quad gates and roadway channelization. At-grade crossings are not foolproof even with gates and channelization. The HSR DEIR references the 30 fatalities and injuries that have occurred at at-grade crossings in Santa Clara County from 2011 to 2016, these being on railroad corridors with much lower train speeds and lower train volumes. City staff have read some of these crash reports and understand that most of these incidents were not ruled suicides; many of the incidents were a result of imperfect human decisions, for example pedestrians and bicyclists opening pedestrian gates and proceeding through the crossing in order to chase after a dog, or assuming that all trains had already passed, etc. Thus, even though HSR proposes to install safety measures such as 4-quadrant vehicle gates and pedestrian gates at at-grade crossings, we understand that these measures will not prevent all collisions with trains. Monterey Rd is a Vision Zero corridor because it already has the highest fatality rate for a City street in San Jose. The City is seeking to eliminate all fatalities and injuries, especially on this corridor, and the overwhelming evidence from FRA¹¹ is that the addition of tracks, addition of train volumes, and increase in train speeds, all at at-grade crossings which are adjacent to intersections that Alternative 4 will introduce, increase risk of fatalities and injuries.

1654-1431

Impact S&S#12: Permanent Exposure to Rail-Related Hazards

Analysis of the proposed project’s impacts on Motor Vehicle, Pedestrian, and Bicycle Accidents Associated with High-Speed Rail Operations is incomplete. The EIR should separate the analysis of increased likelihood of train collisions and train - vehicle/pedestrian collisions, like the Burbank - Los Angeles document, which treats Impact S&S #5: "Train Accidents" and Impact S&S #6: "Motor Vehicle, Pedestrian, and Bicycle Accidents Associated with High-Speed Rail Operations" separately.

1654-1432

The discussion of grade crossing does not discuss several aspects of the project related to HSR operations and accidents including:

1. Higher frequency of trains, both HSR and Caltrain, allowed by the HSR project
2. Train speeds up to 110 mph
3. Adding a third track to crossings, which results in a physically longer crossing
4. Operating over at-grade crossings which are adjacent to highway intersections

These features increase the risk and severity of collisions, per FRA.¹²

¹¹ "In-Depth Data Analysis of Grade Crossing Accidents Resulting in Injuries and Fatalities" Final Report, May 2017. DOT/FRA/ORD-17/04. US Department of Transportation, Federal Railroad Administration. Pg. 12 – 16, 33 – 39 <https://railroads.dot.gov/elibrary/depth-data-analysis-grade-crossing-accidents-resulting-injuries-and-fatalities>

¹² "In-Depth Data Analysis of Grade Crossing Accidents Resulting in Injuries and Fatalities" Final Report, May 2017. DOT/FRA/ORD-17/04. US Department of Transportation, Federal Railroad Administration. Pg. 12 – 16, 33 – 39 <https://railroads.dot.gov/elibrary/depth-data-analysis-grade-crossing-accidents-resulting-injuries-and-fatalities>

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1654-1433 | The discussion in the document is limited to a static analysis of the crossing protections that does not disclose the safety impacts of the items above during operations. Of the five crossings that the City of San José identified for grade separation, all five meet one or more of the conditions where the Federal Highway Administration’s Technical Working Group finds that grade separation should be considered.¹³ It is inconsistent for the HSR Authority to tout the safety benefits offered by grade separation in Alternatives 1, 2, and 3, and ignore the safety impacts of at-grade crossings in Alternative 4.

The CEQA conclusion of less than significant impact is not consistent with the aforementioned FRA research and FHWA Working Group recommendations.

1654-1434 | While S&S#12 does not impact Fire Department response times, it does expose firefighters to increased risk when working on or near active railways. At-grade crossings have a higher propensity for collisions and accidental fires caused by debris on tracks which will require a fire department response. Alternative 4 increases the number and frequency of trains which increase the risk of collision or accidental fires.

1654-1435 | SS-MM#3: Install Emergency Vehicle Detection
The City of San José introduced Centralized Emergency Vehicle Pre-emption (CEVP) in 2018 through collaboration with the Fire Department, Information Technology Department, and the Department of Transportation¹⁴. The system, also referred to as EVP (Emergency Vehicle Preemption) covers more than 900 intersections within city limits, including Monterey between Capitol Expressway and Bernal Road. Although SS-MM#3 would provide emergency vehicle detection equipment to improve response times, this technology is already in use and would not provide an additional mitigation to narrowing of Monterey Highway or gate down time. Therefore, SS-MM#3 is not a mitigation, it already exists. Also, emergency vehicle preemption does not do anything for emergency vehicles waiting to cross an at-grade crossing when trains are approaching because train preemption supersedes emergency vehicle preemption. Again, the City requests that the HSR Authority enter into an agreement to fund its proportionate share of grade separation of key intersections along Monterey Road as the mitigation measure for SS-MM#3 in San José.

1654-1436 | Mitigations for Fire Station 18
Alternative 2 - Mitigation Measure #1 to “construct permanent access roads and driveways for alternative 2 Skyway Drive” (Variant B) will result in delayed access to southbound Monterey Highway, increasing overall response times. Should Monterey Highway and Skyway Drive be depressed as discussed in Variant B, a new fire facility may be required to maintain emergency vehicle access to the facility and to maintain effective deployment of resources at Station 18. A new facility on the eastern portion of the property would provide direct access to Skyway Drive and Monterey Highway as designed in Variant B.

1654-1437 | **Section 3.13 Station Planning Land Use**
Station Planning, Land Use, and Development – Appendix 2-E, Project Impact Avoidance and Minimization Features

¹³ "Highway-Rail Crossing Handbook, Third Edition" July 2019. FHWA-SA-18-040/FRA-RRS-18-001. US Department of Transportation, Federal Railroad Administration. Pg. 119 - 122 https://safety.fhwa.dot.gov/hsip/xings/com_roaduser/fhwasa18040/fhwasa18040v2.pdf
¹⁴ City of San Jose Fire Department CEVP Data Story <https://www.sanjoseca.gov/home/showdocument?id=50299>

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1654-1437 | Impact Avoidance and Minimization Features (IAMFs) are incorporated into the Project Section *design and construction* to avoid or minimize environmental or community impacts. However, those features seem unable to resolve structural design issues of concern such as impacts from at-grade crossings. This mismatch is seen throughout the DEIR. Operations manual and after-construction agreements cannot resolve project design features, yet the DEIR points to IAMFs as if they are mitigating project design issues.

1654-1438 | LU-IAMF#1: HSR Station Area Development:
General Principles and Guidelines refer to Operation and Maintenance only. They also refer to previous documents that may not be adequate to address current concerns, such as the HSR Station Area Development General Principles and Guidelines, February 3, 2011.

1654-1439 | Figure 3.13-7 Planned Land Uses (Current Zoning)—San Jose Diridon Station RSA / Planned Development - San Jose Diridon Station Approach Subsection
Information shown on map may need to be changed to reflect pending land use changes due to the updated Diridon Station Area Plan and proposed Downtown West development, if those changes are completed prior to the FEIR. Downtown West development should be included in discussion for planned developments around the Diridon Station Area as it may impact past and future analyses of the area. Industrial uses will be changed and will be substituted mostly by residential and office/commercial uses.

1654-1440 | Expand the reference that says: "In addition, the Authority, Caltrain, the City of San Jose, and the VTA have formed a partnership to initiate a concept plan to transform San Jose Diridon Station" to include future inter-agency collaboration under LU-IAMF#2 Station Area Planning and Local Agency coordination.

1654-1441 | Impact LU#4: Permanent Alteration of Land Use Patterns from Land Use Conversion and Introduction of Incompatible Uses San Jose Diridon Station Approach Subsection
The document states that: "LU-IAMF#1 would avoid incompatibility of HSR infrastructure and the San Jose Diridon Station with adjacent land uses." It does not. Under "Appendix 2-E, Project Impact Avoidance and Minimization Features," the "LU-IAMF#1: HSR Station Area Development: General Principles and Guidelines", clearly states that: "Prior to Operation and Maintenance, the Authority shall prepare a memorandum for each station describing how the Authority’s station area development principles and guidelines are applied to achieve the anticipated benefits of station area development. Refer to HSR Station Area Development General Principles and Guidelines, February 3, 2011." Again, LU-IAMF#1 does not resolve the City’s concerns with Alternative 4. LU-IAMF#1 is an "after-the-fact" operations and maintenance manual. It is unlikely that such a manual can resolve structural design concerns with noise and vibration along the Gardner neighborhood, safety and circulation impacts from the at-grade crossing at Auzerais in the Gregory neighborhood. In addition, NV-IAMF#1 does not resolve the issues either. "NV-IAMF#1: Noise and Vibration" states that: "Prior to Construction, the Contractor shall prepare and submit to the Authority a noise and vibration technical memorandum documenting how the FTA and FRA guidelines for minimizing construction noise and vibration impacts would be employed when work is being conducted within 1,000 feet of sensitive receptors. Typical construction practices contained...". This measure is about construction only. NV-IAMF#1 cannot resolve structural design issues with associated operational impacts. Again, as an alternative mitigation for LU#4, enter into an agreement to fund HSR’s proportionate share of grade separations at West Virginia Street and Auzerais Avenue.

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San Jose Diridon Station Approach Subsection San Jose Visual Design Guidelines
 This section states that the Jan 2012 San José Visual Design Guidelines were incorporated into a Cooperative Agreement that was approved by the City Council and the Authority Board of Directors and that "implementation of these Guidelines would reduce potential incompatibility of HSR infrastructure with adjacent land uses, thereby minimizing changes to existing or planned uses". This is not the case. First, the San Jose Visual Design Guidelines were never approved by City Council. Second, the San Jose Visual Design Guidelines only address a subset of alternatives: HSR viaduct from the northern limit, over the 280/87 interchange, to an at-grade alignment through Communications Hill and on a berm on the east side of the UPRR ROW in the Monterey corridor to the southern city limit. This does not cover Alternative 4 (blended at-grade through the whole corridor, including through the Gardner/N Willow Glen neighborhood) or Alternatives 1 and 3 (viaduct in the median of Monterey Rd). Therefore, the San José Visual Design Guidelines document is not an appropriate guideline to mitigate "potential incompatibility of HSR infrastructure with adjacent land uses." Specifically to mitigate the visual impact of the blended corridor, the City requests that the HSR Authority enter into an agreement to fund a share of full screening, aesthetic, and associated (noise, vibration) advanced through the DISC process as an alternative to the Visual Design Guidelines. Refer to the memoranda by staff and City Councilmembers and action taken at the [February 4, 2020](#) and [August 20, 2019](#) San Jose City Council meetings for detailed descriptions and expectations of aesthetics, noise, and vibration treatments, partnership, and funding, including expectations of the HSR Authority during the environmental process.

1654-1443

Impact LU#5: Permanent Indirect Impacts on Land Use Patterns from Increased Noise...
 The City disagrees with the CEQA conclusion that impacts from noise on existing land use patterns would be less than significant under CEQA for all alternatives because existing transportation corridors are already exposed to increased levels of noise from train and vehicular traffic. Alternative 4 would have significant noise impacts on existing land uses, especially residential. Existing train volumes are only 52 trains per day at Auzerais Avenue and West Virginia Street grade crossings and 16 trains per day at the Skyway Drive, Branham Road, and Chynoweth Avenue crossings. HSR phase 1 would add up to 176 HSR trains per day, according to Appendix 2-C. All of these crossings are surrounded by residences. To say that the people who live there would not be impacted because they are already used to train and road noise is incorrect. Train noise would exceed the performance standards in San José ordinance 20.50.300. Frequent train horn noise throughout the day would disturb residents' quality of life and make it a less amenable place to live. A quiet zone is not an acceptable option for the City of San Jose to mitigate train horn noise impacts as explained elsewhere in our comment letter. Grade separation at these locations is the only appropriate mitigation to the numerous impacts caused by having at-grade crossings, and the City asks that the HSR Authority enter into an agreement to fund its proportionate share of grade separations as an alternative mitigation for LU#5.

1654-1444

Impact LU#5: Permanent Indirect Impacts on Land Use Patterns from Increased Noise, Light, and Glare
 Alternative 4 would have significant noise impacts on existing land uses, especially residential. Existing train volumes are only 52 trains per day at Auzerais Avenue and West Virginia Street grade crossings and 16 trains per day at the Skyway, Branham, and Chynoweth crossings. HSR phase 1 would add up to 176 HSR trains per day. Further the adopted Caltrain Service Vision would add 268 Caltrains a day at Auzerais and Virginia and 152 Caltrains a day at Skyway, Branham, and Chynoweth crossings. All these crossings are surrounded by residences. To say that the people who live there would not be impacted because they're already used to train and road noise is incorrect. Train noise would exceed the performance standards in San José ordinance 20.50.300. Frequent train horn noise throughout the day would disturb residents' quality of life and make it a less amenable place to live. This leads us to disagree

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with the CEQA conclusion that impacts from noise on existing land use patterns would be less than significant under CEQA for all alternatives because existing transportation corridors are already exposed to increased levels of noise from train and vehicular traffic.

1654-1445

A quiet zone is not an acceptable option for the City of San Jose to mitigate train horn noise impacts as explained elsewhere in our comment letter. Grade separation at these locations is the only appropriate mitigation to the numerous impacts caused by having at-grade crossings.

1654-1446

The DEIR states on pg. 13-51 that: "For those portions on embankment, noise would diminish to less than 100 decibels 75 feet from the source." The current rail ROW in the Gardner neighborhood would not allow for this noise reduction because it is not possible to provide 75 feet distance from the tracks and the residential properties, even less as HSR adds additional tracks within the existing ROW. Furthermore, the DEIR states that: "Introduction of a new source of noise into portions of the project constructed within existing transportation corridors **would not be as noticeable as train noise in the rural portions of the alignment.**" It is the opposite: new/additional noise into existing corridors (particularly those that are residential), just exacerbate a problem that is already there. The fact that the residents have been able to cope with noise over the years is not a rationale to justify additional noise. This is traditional nuisance law in city planning validated by the US Supreme Court. If you come to the nuisance, it is your problem. But if you create or add a nuisance, the problem is for the one adding the nuisance, not the residents who live currently there.

1654-1447

Mitigation Measure LU-MM#1: HSR Station Area Development: General Principles and Guidelines
 Mitigation Measure LU-MM#1 does not address the City's concerns with land use compatibility and will not be able to resolve concerns dealing structural design issues. The principles and guidelines need to be incorporated into the project design process to mitigate impacts and add benefits, rather than after the fact.

1654-1448

Section 3.15 Parks Recreation Open Space
Table 3.15-2 Parks, Recreational Facilities, and Open Space Resources by Subsection
 The agency with jurisdiction for Highway 87 Bikeway is Caltrans. The HSR Authority will need to consult and seek approval from Caltrans on the traction control infrastructure and design plans. The City is permitted to use the facility for pedestrian/bicycle usage through a Joint Use Agreement and share maintenance responsibilities with Caltrans, as outlined in the Freeway Maintenance Agreement. The HSR Authority will need to coordinate an amended or new agreement to accommodate the joint use and additional functions along the bikeway if needed.

1654-1449

Three Creeks Trail is recognized in the table as undeveloped. The trail is open from Lonus Street to the Falcon Court cul-de-sac. The Guadalupe River Trail Master Plan documents a future bridge span over the Guadalupe River to enable interconnectivity of these trail systems.

1654-1450

Table inaccurately defines San Jose Trails per the "Features" column as "Urban, hiking and bicycle trail". This should be more clearly stated as "Class I Bikeway Trails meeting recreational and active transportation functions (for pedestrians, bicyclists, equestrian and other users)."

1654-1451

Impact PK#2: Temporary Changes to Access or Use of Parks

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1654-1451 | Please provide more clarity regarding loss of the Fisher Creek Trail alignment due to the HSR embankment. The project speaks of “decreased access,” but “Permanent Loss of Access” would be a more clear statement. This is a significant impact to the City’s goal for developing an interconnected Trail Network, per the General Plan and ActivateSJ (Department of Parks Recreation & Neighborhood Services, 20-year Strategic Plan).

1654-1452 | Impact PK#4: Permanent Changes Affecting Access to or Circulation in Parks, Recreational Facilities, and Open Space Resources
Impact PK#6: Permanent Acquisition of Parks, Recreation, and Open Space Resources
 Loss of the Highway 87 Bikeway North (between Almaden Expressway and Willow Street) may not be permissible. The bikeway was developed as a mitigation for loss of pedestrian and bicyclist access when Highway 87 replaced surface streets. Please determine if a temporary loss is permissible per CEQA and if not, coordinate with San Jose on a suitable Class I Bikeway Trail alternative route.

1654-1453 | The Highway 87 Bikeway Trail leads to the Tamien Light Rail / Caltrain Station. Loss of access from Willow Street will impact a Community of Concern (Washington Area Neighborhood).

1654-1454 | Table 3.15-14 CEQA Significant Conclusions
 Impact PK#4 seems to create a conflict between the HSR EIR and Highway 87 EIR, which required development of the Highway 87 Bikeway Trail as a mitigation for lost pedestrian and bicycle access (formerly provided by surface streets). Again, please determine if this loss is permissible per CEQA. If this needs further mitigation, the parallel Guadalupe River Trail system has been master planned from Virginia Street to Chynoweth Avenue. The statement on Page 3.15.125 about the loss of Highway 87 Bikeway North is very concerning; please clarify and coordinate with the City about a proper process moving forward.

1654-1455 | **Section 3.16 Aesthetics**
Impact AVQ#6: Permanent Direct Impacts on Visual Quality- Monterey Highway San Jose Landscape Unit
 As part of AVQ-MM#3 Public Art must be integrated into CHSTP structures within City limits. This complies with the City of San Jose ordinance for Public Art, and the City of San Jose adopted Public Art Masterplan. It is also in accordance with CHSTP Aesthetic guidelines for non-station structures. Similar to the City’s percent for art ordinance, it is recommended CHSTP set aside 1% of their overall construction budget, including any land acquisition costs, for public art, and contract with the City’s Public Art program to help manage the Public Art component.

1654-1456 | Please clarify how AVQ-MM#4 (provide vegetation screening) would work in the Monterey corridor for Alternatives 1, 2, 3, and 4. Alternatives 1 and 3 (viaduct in the Monterey Rd median) stay out of UPRR ROW, and the City therefore does not understand where trees and vegetation will be planted. Moreover, considering that the viaduct is up to 80 feet tall, please articulate how trees would screen residential views of the HSR viaduct. Any visible components of the structure that are left exposed after the vegetation screening should implement public art to help enhance the visual quality. Please show a schematic demonstrating where trees will be planted and how they will obstruct residential sight lines to the HSR viaduct from adjacent residential neighborhoods. For Alternatives 2 and 4, similarly clarify where will you plant the trees/vegetation. The City is concerned that there is insufficient space in the Monterey

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1654-1456 | corridor, especially on the west side of the rail corridor, for tree planting with these alternatives. Please produce a schematic showing otherwise.

1654-1457 | Tree plantings to the east of the HSR alignment can be accomplished under Alternative 4 by building the missing bicycle and pedestrian facilities, including tree wells and streets trees, south of Southside Dr per the adopted San José Complete Streets Design Standards and Guidelines. Two of the grade separation configurations for Monterey Rd design by the City (Attachment B) would provide a 10 foot offset on the western side of the alignment that could be used for vegetative screening plantings. The third is a trench that would not have visual impacts.

1654-1458 | **Section 3.17 Cultural Resources**
Impacts to the Southern Pacific Depot (i.e., the/ Diridon Station): This is a Designated City Landmark and as such any work within the legal description boundary of the Landmark requires a Historic Preservation Permit to be reviewed by the City of San Jose’s Historic Landmarks Commission as the Quasi-Judicial Body with a final approval by the Director or City Council. This review is required under the City’s Historic Preservation Ordinance MC13.48. Depending on the work within the legal boundary of the Landmark, the required finding is that the work is not a “detriment” to the Landmark. A Significant and Unavoidable impact may be seen as a “detriment” but more specific project details are needed to analyze.

1654-1459 | Impacts to the Sunlite Bakery Company: This is a Candidate City Landmark. Although because not locally designated it is not subject to the Historic Preservation Ordinance. However, the work may not be consistent with the General Plan policies for Historic Preservation. This property needs a treatment plan to determine if a change of status would result on the Historic Resources Inventory, with a classification from Candidate City Landmark to Structure of Merit because of loss of integrity due to the project.

1654-1460 | Table 3.17-9 CEQA Significance Conclusions for Impact CUL#4: Permanent Demolition, Destruction, Relocation, or Alteration of Built Resources or Setting
 Because of the Significant and Unavoidable impacts to Southern Pacific Depot and Sunlite Bakery, the project is inconsistent with several policies under the City’s General Plan for Historic Preservation. Also any work (both public and private) to the above properties requires “Early Referral” consultation with the Historic Landmarks Commission under the City Council policy. This should be scheduled as soon as possible.
 Link to Historic Landmarks Commission: <https://www.sanjoseca.gov/your-government/departments/planning-building-code-enforcement/planning-division/commissions-and-hearings/historic-landmarks-commission>

1654-1461 | **Section 7.0 Other NEPA CEQA Considerations**
7.1.1 Adverse Effects that Cannot be Avoided under NEPA
 The DEIR pg. 7-1 states: “The changes to the geometry and capacity of intersections under Alternatives 1, 2, and 3 would result in automobile delay. These delays would not occur under Alternative 4.” Alternative 4 however, significantly increases gate down time at at-grade crossings, causing delay for all users (vehicles, pedestrians, bikes) crossing the railroad corridor, which are impacts under NEPA.

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Chapter 8 Preferred Alternative8.2.1 Local Communities

The subsection "City of San Jose, downtown area to Tamien" in the DEIR does not mention the input from both the City of San José, and other stakeholders about the needs to align HSR plans with on-going Diridon Integrated Station Concept Plan work. Please refer to City letters dated: April 14, 2016, May 7, 2018, August 22, 2019, and June 1, 2020 (Attachment C) and memoranda by staff and City Councilmembers and action taken at the [February 4, 2020](#) and [August 20, 2019](#) San Jose City Council meetings.

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The subsection "The City of San Jose, Monterey Corridor" does not mention the repeated input from both the City of San José, neighborhood groups, and residents that grade separations need to be included for safety, noise, and traffic reasons. Please refer to City letters dated: April 14, 2016, May 7, 2018, August 22, 2019, and June 1, 2020 (Attachment C) and memoranda by staff and City Councilmembers and action taken at the [February 4, 2020](#) and [August 20, 2019](#) San Jose City Council meetings, and neighborhood letter dated March 20, 2019 (Attachment D).

1654-1464

8.4.1.2 Monterey Corridor Subsection

Train horn noise can be mitigated by grade separations along Monterey Rd and adding design features to Blossom Hill and Capitol Caltrain stations that would allow HSR trains to pass trains without blowing horns. Similarly, emergency vehicle access and response time impacts can be mitigated by grade separations along Monterey Rd. Again, the City requests that the HSR Authority enter into an agreement to fund its proportionate share of grade separation of key intersections along Monterey Road as alternative mitigation for safety and security, noise, traffic and other impacts, as detailed above.

1654-1465

8.4.3 Additional Considerations

The DEIR correctly points out that Alternative 4 would enable the Caltrain Service Vision. The Service Vision was adopted in October 2019 by Resolution 2019-38, six months before the DEIR was published. Discussion or analysis of the implications and impacts from the Service Vision is missing from rest of the DEIR document. It is not addressed in the Cumulative impacts or specific impact analysis chapters.

Since Alternative 4 "would provide for an extension of electrification and other infrastructure to support increased regional passenger rail service to Gilroy," disclosure of the reasonably foreseeable impacts due to increased Caltrain service south of Tamien station should be provided when comparing alternatives.

1654-1466

8.4.4 Alternative Comparison

When combining both severe and moderate impacts, Alternative 4 has the most noise impacts after mitigation, not Alternative 1. Alternative 4 has the most moderate and severe noise impacts even after sound wall mitigations and if cities adopted quiet zones, see table 3.4-28 through 3.4-31.

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As the HSR Authority cannot unilaterally adopt quiet zones, and per Code of Federal Regulations 49 Section 222. 51(c) the FRA can remove a quiet zone, quiet zones cannot be relied upon as mitigation. Alternative 4 would have the highest number of severe impacts after sound wall mitigation. Alternative 3 has the lowest number of severe noise impacts with both levels of mitigations. See Table 3.4-28, Table 3.4-31, and Table 3.4-34 "Noise Mitigation Effectiveness" of Chapter 3.4.

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Section 3.19 Cumulative Impacts

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Noise

Caltrain Service Vision is missed from the planned rail and transit projects discussion. The increased Caltrain service enabled by extension of blended service would add significant cumulative noise impacts. According to Caltrain's "City of San José Booklet"¹⁵ under the adopted Service Vision the number of Caltrains crossing Auzerais and Virginia would increase from 34 per day today to 268 in 2040. At Skyway, Branham, and Chynoweth, Caltrain would increase from 6 (today) to 58 trains per day. These numbers are far higher than those in the Caltrain electrification EIR, and would have substantial effects on grade down time, noise, and vibration. Discussion and quantification of these cumulative impacts is warranted, especially in the areas of noise, vibration, and emergency response where significant impacts exist before the additional Caltrain impacts are considered.

APPENDIX 2-D: APPLICABLE DESIGN STANDARDS

1654-1469

Roadway Work (Grade Separation) Design Checklist

1. Vehicle Classification: Refer to San José Complete Streets Design Standards and Guidelines for design vehicle and control vehicle selection, page 59.

CSJ General Plan Land Uses map:

<https://www.arcgis.com/apps/webappviewer/index.html?id=5c1421e8dc7f4839a70781c3924d7440&extent=-13575059.1668%2C4481254.8279%2C-13560536.1314%2C4490389.0528%2C102100>

1654-1470

2. Design Speed: Refer to San José Complete Streets Design Standards and Guidelines Target Speed information (p. 21). Refer to City General Plans 2040 for street typology and functional classification.

1654-1471

3. Roadway Grades: Refer to San Jose Muni Code 19.36.040 and Maximum Street Gradient Design Standards (<https://records.sanjoseca.gov/Ordinances/ORD17539.pdf>).

1654-1472

4. Roadway X-slopes: 2% max for San Jose Streets.

1654-1473

5. Grade Differential: Refer to Maximum Street Gradient Design Standards.

1654-1474

6. Roadway Width: Refer to San Jose Mini Code 13.05.070 for Standard Right of Way (ROW) Widths, San Jose Complete Streets Design Standards and Guidelines for Chapter V for sidewalk width and Page 15-19 for roadway widths examples.

1654-1475

11. Horizontal Curves: Refer to San Jose Muni Code 19.36.040.

1654-1476

12. Stopping Sight Distance(Vert): Follow latest HDM.

1654-1477

15. Lane Width: Refer to San Jose Complete Streets Design Standards and Guidelines Page 14. The rest design elements should follow latest Caltrans Standard Plans, HDM, AASHTO and NACTO design guide, whichever is more stringent.

1654-1478

16. Cul De Sac: Refer to Muni Code 19.36.080 and San Jose Geometric Design Guidelines

1654-1479

17. Street Knuckle: Refer to San Jose Geometric Design Guidelines

1654-1480

18. Stopping Sight Distance (Hori): Follow latest HDM.

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Design speed should follow the San Jose Complete Streets Design Standards and Guidelines Target Speed associated with Street Typology and add Street Typology into the design elements where applicable.

¹⁵ https://caltrain2040.org/wp-content/uploads/CBP_CIA_R2_Booklet_SI-2.pdf

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APPENDIX 2-E: PROJECT IMPACT AVOIDANCE AND MINIMIZATION FEATURES ANALYSIS

LU-IAMF#2 Station Area Planning and Local Agency Coordination

The City called for better interagency coordination to resolve the concerns with Alternative 4 and also continue to work together with The HSR Authority to better integrate the Diridon Integrated Station Concept Plan (DISC) into the HSR project design. It appears that such coordination should be better described and identified under LU-IAMF#2. However, LU-IAMF#2 refers to Operations and Maintenance, not structural design issues that could potentially resolve the City's concerns. Addressing the City's concerns via a collaboration between the City and HSR Authority should be via design first, and then operations and maintenance. For example, the EIR/EIS can include an alternative mitigation measure for the HSR Authority to contribute to DISC grade separations at Auzerais and West Virginia, addressing both noise and at-grade crossing safety concerns. It is very unlikely that an operations manual under LU-IAMF#2 would fully resolve at-grade crossing impacts at Auzerais and West Virginia.

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APPENDIX 2-K: POLICY CONSISTENCY ANALYSES

Table 3 Policy Inconsistency, Reconciliation, and Rationale for Noise and Vibration - Land Use Compatibility Guidelines for Community Noise in San Jose, Table 4

APPENDIX 2-K: POLICY CONSISTENCY ANALYSES does not resolve or reconcile the project's impacts. Page 2-K-7 states that: "Project implementation would result in noise environments that exceed 70 Ldn which requires acoustical analysis for residential land use/FRA Category 2 and schools and churches, etc./FRA Category 3. At institutional and commercial land use/FRA Category 3, project implementation would result in noise environments that exceed 77 Ldn which requires acoustical analysis." The document provides as a solution a circular reference, referring to LU-IAMF#1 HSR Station Area Development Principles and Guidelines, which again is a future manual to resolve operations and maintenance issues, and not structural design issues that cause the significant noise impacts after mitigation

1654-1484

APPENDIX 3.19-B:

Cumulative Transportation Projects Lists

Caltrain Service Vision adopted October 4, 2019 is missing from the project list. The increased Caltrain service enabled by extension of blended service would add significant cumulative benefits and impacts.

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Since Alternative 4 "would provide for an extension of electrification and other infrastructure to support increased regional passenger rail service to Gilroy," disclosure of the reasonably foreseeable impacts due to increased Caltrain service south of Tamien station should be provided. These include additional train horn noise, gate down time, and vibration.

Volume 3

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TT-D0702 Monterey Rd - Fisher Creek Trail

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The aerial structure is developed upon columns. This is contrary to text suggesting that a berm would prevent continuity of Fisher Creek Trail and link to Coyote Creek Trail. Please refer to discussion on Page 3.15.54. Confirm that an existing signalized crossing of at-grade rails will remain in place, and public passage may occur beneath the aerial HSR structure. The City recommends alteration of HSR alignment in this area if this public passage can be sustained.

1654-1487

TT-D4002 College Park Caltrain Station

The proposed rebuild of the College Park Caltrain Station will have a single side platform requiring northbound trains to cross the south bound mainline to reach the station. Please confirm that this design is compatible with level of blended service proposed in the DEIR and the Caltrain Service Vision. If not, please clarify whether service to the station will be impacted. If any additional island platforms are needed, grade separated passenger access across the tracks is necessary.

1654-1488

TT-D4004 and D4005 – Hwy 87 Bikeway Trail and Caltrain service road

The proposed flood wall at the perimeter to Unified School District site appears to impact the entry to the Highway 87 Bikeway Trail. There may also be an impact near Almaden Expressway, and it is unclear how the trail is sustained beneath the Expressway. The City cannot support a tunnel within the trail network, particularly at a site with no potential for observation by police or rangers. The City asks for the trail passage to occur within an unconfined space.

1654-1489

The City has reached out to Caltrain in order to support dual use of its service road planned between the elevated Highway 87 and the active railway by Sta B3198+00. Alternative 4 appears to narrow that space and may jeopardize our efforts to build a trail connection from the Three Creeks Trail to Alma Avenue along the west side of the highway. Caltrain has been supportive of a joint-use trail access. City provided the HSR Authority a copy of the 2015 Three Creeks Trail Vision Study in 2016. We seek a clear statement that a wide passage will support a Class I Bikeway connection from the Highway 87 Bikeway Trail to both sides of Alma Avenue. This improvement would be the north and south of Alma Avenue, and not resolved by use of Willow Street.

1654-1490

Construction Impact Mitigation Measures

The Construction Impact Mitigation Measures are an area of significant concern where the DEIR needs to be expanded in detail and clarified in order to allow the City to provide meaningful and comprehensive review. The construction impact outreach and mitigation plan measures lack specificity and does not commit HSR to a specific course of action that will reduce significant impacts. Please further articulate the scope, timing, and commitments of HSR to mitigate construction impacts and how the proposed mitigations will fully and adequately address each impact. Without some level of detail with respect to anticipated impacts and corresponding mitigation measures it is not possible to determine if the mitigation itself triggers other environmental considerations. At a minimum, the mitigation measures should specify how they will comply with the intent of the City's Construction Impact Ordinance as set forth in Title 13, Section 13.36 of the San Jose Municipal Code.

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The City expects the HSR Authority to enter into a mutually-beneficial master cooperative agreement with the City that includes very specific and proactive construction impact outreach and mitigation plan measures. For example, the specific measures should include:

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- a traffic/transportation management plan that outlines the timing of street, trail and transit service closures and alternative routes for all travelers;
- a detailed outreach and impact mitigation approach that proactively addresses the needs of businesses, residents, employees, and other visitors, with clear, culturally competent and multilingual communication channels, processes and points of contacts;
- advance information about the processes for construction easements and/or damages, including for landlords and businesses that are concerned about leasing their properties in anticipation of the project; and
- truck haul routes that avoid further exacerbating construction impacts.

1654-1492

The City expects the construction outreach and impact mitigation elements to be well-planned and coordinated far in advance of the start of construction, such that negative impacts, anticipated or not, can be responsibly, quickly, and thoroughly addressed. This will provide assurance and certainty for the City, community, and particularly the businesses, institutions, and residents most impacted by construction of this extensive project.

1654-1493

Agency Jurisdiction, Environmental Compliance and Implications for City

The DEIR does not clearly identify and explain the roles and responsibilities of various other public agencies, including the City, who will be required to issue or approve various discretionary agreements, permits or licenses as part of the project. The City seeks certainty about which agency is intended to have jurisdiction for various aspects of the project, i.e. roles, responsibilities, and resource commitments. For example, HSR has established an Environmental Management System to ensure systematic accountability of mitigation measures. As part of this, HSR has developed an Environmental Impact Compliance and Reporting (EICR) matrix for the project to enable a complete tracking of all the mitigation measures. This matrix documents the environmental issue, mitigation measure, implementation timeframe, and responsibility and oversight. This compliance system includes the following key elements:

- Federal and state environmental mitigation measures, referred to as the Mitigation Monitoring and Reporting Program (MMRP);
- Design Requirements and Best Management Practices to avoid environmental impacts;
- Property Specific Requirements developed prior to right-of-way acquisition to minimize effects on property owners;
- Archaeological Sensitive Area (ASA) tracking; and
- Permit Compliance Monitoring, as jurisdictional agencies' permits are obtained.

Unfortunately, the above-referenced documents do not clearly articulate the role and obligation of the City of San José as a responsible agency for the HSR project. The City expects the HSR Authority to work with the City to clarify the City's obligations and responsibilities for the HSR project. The City will be required to take discretionary actions for encroachment permits, temporary street closures, utility realignments, pavement repairs, and other related work within the City. Mitigation measure monitoring may be tracked by the City through its permit compliance system, through the HSR system discussed above, and/or through other agencies (i.e., the Santa Clara Valley Water District).

A formal agreement articulating the responsibilities of the City and the HSR Authority regarding mitigation monitoring and compliance with the environmental document will be required. The DEIR should clarify the Master Cooperative Agreement between the City and the HSR Authority will be the mechanism for specifying roles and responsibilities.

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No.	Section	Report Page	Subject	CSJ COMMENTS
1654-1494	1		General Comment	Per City Council 5-1 Intersection Adverse Affects have to be addressed. Refer to the City's Transportation Analysis Handbook on how to address adverse affects. Link to City Council 5-1: https://www.sanjoseca.gov/your-government/departments-offices/transportation/planning-policies/vehicle-miles-traveled-metric
1654-1495	2		General Comment	Include vehicular queuing analysis at all left turn pockets at study intersections and lengthening of pockets where feasible.
1654-1496	3		General Comment	Include analysis to changes of access and circulation to properties affected by the alignment.
1654-1497	4		General Comment	Provide analysis of pedestrian and bike safety at at-grade intersection crossings.
1654-1498	5		General Comment	Provide parking numbers required by the project. Where will employees park?
1654-1499	6		General Comment	Include sight distance analysis at study intersections with train crossings and any required improvements to improve sight distance
1654-1500	7		General Comments	This EIR proposes environmental clearance of an HSR project for construction when the corridors from Transbay to Santa Clara and Santa Clara to Gilroy are in the midst of multiple on-going multi-agency planning processes to define the futures of those corridors.
1654-1501	8		General Comment: Proposed baseball stadium	Remove all reference to the ballpark stadium EIR and project. The project is not moving forward, therefore mentioning it is irrelevant, even it was approved. The Diridon Station Area Plan is currently being amended to remove the ballpark land use entirely.
1654-1502	9		General Comment: Google Development	Update all reference to Google development to state the following: <ul style="list-style-type: none"> - Google development is 85 acre - Diridon Station Area is 250 acre - As of October 2019, Google's office development ranges from 6.5-7.3 MSF of office - At the time of HSR construction, depending on schedule overlaps with other future developments (i.e. Google), parking conditions may vary and HSR may need to conform to different parking conditions.
1654-1503	10		General Comment: Planned Passenger Rail Projects	Update dates throughout EIR documents: <ul style="list-style-type: none"> - BART Ph1 Berryessa BART Station began passenger service on June 13, 2020 (not 2019) - BART Ph 2 plans to open in 2029/2030 (not 2026) - Capitol Expressway Light Rail Project plans to open in 2026

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1654-1504	11			Public Art/Muni Code 22.08 Art Program	Any visible HSR infrastructure, especially that which is above grade in San Jose, should set aside at least one percent of the construction budget for public art - this would comply with the City's percent for art ordinance. This can be used to hire an artist or artist(s) to help integrate a thoughtful design approach to any infrastructure that is significantly visible.
1654-1505	12			Public Art Master Plan	Any structures that go into the city environment, sound walls, above grade work, or new construction, will need to have an aesthetic component per San Jose Public Art Master Plan, approved by City Council in March 2007. The Masterplan established priorities for the Public Art Program and recommends public art elements will be incorporated into high-traffic transportation corridors and pedestrian areas. Attached is a list of recommendations regarding public art, aesthetics and design for HSRA to consider when we update the draft Visual Design Guidelines. Link to the Public Art Master Plan: https://www.sanjoseca.gov/home/showdocument?id=2008 Page 18 of the plan describe Transit Corridors and High Transportation Hubs
1654-1506	13	Ch 2 Alternatives	2-17	Figure 2-16 Four-Track Viaduct	Provide dimensions for distance from outer tracts to central superstructure viaduct
1654-1507	14	Ch 2 Alternatives	2-36	Planned Land Use	Revise following sentence in 2nd paragraph as shown below: "North of San Jose Diridon Station, a seven-story mixed-use development is under construction and nearly completed on Stockton Avenue."
1654-1508	15	Ch 2 Alternatives	2-36	Planned Land Use	"A phased single-family residential project is moving forward on Communications Hill..." I believe this is multifamily.
1654-1509	16	Ch 2 Alternatives	2-38	Table 2-5 Planned Transportation Improvements	1. Remove Park Ave and St John Multimodal projects, completed in 2018. 2. Remove Autumn St widening. Segment from UPRR to Julian St was completed in 2018 and Google development will complete the project to San Carlos St
1654-1510	17	Ch 2 Alternatives	2-57	Irrigation & Drainage	For facilities mentioned that may need to be modified or replaces, will it be HSR that will construct these improvements?
1654-1511	18	Ch 2 Alternatives	2-117	Alternative 4 - Diridon Design Variant	Depending on construction scheduling in comparison to other future developments, alteration of curvature of rail alignment may affect parcels and feasibility of modifications along area approaching Diridon Station. Variant needs further coordination with future developments north of Diridon Station.

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1654-1512	19	Ch 2 Alternatives	2-135	Construction Plan	Depending on actual construction schedule may need to take into consideration impacts and overlap effects of other major projects within the Diridon Station such as BART phase II and Google development. Construction Impact Mitigation Plan will need to be provided
1654-1513	20	Ch 2 Alternatives	2-140	Table 2-17 Construction Staging San Jose Diridon Station Subsection	1st row - this area (north of Julian, between Caltrain and Montgomery St) is proposed for development and may not be available for staging area 2nd row - "east of Lafayette St" is not San Jose jurisdiction; it is City of Santa Clara jurisdiction
1654-1514	21	Ch 2 Alternatives	2-140	Table 2-17 Construction Staging Monterey Corridor	PEPD plans shows construction staging area at Monterey Rd and Blossom Hill Rd in Alternative 1-3, add to table.
1654-1515	22	Ch 2 Alternatives	2-157	Local Permits	Local permits may include, but not limited to major encroachment permits, grading and drainage permits, major improvement permits
1654-1516	23	Ch 3.2 Transportation	3.2-4	Regional and Local	Include City's Council 5-1 VMT Policy as a relevant City policy and plan for transportation. Link to City's policy: https://www.sanjoseca.gov/your-government/departments-offices/transportation/planning-policies/vehicle-miles-traveled-metric
1654-1517	24	Ch 3.2 Transportation	3.2-6	Definition of Resource Study Area	Include driveway access and circulation changes to affected parcels as an indirect impact and provide narrative as how those impacts will be addressed by the project for each alternative.
1654-1518	25	Ch 3.2 Transportation	3.2-9	Methods for Impact Analysis	Provide more information and figures as to where resources are available for passenger loading/unloading and how shuttles will be provided by the project. Where are the anticipated areas?
1654-1519	26	Ch 3.2 Transportation	3.2-12	Baseline Operations Analysis	City requires analysis of Background Plus Project scenario to analyze LOS adverse affects at study intersections. The Background scenario includes approved and pending projects.
1654-1520	27	Ch 3.2 Transportation	3.2-19	San Jose Diridon Station Approach Subsection	Note: The City does not require LOS study of signalized intersections within the Downtown boundary.
1654-1521	28	Ch 3.2 Transportation	3.2-34	Diridon Station Approach Subsection Bicycle Facilities	There are 24 electronic bike lockers registered to BikeLink users located on Crandall St (16 spaces), and Laurel Grove Ln (8 spaces). Revise the following paragraph by adding the statement written in bold below: The station provides 16 bicycle parking spaces at outdoor bicycle racks, 24 bike parking spaces in electronic bike lockers and 48 bicycle parking spaces in reserved lockers, for a total of 88 bicycle parking spaces. A 27-space Bay Area Bike Share station is located on the south side of Crandall Street.

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1654-1522	29	Ch 3.2 Transportation	3.2-35	Figure 3.2-7 San Jose Diridon Station Existing Bicycle Facilities	General Comment: At the time of construction, circulation and bike lane provisions may differ from its current condition from information provided. Depending which development takes precedence within Diridon Station Area, there may be an varying facility conditions from information shown in Figure 3.2-7
1654-1523	30	Ch 3.2 Transportation	3.2-35	Figure 3.2-7 San Jose Diridon Station Existing Bicycle Facilities	Refer to the 2025 City's Bike Plan for existing and proposed bicycle improvements. Link to 2025 Bike Plan: https://tooledesign.github.io/San_Jose_Bike_Plan/new/#map Missing existing Class II bike facility, add on: - Autumn (St John to Park), Montgomery (Park to San Carlos), and Bird (San Carlos to SR280) - Almaden BL/Vine (from Balbach/Woz continuing south) - W San Fernando (Diridon to Race st) - Race (Alameda to Park, and south of San Carlos) - Lincoln (south of San Carlos) Missing existing Class III bike facility, add on Virginia (east of Hwy 87) Revise text descriptions on Page 3.2-34 to reflect above.
1654-1524	31	Ch 3.2 Transportation	3.2-50	Impact TR#3: Permanent Delay/Congestion Consequences on Freeways and Roadways from Permanent Road Closures and Relocations	Permanent roadway closures and changes require separate individual VMT analyses and clearance under CEQA. Under operations, analysis needs to be provided for volume shifts to adjacent streets, impacts to bike and pedestrian access, impacts to access/circulation of adjacent properties and any resulting LOS adverse affects. Note: General Plan Street Closures require approval by the City's Planning Commission
1654-1525	32	Ch 3.2 Transportation	3.2-64 to 3.2-73	Impact TR#8: Temporary Construction-Related Effects on Parking Impact TR#9 Permanent Effects Related to Parking	Include discussion of any parking impacts to residential streets resulting from roadway changes or closures.
1654-1526	33	Ch 3.2 Transportation	3.2-75	Impact TR#10: Temporary Impacts on Bus Transit	Coordinate with VTA regarding impacts to public transit and possible improvements/changes in service to alleviate impacts.

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1654-1527	34	Ch 3.2 Transportation	3.2-84	North Railroad Trail	<p>Reference to North Railroad Trail only appears in this table, and not elsewhere in the Transportation or Parks & Open Space sections. Recommend clarity on site location, consistency with Class I Bikeway Trail design standards and explanation of any potential impacts. This trail system is not identified per the City’s Trail Database.</p> <p>If understanding the “No Project Conditions” definition, we are supportive of the project assuming role of delivering the Los Gatos Creek Trail under-crossing.</p>
1654-1528	35	Ch 3.2 Transportation	3.2-95	TR-MM#2: Install Transit Signal Priority	In the San Jose Diridon Station Area, TSP on Cahill, Montgomery, and Autumn streets will be competing with TSP on Santa Clara Street, so this measure seems ineffective.
1654-1529	36	Ch 3.2 Transportation	3.12-105	Parking in Diridon Area	Minimum amount of parking is required needs to be maintained throughout the phasing of HSR project within the Diridon area. Permanent displacement of parking should not affect the minimum amount of parking provided for events at SAP. Preferred alternative 4 would have the least impact on displacing parking
1654-1530	37	3.4 Noise and Vibration	3.4-91	Horn Noise	Due to the safety impacts of adding or enabling over two hundred HSR and Caltrain trips a day, increases in train speeds, and increased grade crossings distances, at grade crossings, city staff would not support implementing quiet zones along Monterey Road in San José. Even if San Jose implemented quiet zones, they could be terminated in the future per train horn regulations in CFR Part 222.51, due to increased level of risk to the motoring public at public highway-rail grade crossings. Therefore, horn noise impacts and mitigation should be evaluated as if quiet zones are not implemented in San José.
1654-1531	38	Ch 3.6 Public Utilities & Energy		General Comment	At what design stage will minor utilities be shown in plan drawings? 30% or 60%?
1654-1532	39	Ch 3.6 Public Utilities & Energy	3.6-2	Key Definitions/Public Utilities Wastewater Lines	The report defines wastewater lines of outside diameter of ≥ 20 inches as major public utilities. However, HSR’s response to City’s comments from 2018 stated that "For SS, major utility is defined as ≥ 24 ." Please clarify which definition is correct. The 15% Plan & Profile is missing at least one 21" SS line, which should be added if the definition in EIR is correct.
1654-1533	40	Ch 3.6 Public Utilities & Energy	3.6-2	Key Definitions/Public Utilities Stormwater Lines	Impact evaluation of Public Utilities includes storm mains ≥ 42 -inch. Contractor is responsible for identifying all impacted storm assets, including smaller diameter, and protecting in place to ensure functionable and operational, with no reduction of capacity during relocation and construction of HSR project.

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1654-1534	41	Ch 3.6 Public Utilities & Energy	3.6-19	Table 3.6-3 Major Utility Lines within the Public Utility Resource Study Area	Table 3.6-3: What data was used and how was the number of Storm and Sanitary Sewer utilities within the Study determined? (e.g. spatial selection in GIS, as-built records, etc.)
1654-1535	42	Ch 3.6 Public Utilities & Energy	3.6-28	Public Water Utilities and Energy, San Jose Municipal Water System	In the first paragraph, revise the last two sentences to read as: In the neighborhoods of Edenvale, and Coyote Valley, groundwater from the Santa Clara Subbasin provides for most of the potable water use. The Evergreen service area receives both treated surface water and groundwater supply from SCVWD.
1654-1536	43	Ch 3.6 Public Utilities & Energy	3.6-35	Public Utilities	3rd Paragraph - The City of San Jose has 17 active sanitary pump stations; not 16.
1654-1537	44	Ch 3.6 Public Utilities & Energy	3.6-37	Public Utilities	Correct number for storm drain line is more than 1100 miles; Correct number for catch basins is 35,500; Correct number for storm pump stations is 31.
1654-1538	45	Ch 3.6 Public Utilities & Energy	3.6-51	Impact PUE#1: Planned and Accidental Temporary Interruption of Utility Service	2nd paragraph - There is a misspelled of the word "Bult"; Please correct.
1654-1539	46	Ch 3.6 Public Utilities & Energy	3.6-51	Impact PUE#1: Planned and Accidental Temporary Interruption of Utility Service	3rd Paragraph - List of critical facilities to be interrupted by the construction should be listed,
1654-1540	47	Ch 3.6 Public Utilities & Energy	3.6-52-53	Impact PUE#2: Temporary Impacts from Water Use	The report declares the impact to portable usage would be "less than significant", with average increase of 10% of the normal water usage. How will the water from the construction be mitigated? Will it be collected and trucked off site? Disposed of in sanitary sewer? If sanitary sewer, need to coordinate with DOT Sewer Division to ensure capacity. Is the amount of water to be used expected to be "less than significant" as well?
1654-1541	48	Ch 3.6 Public Utilities & Energy	3.6-55	Impact PUE#3: Reduced Access to Existing Utilities in the HSR Right-of-Way - Construction access	Report indicates right-of-way to be permanently fenced and secured. Any closure/construction impacts to City of San Jose right-of-way will be subject to review and issuance of encroachment permit.

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1654-1542	49	Ch 3.6 Public Utilities & Energy	3.6-55	Table 3.6-13 Major Utility Conflicts and New Utility Installations	<p>Provide relocation plans for ALL City storm and sanitary sewer lines that the project is proposing to relocate, including pump stations. Project must coordinate with the City of San Jose and obtain approval prior to construction.</p> <p>For sanitary and storm relocations, include language on easements and maintenance access to City utilities post-construction of project.</p> <p>Will relocation of the storm pump stations (Taylor, Delmas, Willow, Alma, and Almaden) require land acquisition and coordination with City Real Estate?</p>
1654-1543	50	Ch 3.6 Public Utilities & Energy	3.6-56	Impact PUE#4: Existing Major Utilities Requiring Relocation or Removal	<p>Revise paragraph by adding statement/words written in bold below. Construction of any of the project alternatives would require excavation to support construction of various HSR facilities including elevated structures, railbeds, below-ground tracks, or tunnels. During excavation activities, buried utility lines (including water supply pipelines, natural gas, fuel, communication, and sanitary sewer lines, storm drains, and electrical lines) may be uncovered, which could result in conflicts with existing major utilities during construction because major utilities may need to be permanently relocated as a result of construction. In addition, conflicts could result from existing surface structures, including electrical substations and water conveyance facilities, groundwater well and pump stations, aboveground or overhead electric lines, transmission towers, communication lines, and other major utilities that are in conflict with construction of HSR facilities because the utilities may need to be permanently relocated or permanently removed as a result of construction. Relocation of the three existing pump station facilities for San Jose Municipal Water System may include land requisition, permitting process and approval from State Department of Drinking Water, specialized construction of installing new wells, installation of new pumps, motors, installation of new storm drain, protective enclosures and new conveyance piping system.</p>
1654-1544	51	Ch 3.6 Public Utilities & Energy	3.6-56	Impact PUE#4: Existing Major Utilities Requiring Relocation or Removal	<p>For existing utilities (including pipelines and pump stations) to be relocated outside the HSR's right-of-way, clarify if there are acquisitions of private properties, and how they would affect the CEQA. Clarify if any existing land use would be changed to accommodate the installation and operation of relocated utilities.</p>

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1654-1545	52	Ch 3.6 Public Utilities & Energy	3.6-57	Impact PUE#4: Existing Major Utilities Requiring Relocation or Removal Pump Stations	City of San Jose prefers gravity solutions over pumping due to operation and maintenance concerns related to pump stations. Project applicant should identify alternative ways to convey wastewater via gravity lines.
1654-1546	53	Ch 3.6 Public Utilities & Energy	3.6-58	Impact PUE#5: Temporary Impacts from Construction of New Utility Infrastructure	Last Paragraph - The City requests that temporary impact to City's essential facilities (such as sanitary pump stations) to be discussed in detail.
1654-1547	54	Ch 3.6 Public Utilities & Energy	3.6-65	Impact PUE#6: Temporary Impacts from Stormwater and Wastewater Generation during Construction	4th paragraph - Discharging wastewater directly into City's sanitary line needs to be closely coordinated with City's staff for capacity and maintenance activities.
1654-1548	55	Ch 3.6 Public Utilities & Energy	3.6-66	Impact PUE#6: Temporary Impacts from Stormwater and Wastewater Generation during Construction	2nd paragraph - SWPPP should be prepared by qualified Developer and Practitioner.
1654-1549	56	Ch 3.6 Public Utilities & Energy	3.6-71/72	Impact PUE#8: Continuous Permanent Impacts from Water Use - CEQA conclusion	Permanent impact to water use; Diridon Station's existing water usage is 5,400 gallons per day (gpd). The proposed project will use 24,200 gpd. This is a fourfold increase in water usage, yet the report declares "Less than significant impact". Was a Water Supply Assessment prepared or used to determine the threshold for "significant impact" in term of water use? Please document the evidence used to determine the level of significance.
1654-1550	57	Ch 3.6 Public Utilities & Energy	3.6-73	Impact PUE#9: Continuous Permanent Impacts from Wastewater Generation - CEQA conclusion	CEQA conclusion for wastewater impact for Diridon station is "less than significant". This seems to be underestimated. The report projects Diridon Station will generate 24,200 gpd of wastewater and will assume an increase of 0.01% at the Treatment Plant. The 24,200 gpd amount is a 4 times increase in wastewater generation at Diridon Station. While the ultimate impact to the wastewater facility may be "less than significant," the impact on the existing localized wastewater infrastructure near the Station is significant. The project should include capital improvement funding to upsize the collection system infrastructure downstream of the Station.
1654-1551	58	Ch 3.6 Public Utilities & Energy	3.6-73	Impact PUE#9: Continuous Permanent Impacts from Wastewater Generation - CEQA conclusion	With the increase in wastewater generation, the capacity of sanitary pumps stations between the Station and the Regional Wastewater Facility should be evaluated for impacts to sanitary sewer capacity as well. There is no mention of this analysis in the report.

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1654-1552	59	Ch 3.8 Hydrology Water Resources	3.8-46	Impact Impact HYD#2: Permanent Impacts on Drainage Patterns and Stormwater Runoff during Construction - Stormwater management	HYD-IAMF#1 and #2 both state that contractor shall prepare stormwater management plan and flood protection plan for review prior to construction and during design phase, stormwater capacity will be evaluated. How do we know the impacts to City streets and infrastructure with the EIR? Identify stormwater treatment facilities required within CSJ public right-of-way. Project needs to provide treatment for any new or replaced travel lane area exceeding 10,000 s.f. of impervious surface
1654-1553	60	Ch 3.8 Hydrology Water Resources	3.8-54	Hydrology	Provide drainage report and sizing calcs for additional impervious area and new drainage area runoff conveyed to City of San Jose storm system.
1654-1554	61	Ch 3.8 Hydrology Water Resources	3.8-78	Hydrogeology and Water Resources	Revise 1 st paragraph by adding the statement written in bold below: All four alternatives would require the protection of public drinking water supply wells during construction, as described in Impact HYD#8, and potentially the relocation of public drinking water supply wells. Existing wells in the HSR track alignment, such as below a viaduct or embankment, and other permanent impact areas, such as below realigned Monterey Road, would likely be abandoned and relocated nearby. <u>As in the case of San Jose Municipal Water System, there are three domestic groundwater well production facilities of approximate 300 feet depth designed to pump approximately 2,000 GPM each of potable water to provide water supply to San José Municipal Water System customers. Replacing these wells would likely require land acquisition, environmental review, permitting and approval from State Department of Drinking Water, specialized construction to drill at least 600 feet depth, and installation of pumps, motors, and protective enclosures.</u> Table 3.8-24 shows the existing public drinking water supply wells in the footprint of each alternative and subsection and the project’s requirements to protect or relocate these wells in coordination with the owner.....
1654-1555	62	Ch 3.11 Safety & Security	3.11-10	CA HSR Program Safety and Security Management Plan	This section states that the HSR alignment would be fully access-controlled, meaning that the public would be able to access the system only at the station platforms, and that access-control barriers and railway/roadway vehicle barriers along the right-of-way would prevent intrusion into the right-of-way. This is not true for Alternative 4 which includes at-grade crossings through which people, animal, vehicles, etc. can enter and cross the rail right of way. For safety reasons, at-grade crossings on the HSR corridor are unacceptable to the City of San Jose.

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1654-1556	63	Ch 3.11 Safety & Security	3.11-68	Impact S&S#12: Permanent Exposure to Rail-Related Hazards	In the San Jose Diridon Station Approach, two at-grade crossings are listed. However, there is a third at-grade crossing (pedestrian-only) at College Park Caltrain Station. Please include this and address.
1654-1557	64	Ch 3.13 Station Planning Land Use	3.13-1	Station Planning, Land Use, and Development - Appendix 2-J, Regional and Local Plans and Policies	Explain how EIR/EIR reconcile project design with the following policies of the City of San Jose General Plan: Goal EC-2 – Vibration. Minimize vibration impacts on people, residences, and business operations. Policy EC-2.1: Near light and heavy rail lines or other sources of ground-borne vibration, minimize vibration impacts on people, residences, and businesses through the use of setbacks and/or structural design features that reduce vibration to levels at or below the guidelines of the Federal Transit Administration. And, Policy EC-2.2: Require new sources of ground-borne vibration, such as transit along fixed rail systems or the operation of impulsive equipment, to minimize vibration impacts on existing sensitive land uses to levels at or below the guidelines of the Federal Transit Administration. Add City Policy EC-2 to Appendix 2-K for analysis.
1654-1558	65	Ch 3.13 Station Planning Land Use	3.13-3	Consistency with Plans and Laws	Add under the bullet point list those areas plans for San Jose: the Envision San Jose 2040 General Plan, and the Diridon Station Area Plan (2014), at minimum. In the same page the document states that: "Appendix 2-K further details the project's inconsistency with these local and regional land use policies. It also includes a discussion of approaches the Authority has committed to take to reconcile any inconsistency as well as the rationale for carrying forth the project where it remains inconsistent with the policy despite these approaches." It does not. Appendix 2-K does not provide information that would reconcile major policy issues with noise and vibration.
1654-1559	66	Ch 3.13 Station Planning Land Use	3.13-7	SJ Diridon Station Area	Existing Land Use surrounding Diridon Station will be undergoing substantial changes and will most likely impact this document's current approach in analyzing the Diridon Station Area. Industrial uses will be changed and will be substituted mostly by residential and office/commercial uses.
1654-1560	67	Ch 3.13 Station Planning Land Use	3.13-7	Monterey Corridor Subsection	The first paragraph says that Alts 1, 2, 3 would be on the west side of UPRR, and Alt 4 would be on the east side of UPRR. Please correct this to say vice versa.
1654-1561	68	Ch 3.13 Station Planning Land Use	3.13-8	Figure 3.13-1 Existing Land Uses - Diridon Area	This figure should be updated to reflect high-density residential developments that are already built and occupied at 808 W San Carlos St and 333 Sunol St; park land at Del Monte Park (806 W Home St); and commercial uses rather than industrial on the east side of SR 87. Also, much of the land on the east side of the Caltrain corridor in the station footprint boundary is proposed for commercial/mixed use (Google); it is misleading to leave this shown as industrial.

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1654-1562	69	Ch 3.13 Station Planning Land Use	3.13-19	Figure 3.13-7 Planned Land Uses (Current Zoning)—San Jose Diridon Station RSA	Information shown on map may need to be changed to reflect pending land use changes due to the proposed Google development. Google development should be included in discussion for planned developments around the Diridon Station Area as it may impact past and future analyses of the area.
1654-1563	70	Ch 3.13 Station Planning Land Use	3.13-24	Planned Development - San Jose Diridon Station Approach Subsection	Expand the reference that says: "In addition, the Authority, Caltrain, the City of San Jose, and the VTA have formed a partnership to initiate a concept plan to transform San Jose Diridon Station." to Include future inter-agency collaboration under LU-IAMF#2 Station Area Planning and Local Agency coordination.
1654-1564	71	Ch 3.13 Station Planning Land Use	3.13-42	Table 3.13-5 Land Use Permanently Converted by the Project Alternatives	Is this table based on the existing land uses shown in Figure 3.13-1? If so, then the amount of existing commercial land uses that will be permanently converted by the project alternatives is underestimated.
1654-1565	72	Ch 3.13 Station Planning Land Use	3.13-46	Table 3.13-6 Summary of Permanent Land Conversion...	Is this table based on the existing land uses shown in Figure 3.13-1? If so, then the amount of existing commercial land uses that will be permanently converted by the project alternatives is underestimated.
1654-1566	73	Ch 3.15 Parks Recreation Open Space	3.15-1	Definition of Resources - Parks	Update definition of Parks to state that "for active and passive recreational or ornamental purposes." Please note that not all "Park" space may be publicly open. San Jose, like may public agencies manages POPOS (Privately Owned, Public Open Space) which is governed by agreements between the agency and landowner. These spaces should be protected in a similar manner. Clarity on this point is required on page 3.15-5, as parks on that page are defined as only upon public lands.
1654-1567	74	Ch 3.15 Parks Recreation Open Space	3.15-1	Definition of Resources - Recreation	Update definition of "Recreation". Recognize that pedestrian and bicycle trails are active transportation resources as noted by the City of San Jose General Plan, Bike Plan 2020 and the Caltrans Highway Design Manual Chapter 1000.
1654-1568	75	Ch 3.15 Parks Recreation Open Space	3.15-7	Parks, Recreation, and Open Space Resources	Include a cross-reference to confirm that "Walking/Biking Trails" are recognized as transportation facilities per the City of San Jose General Plan, Bike Plan 2020 and the Caltrans Highway Design Manual Chapter 1000 (recommend that this occur as part of Section 3.2.5.5 at a minimum).

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1654-1569	76	Ch 3.15 Parks Recreation Open Space	3.15-9	Figure 3.15-1 Parks, Recreation, Open Space Resources, and School District Play Areas—San Jose Diridon Station Approach Subsection (north)	<p>Map misidentifies the Guadalupe River Park (5). The park extends from Highway 280 to Highway 880. The area indicated, north of Highway 880, is the “Lower Guadalupe River Trail”. The Lower Guadalupe River Trail extends from Highway 880 to Gold Street in Alviso. The trail alignment between Airport Parkway and Green Island Bridge (south of Highway 101) occurs on both sides of the river. Recommend that map be updated to reflect these points.</p> <p>Confirm with the City of Santa Clara that “College Park” is a park site. We believe that College Park refers to the neighborhood and train station. College Park is not found on the City of Santa Clara’s Parks and Recreation Department website.</p> <p>The west bank “open space” green line from Highway 237 to Gold Street is not a public facility and is not open to the public. Neither San Jose, nor Santa Clara have processed a CEQA document for public access nor (to our knowledge) entered into a Joint Trail Agreement with the Santa Clara Valley Water District.</p> <p>The map does not identify San Jose’s Riverview Park and Santa Clara’s Rivermark Park; both directly adjacent to the river, near River Oaks Parkway.</p>
1654-1570	77	Ch 3.15 Parks Recreation Open Space	3.15-10	Figure 3.15-2 Parks, Recreation, Open Space Resources, and School District Play Areas — San Jose Diridon Station Approach Subsection (south)	<p>Discovery Dog Park is incorrectly marked. The park exists between Delmas Avenue and the freeway embankment, between Santa Clara Street and Park Avenue. Ensure that level of impact during construction and permanently is accurately discussed.</p> <p>Map shows but does not label the Communications Hill Trail (at lower right corner).</p> <p>Identify the Three Creeks Trail as an “Open” system, from Lonus Street to the Falcon Court cul-de-sac (immediately west of the Guadalupe River).</p> <p>The Guadalupe River Trail has been master planned from Virginia Street to Alma Avenue (and southward to Chynoweth Avenue) but is not currently developed or opened as suggested by the map.</p> <p>Map is not showing Arena Green as a Park Facility (along the Guadalupe River, on both banks, from Santa Clara Street to Julian Street)</p>

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1654-1571	78	Ch 3.15 Parks Recreation Open Space	3.15-11	Figure 3.15-3 Parks, Recreation, Open Space Resources, and School District Play Areas—Monterey Corridor Subsection	The Guadalupe River Park (6) is not as noted near Highway 85. The Guadalupe River Trail extends from Chynoweth Avenue to Coleman Road, along the east bank of the river and ponds. The substantial open space adjacent to the trail is under governance of the Santa Clara Valley Water District is not currently open to the public (unless the District has indicated otherwise).
1654-1572	79	Ch 3.15 Parks Recreation Open Space	3.15-10 to 3.15-12	Figure 13.5-2 to Figure 13.5-4 Parks, Recreation, Open Space Resources	<p>The following parks are within the resource study boundaries but are not identified in the Figures: Guadalupe Gardens, Arena Green, John P. McEnery Park, Del Monte Park, Discovery Meadows, River Glen Park, Roberto Antonio Balermino Park, Viera Park, William Lewis Manly Park, Hillsdale Fitness Park (planned), Elaine Richardson Park, Solari Park, Parkview III Park.</p> <p>Link to the City's Parks and Trail map: https://www.sanjoseca.gov/your-government/departments/parks-recreation-neighborhood-services/outdoor-activities/-selcat-102/-npage-7</p> <p>Similarly, none of the PRNS facilities outside of parks and trails within the boundary are included. I'm not sure if these fall under the recreational facilities category as defined by the EIR? If so, then Southside Community Center, Evandale Library, Seven Trees Community Center, Dairy Hill Open Space, and Tuscany Hills Open Space may need to be added?</p>
1654-1573	80	Ch 3.15 Parks Recreation Open Space	3.15-32 to 3.15-40	Table 3.15-4 Noise, Vibration, and Construction Emissions Impacts on Use and User Experience of Parks, Recreational Facilities, and Open Space Resources	What defines a space as urban, residential, or industrial? Several parks are labeled as "urban" but are very much within a residential setting.

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1654-1574	81	Ch 3.15 Parks Recreation Open Space	3.15-52	Guadalupe River Trail	<p>The project proposes acquisition of 0.70 acres and reports that a portion of the existing trail will be impacted during construction. The extent of the trail narrowing should be stated. The trail system supports between 200,000 and 350,000 users annually, so sustaining a minimum 8' wide trail (per Caltrans Highway Design Manual) is the most significant impact that could be contemplated. Recommend more detail on the short-term and long-term impact. Concern about public safety should columns or other visual barriers be proposed in close proximity to the trail system.</p> <p>The narrative introduces impacts along the 3-mile section of the park (assuming that this means the Guadalupe River Park, from 880 to 280). But the discussion identifies no impacts in Alviso, which is 6 miles to the north from the park. Recommend greater clarity on the type of work and locations.</p>
1654-1575	82	Ch 3.15 Parks Recreation Open Space	3.15-52	Los Gatos Creek Trail	Document misreports that the Los Gatos Creek Trail commences at "Main Street in San Jose". This site is in the Town of Los Gatos. And the trail system itself begins at Lexington Dam, well above the Town of Los Gatos.
1654-1576	83	Ch 3.15 Parks Recreation Open Space	3.15-63	Table 3.15-7 Permanent Parks, Recreation, and Open Space Acquisitions	Why is Tamien Park listed here but not listed in Impact PK#4? The impacted area will block an access point into the park as well as a pedestrian pathway towards Tamien Station.
1654-1577	84	Ch 3.15 Parks Recreation Open Space	3.15-65	Impact PK#6: Permanent Acquisition of Parks, Recreation, and Open Space Resources	<p>The EIR describes Tamien Park Phase 2 as a "planned expansion". For clarity, the word expansion is not appropriate since Phase 2 is the continuation of the original master planned and approved design, rather than an expansion to an already completed park. Perhaps "planned development" or "planned buildout" are more appropriate.</p> <p>It should be noted too that the impacts to Tamien Park would also include disruption of the internal park circulation (a portion of the main pathway around the park is within the impacted area) as well as pedestrian access between the park and Tamien Station.</p> <p>Note that Tamien Park Phase II has been bid, and construction to commence Summer 2020, with a public opening before construction of HSR.</p>
1654-1578	85	Ch 3.15 Parks Recreation Open Space	3.15-117	PR-MM#1: Provide Access to Trails during Construction	It is understood that access to a Class I Bikeway detour is to be provided. However, narrative explains that detours leading to public streets will be required. Recommend that a prolonged detour of a Class I Bikeway be met with a viable off-street route.

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1654-1579	86	Ch 3.16 Aesthetics	3.16-5	Envision San Jose 2040 General Plan (City of San Jose 2011)	Paragraph should include mention of AC-2, pg. 12, of the City's General Plan that states: high impact public art should be integrated throughout the community
1654-1580	87	Ch 3.16 Aesthetics	3.16-6	Definition of resource study area	Paragraph should include mention of Public Art. Example: Definition of Resource Study Area The RSA is the area in which all environmental investigations specific to aesthetics and visual quality are conducted to determine the resource characteristics and potential project impacts. The RSA for direct and indirect impacts encompasses a 0.5-mile distance from the project footprint in rural areas and a 0.25-mile distance from the project footprint in urbanized areas. Where elevated or more expansive views are present or where there are prominent and regionally important visual and scenic features, such as mountain ridgelines, large iconic structures, public art , or water features, middle ground views (up to 3 miles from the project footprint) and background views (beyond 3 miles from the project footprint) are discussed as contributing visual elements to the RSA.
1654-1581	88	Ch 3.16 Aesthetics	3.16-19	Diridon Station Landscape Unit Visual Character/Cultural Environment	Paragraph should include mention of the new largescale mural at the Modera lofts should be mentioned, example: A new colorful residential loft building, converted from the historic Del Monte Plant 51, is visible from the station and includes a visible multi-story mural.
1654-1582	89	Ch 3.16 Aesthetics	3.16-24	San Jose Station Approach Landscape Unit	Paragraph should include mention of public art assets along the Guadalupe River Trail. Example: Guadalupe River Park is a 3-mile ribbon of parkland that runs along the banks of the Guadalupe River in the heart of downtown San Jose from I-880 at the north, to I-280 at the south. It is a resource of regional importance to the people of Santa Clara County and the San Francisco Bay Area (Bay Area) and numerous Public Art assets are located along the park trail.
1654-1583	90	Ch 3.16 Aesthetics	3.16-88	Figure 3.16-19 W Hedding St	Update the first 3 images. Existing condition on Hedding St now includes lane reduction and new bike lane.
1654-1584	91	Ch 3.16 Aesthetics	3.16-101	Impact AVQ#4: Permanent Direct Impacts on Visual Quality- San Jose Station Approach	Disagree with the CEQA conclusion that Alternatives 1, 2, and 3 would have less than significant impact in the Diridon Approach Area. To the north and south of Diridon Station, the HSR viaduct is very tall, and contains numerous straddle bents and columns. These are extraordinary concrete structures, taller than the existing SR-87 viaduct. Even at half the height and with its aesthetic treatments, SR-87 imposes a visual and physical barrier through central San Jose by creating dark underpasses and dead space that is often overtaken by homeless encampments. The HSR viaduct will be taller, casting larger shadows through central San Jose, and creating more dead space that will be plagued by homeless encampments.

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1654-1585	92	Ch 3.20 Design Variants	3.20-9	3.20.3.2 Areas with Impact Differences	This section says that the "construction of the design variants would not affect any different transportation facilities than the alternatives without the DDV and TDV." However, section 3.20.2.1 explains that the DDV would require at least four tracks be shifted in the Diridon Station platform area. This would impact existing train operations and should be disclosed.
1654-1586	93	7.0 Other NEPA CEQA Considerations	7-1	7.1.1 Adverse Effects that Cannot be Avoided under NEPA	This statement is incorrect "The changes to the geometry and capacity of intersections under Alternatives 1, 2, and 3 would result in automobile delay. These delays would not occur under Alternative 4." Alternative 4 significantly increases gate down time at at-grade crossings, causing delay for all users (vehicles, peds, bikes) crossing the railroad corridor.
1654-1587	94	8.0 Preferred Alternative	8-12	Table 8-1 Community and Environmental Factors by Alternative	Under "Emergency Vehicle Access/Response Time" for "Types of mitigation needed..." please add grade separations to cell for Alternative 4.
1654-1588	95	8.0 Preferred Alternative	8-18	8.4.3 Additional Considerations	Would Alt 4 and perhaps portions of Alts 1-3 result in demolition/ reconstruction of part of the Caltrain electrification work in the Diridon Approach subsection due to the need to realign tracks in order to add the additional track? If so, how is this factored into the considerations in this DEIR?
1654-1589	96	8.0 Preferred Alternative	8-19	8.4.3 Additional Considerations	Alternatives 1, 2, and 3 do not contain "infrastructure to support increased regional passenger rail service to Gilroy" because they were conceived and designed assuming no blended service. All three alternatives could be made compatible with blended Caltrain service, through the addition of Caltrain stations and other infrastructure. Adding such elements would create more impacts and add costs to the alternatives, but lack of shared use with Caltrain is not an inherent feature of the alternatives.
1654-1590	97	8.0 Preferred Alternative	8-19	8.4.4 Alternative Comparison	Discussion of the predominant factors contributing to the impacts of Alternative 2 is does not mention the use of Monterey Road right-of-way for the elevated embankment. The same elevated embankment would not create most of the impacts if located within the Union Pacific ROW.
1654-1591	98	APPENDIX 2-E: PROJECT IMPACT AVOIDANCE AND MINIMIZATION FEATURES ANALYSIS	2-E-33 to 2-E-36	TR-IAMF #1-12	Major construction project shall be required as a condition to the permit to submit to the Director of Public Works, for approval by the City Council, a Construction Impact Mitigation Plan (CIMP) as outlined in Muni Code Chapter 13.36 - PUBLIC RIGHT-OF-WAY WORK PERMITS. The CIMP will have more detailed information for each of the areas of where the impacts will be and how they will mitigate.

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1654-1592	99	APPENDIX 2-J: REGIONAL AND LOCAL PLANS AND POLICIES	2-J-99	Table 11 Regional and Local Plans and Policies Relevant to Safety and Security	<p>Missing following Law Enforcement and Fire Protection Policies:</p> <p>ES-3.1 Provide rapid and timely Level of Service response time to all emergencies:</p> <ol style="list-style-type: none"> 1. For police protection, use as a goal a response time of six minutes or less for 60 percent of all Priority 1 calls, and of eleven minutes or less for 60 percent of all Priority 2 calls. 2. For fire protection, use as a goal a total response time (reflex) of eight minutes and a total travel time of four minutes for 80 percent of emergency incidents. <p>ES-3.24 Analyze service demands and deploy dynamic response techniques to reduce response time and maximize use of available resources.</p>
1654-1593	100	Appendix 2 K	2-K-2	San José General Plan	<p>Document reads, "Policy TR-5.3: The minimum overall roadway performance during peak travel periods should be level of service "D" except for designated areas" This is outdated as General Plan now reads. "TR-5.3 Development projects' effects on the transportation network will be evaluated during the entitlement process and will be required to fund or construct improvements in proportion to their impacts on the transportation system. Improvements will prioritize multimodal improvements that reduce VMT over automobile network improvements.</p> <ul style="list-style-type: none"> • Downtown. Downtown San José exemplifies low-VMT with integrated land use and transportation development. In recognition of the unique position of the Downtown as the transit hub of Santa Clara County, and as the center for financial, business, institutional and cultural activities, Downtown projects shall support the long-term development of a world class urban transportation network." <p>https://www.sanjoseca.gov/home/showdocument?id=22359</p>
1654-1594	101	Appendix 3.6A Public Utilities and Energy Facilities	3.6-A-51	Table 1b Existing Major Utilities and Energy Facilities within the Public Utilities Resource Study Area under Alternative 4	<p>Two 48" SS lines identified at Stn 2996+56 and 2997+61 are not found in the City of San Jose's database. Confirm if these lines are active and verify ownership.</p>

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1654-1595	102	Appendix 3.6A Public Utilities and Energy Facilities	3.6-A-53	Table 1d Existing Major Utilities and Energy Facilities within the Public Utilities Resource Study Area under Alternative 4	Missing San Jose Muni Water Well and Pump Facilities that require relocation. Insert row to include Pump Station and Well under the Morgan Hill and Gilroy Subsection with the following information: Utility Type – Groundwater Pump Station Facility Provider – City of San Jose/San Joe Muni Water Stations- B765+00, B770+00, B755+00 Longitude/Traverse - Longitudinal Existing Roadway Crossing- Bailey Disposition – Relocation
1654-1596	103	APPENDIX 3.19-B: CUMULATIVE TRANSPORTATION PROJECTS LISTS	3.19-B-7	Table 2 City of San Jose Transportation Projects List	Update project status for US101/Blossom Hill IC: - Construction August 2020-2022
1654-1597	104	PEPD Alternative 1-4	Dwg # TT- D4001- D4015	Alternative 4 Utility Conflicts Storm Lines	All City of San Jose existing storm lines (including <42-inch) transverse and longitudinal in conflict with HSR alignment should be called out with diameter and note to protect in place, relocate, etc. Alternative 4 drawings have been marked-up to identify missing storm mains (see DEIRS_JM_V3-18_PEPD_Alt4_Book4A_MPCComments.pdf); please add these to Alt 4's drawings, and also label them in Alternative 1-3's drawings. The contractor is liable of identifying all existing storm lines prior to construction and protecting them in place.
1654-1598	105	PEPD Alternative 1-4	Dwg # TT- D4001- D4015	Alternative 4 Utility Conflicts Sanitary Lines	Many of City of San Jose's existing sanitary sewer lines are not called out in the Plan & Profile drawings. We've noted some of them in Alternative 4's drawings (see DEIRS_JM_V3-18_PEPD_Alt4_Book4A_MPCComments.pdf); please add these to Alt 4's drawings, and also label them in Alternative 1-3's drawings. Many of these were pointed out in our last round of comment in 2018 but have not been addressed. Please note that the contractor is liable of identifying all existing sanitary lines prior to construction and protecting them in place.
1654-1599	106	PEPD Alternative 1-3		Construction Staging Area: Monterey/Blossom Hill	Proposed Construction Staging Area will impact US101/Blossom Hill IC Project construction staging.
1654-1600	107	PEPD Alternative 1-3		Previous City Comments dated 1/18/18	Resubmitting City's comments on Alternatives 1-3 that were submitted to HSRA on January 18, 2018.
1654-1601	108	PEPD Alt 1	TT-DO153 & TT- DO301	Los Gatos Creek Trail UC Project	City is at 90% Design Package for Los Gatos Creek Trail under-crossing beneath existing rail and San Carlos Street.

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1654-1602	109	PEPD Alt 1			Between Sta. B265+00 and B270+00 DPW utility viewer shows 12" CVP SS line and 36" DIP SD line cross the HSR alignment.
1654-1603	110	PEPD Alt 1			Station B317+00 to B324+00: There is a conflict between the 48" Sanitary Sewer PVC pipe and proposed bridge columns' footings at this location. There is a note to "Relocate" the 48", but there is no limits of the relocations. Please show limits of relocations.
1654-1604	111	PEPD Alt 1			Sta. B324+00 and Capitol Expressway DPW utility viewer shows 24" RCP SD line crosses the HSR alignment.
1654-1605	112	PEPD Alt 1			Sta. B335+00 and Senter Rd DPW utility viewer shows 27" RCP SD line crosses the HSR alignment.
1654-1606	113	PEPD Alt 1			Station B380+00: There is a conflict between the 54" Sanitary Sewer PVC pipe and the proposed columns' footprints at this location. There is call-out for relocation, but there is not limits. Please add limits.
1654-1607	114	PEPD Alt 1			Sta. B569+00 and Bernal Rd DPW utility viewer shows 8" VCP SS line crosses the HSD alignment.
1654-1608	115	PEPD Alt 1			Sta. B584+00 and Bernal Way DPW utility viewer shows 8" VCP SS line crosses the HSD alignment.
1654-1609	116	PEPD Alt 3	TT-D0401	Tamien Park	Aerial data misses that Phase I of Tamien Park has been constructed and is open to the public, remove "Future".
1654-1610	117	PEPD Alt 4		Previous City Comments dated 10/17/18	Resubmitting City's comments on PEPD Alt 4 that were submitted to HSRA on October 17, 2018.
1654-1611	118	PEPD Alt4	General Comment	Title Block - CP Coast to Gilroy	Title Block shows entire rail corridor as "CP Coast to Gilroy". Revise and add subsections to match Alternatives 1-3 PEPD plans.
1654-1612	119	PEPD Alt 4	General Comment	Cross Sections	Show existing track center in all cross sections in San Jose ROW.
1654-1613	120	PEPD Alt 4	TT-D4003	Underpass by Sta B3031+00	Provide underpass general plan at Taylor St around stationing 3031+00
1654-1614	121	PEPD Alt 4	TT-D4003	Los Gatos Creek Trail UC Project	Widening of the railway over Los Gatos Creek will impact the City's current 90% design for the Los Gatos Creek Trail Under-Crossing.
1654-1615	122	PEPD Alt 4	TT-D4004	Guadalupe River Trail	Aerial view is missing for the section of the project which seems to have significant permanent impacts to the Guadalupe River Trail.

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1654-1616	123	PEPD Alt 4	TT-D4007 to TT-D4011	Monterey Rd Class I shared-use path	<ol style="list-style-type: none"> 1. Provide Class I shared-use path on both sides of Monterey Rd approximately between Fehren Dr and Metcalf Rd, refer to San Jose Complete Streets Design Standard and Guidelines Page 19 for cross section. 2. Remove all pork chop islands at all intersections where Class I shared-use path is proposed, such as Fehren Dr, Capitol Expy, Senter Rd, Skyway Dr, Branham Ln, Chynoweth Av, Blossom Hill Rd and Bernal Rd, etc. 3. Provide protected intersection along shared-use path, refer to San Jose Complete Streets Design Standard and Guidelines Page 114. 4. Roadway design should conform to the existing complete streets design including lane widths and existing bike facilities.
1654-1617	124	PEPD Alt 4 Book 4D	CV-S4001	Emado Ave and Fox Ln (private streets) Richmond Ave	Construct standard curb, gutter, and sidewalk to meet City's standards for private street and treat the street for stormwater

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1654-1382

The Authority appreciates your comments on the Draft EIR/EIS. In subsequent individual comments, the City of San Jose provided specific detailed comments regarding existing conditions and adopted plans, environmental impacts, cumulative impacts, disproportionate impacts on minority and low-income populations, and mitigation. Each of these specific comments is addressed below.

1654-1383

Refer to Standard Response SJM-Response-GEN-2: Consideration of Diridon Integrated Station Concept and the Google Development at the San Jose Diridon Station, SJM-Response-GEN-3: Consideration of Caltrain Business Plan, Including the 2040 Caltrain Service Vision.

1654-1384

Refer to Standard Response SJM-Response-GEN-2: Consideration of Diridon Integrated Station Concept and the Google Development at the San Jose Diridon Station.

1654-1385

Refer to Standard Response SJM-Response-ALT-1: Alternatives Selection and Evaluation Process, SJM-Response-ALT-2: Project-Specific Alternatives Considerations, SJM-Response-GEN-2: Consideration of Diridon Integrated Station Concept and the Google Development at the San Jose Diridon Station.

The comments request for an additional design variant between CP Coast and Tamien Caltrain Station is noted. The Authority is not adding an additional design variant or alternative at this time. The Authority will continue coordination as an agency partner of DISC during Detailed Design Post-ROD to address design, construction, and operational conflicts.

1654-1386

Refer to Standard Response SJM-Response-GEN-2: Consideration of Diridon Integrated Station Concept and the Google Development at the San Jose Diridon Station, SJM-Response-GS-1: Requests for Grade Separations.

The comment requests that the Authority leverage the work of the DISC process to resolve significant and unavoidable impacts of HSR. The Authority will continue coordination as an agency partner of DISC during Detailed Design that will occur as part of Post-ROD activities. Significant and unavoidable impacts of Alternatives 1 through 4 are disclosed in the Final EIR/EIS. No additional mitigation measures that can be implemented by HSR are available to resolve significant and unavoidable impacts from the reconstruction of Diridon Station. Regarding the referenced Attachment A: Additional Comments by Chapter, each comment received in Attachment A has been addressed and responded to in Volume 4 of this Final EIR/EIS.

DISC is a separate project from the HSR project and thus funding of DISC is a separate matter from the HSR project. While the DISC concept includes a grade separated alignment that would avoid the use of the at-grade crossings at Auzerais Avenue and West Virginia Street, as explained in Standard Response SJM-Response-GS-1, adding grade separations to Alternative 4 is not considered a feasible mitigation measure to address impacts associated with at-grade crossings due to funding constraints. As such, the Authority cannot commit to funding DISC as mitigation for any impacts of the HSR project at this time.

1654-1387

The Authority appreciates its partnership with the City of San Jose, as well as the other partner agencies including the Santa Clara Valley Transportation Authority (VTA) and Caltrain, working together on the Diridon Integrated Station Concept (DISC) planning effort. These memoranda and materials referenced in the comment will be added to the administrative record for the Final EIR/EIS.

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1654-1388

Refer to Standard Response SJM-Response-GS-1: Requests for Grade Separations, SJM-Response-SS-1: At-Grade Crossing Safety, SJM-Response-SS-2: Emergency Vehicle Response Times, SJM-Response-TR-1: Site-Specific Mitigation for Traffic Impacts.

Regarding requests for grade separations, as discussed in Standard Response SJM-Response-GS-1: Requests for Grade Separations, they are not considered as feasible mitigation for traffic, emergency vehicle response delays, or noise due to funding limitations.

Regarding at-grade safety, please see Standard Response SJM-Response-SS-1: At-Grade Crossing Safety, which explains why the EIR/EIS does not identify a significant safety impacts at the at-grade crossings.

Regarding emergency vehicle response times, please see Standard Response SJM-Response-SS-2: Emergency Vehicle Response times which explains the identified significant impacts and the mitigation available to address them.

Regarding traffic delays, please see Standard Response SJM-Response-TR-1: Site-Specific Traffic Mitigation, which explains that the Authority has added certain traffic mitigation measures to address adverse traffic delay, including mitigations related to some, but not all of the streets noted in this comment.

1654-1389

Refer to Standard Response SJM-Response-GS-1: Requests for Grade Separations.

The request for grade separations at Skyway Drive, Branham Road, and Chynoweth Avenue is noted. The Draft EIR/EIS already includes an alternative (Alternative 2) that includes grade separations and follows a similar general alignment as Alternative 4 from south of Tamien Station to south of Gilroy. Thus, Alternative 2 describes the environmental impacts of a grade-separated version of Alternative 4 from the Monterey Corridor through Gilroy. While Alternative 2 includes an embankment design from the Monterey Corridor through Gilroy, the potential secondary impacts of adding grade separations to Alternative 4 at the at-grade crossing would likely be similar to the impacts described in the Draft EIR/EIS for Alternative 2 at and near at-grade crossings in south San Jose, Morgan Hill, San Martin, and Gilroy. Alternatives 1 and 3 analyze viaducts, and Alternative 2 analyzes embankments and grade separations. With this approach, the EIR/EIS already considers alternatives that would avoid impacts associated with having at-grade crossings. Chapter 8, Preferred Alternative, of the Draft EIR/EIS identifies the Preferred Alternative for the San Jose to Central Valley Wye Project Extent as Alternative 4. It was selected based on a balanced consideration of the environmental information presented in the Draft EIR/EIS in the context of project purpose and need; project objectives; the CEQA, NEPA, and Section 404(b)(1) of the Clean Water Act requirements; local and regional land use plans; community and stakeholder preferences; and costs. Section 8.4.1, Review of Alternative Key Differentiators by Subsection, of the Draft EIR/EIS describes the key community and environmental factors that differentiate the alternatives within each subsection of the project.

1654-1390

Refer to Standard Response SJM-Response-GS-1: Requests for Grade Separations.

Refer to response to submission SJM-1654, comment 1389. The request for grade separations at Skyway Drive, Branham Road, and Chynoweth Avenue is noted.

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1654-1391

Refer to Standard Response SJM-Response-GS-1: Requests for Grade Separations.

The request for funding grade separations is noted. The Authority is committed to developing interagency agreements to support decision making, permit approvals during construction, and funding mechanisms, where appropriate.

1654-1392

Refer to Standard Response SJM-Response-GEN-2: Consideration of Diridon Integrated Station Concept and the Google Development at the San Jose Diridon Station, SJM-Response-GS-1: Requests for Grade Separations.

The request for funding grade separations is noted. Please refer to response to submission SJM-1654, comment 1389.

1654-1393

Refer to Standard Response SJM-Response-GS-1: Requests for Grade Separations.

The commenter suggests that the Authority should include grade separations as a mitigation strategy now. Given the high costs and disruptions associated with grade separations, the Authority cannot commit to grade separations as part of mitigation for Alternative 4 for the San Jose to Merced Project Section (or for the San Francisco to San Jose Project Section). Grade separations are not proposed as part of the project, nor as mitigation, so the issue of timing is moot.

1654-1394

Refer to Standard Response SJM-Response-GEN-3: Consideration of Caltrain Business Plan, Including the 2040 Caltrain Service Vision.

Please also see Chapter 5, Environmental Justice of the EIR/EIS for a detailed discussion of impacts to low-income and minority populations.

1654-1395

Refer to Standard Response SJM-Response-GEN-3: Consideration of Caltrain Business Plan, Including the 2040 Caltrain Service Vision.

Please also refer to response to comment SJM-1619-2416.

1654-1396

The comment requests clarification as to how East Bay passenger rail operations would be accommodated under Alternative 4. From San Jose Diridon Station to CP Lick (Park Ave to Daylight Way), Alternative 4 would convert the current double-track corridor to three tracks with a single dedicated track for freight, ACE, Amtrak, and Capitol Corridor and two electrified tracks under a cantilever OCS for Caltrain and HSR. This track configuration, which is described in Chapter 2, Alternatives, of the Draft EIR/EIS, would maintain current capacity for UPRR, ACE, Amtrak, and Capitol Corridor and the planned increases for Caltrain with the PCEP and the proposed HSR service. Impacts of HSR on passenger rail are described in Impact TR#11, Impact TR#14, and ImpactTR#16, and impacts on freight rail are described in Impact TR#20, Impact TR#21, and Impact TR#22 in Section 3.2.6, Environmental Consequences of Section 3.2, Transportation. Please also refer to response to submission 1654, comment 1410.

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1654-1397

Refer to Standard Response SJM-Response-GS-1: Requests for Grade Separations.

The commenter is correct that Chapter 5, Environmental Justice, of the Draft EIR/EIS concludes that mitigation with noise barriers would not fully address the concerns raised during the environmental justice public outreach process regarding noise and vibration in environmental justice communities. The Authority is aware of the City's preference for the inclusion in the EIR/EIS of grade separations as mitigation for noise impacts. As discussed in Chapter 5 in the Final EIR/EIS, where disproportionately high and adverse project effects would remain even after the application of mitigation measures and after consideration of project benefits, the Authority is proposing certain community improvements that have a reasonable relationship to the residual effects as offsetting mitigation for those effects. The Authority engaged with environmental justice communities including the City of San Jose, between the release of the Draft EIR/EIS and the Final EIR/EIS. During the outreach process, the City of San Jose and other community stakeholders identified noise treatments as potential community improvements to address ongoing operational noise affecting residents along the Caltrain corridor. The Authority is now considering implementing residential noise treatments for homes affected by existing train and traffic noise, in several communities within the City of San Jose, including San Jose Diridon, Gardner/Willow Glen, Washington/Guadalupe/Tamien/Alma/Almaden, and South San Jose. As described in Chapter 5 in the Final EIR/EIS, the Authority's conclusion is that after considering direct mitigation (like noise barriers), the noise benefits of the project (reduced highway traffic and airplane noise), and offsetting mitigation providing residential noise treatments in targeted areas in environmental justice communities, that Alternative 4 would not have a disproportionately high and adverse effect related to noise in San Jose communities.

1654-1398

Refer to Standard Response SJM-Response-GS-1: Requests for Grade Separations.

As explained in the Standard Response, the Authority already considers alternatives avoiding at-grade crossing impacts in San Jose (Alternatives 1, 2 and 3) and also considered grade separations to be infeasible for Alternative 4 due to cost. This comment focuses on three intersections in South San Jose, there are 30 at-grade crossings between Santa Clara and Gilroy and the cost of grade separations in San Jose, much less the remainder of them in this project section is cost prohibitive.

The Authority has demonstrated in the Final EIR/EIS that all practicable mitigation to avoid or minimize project effects, including those high and adverse effects that would disproportionately affect minority populations and/or low-income populations, has been proposed where adverse effects are identified.

As discussed in Chapter 5 in the final EIR/EIS, after consideration of direct mitigation only, there would be the following residual disproportionately high and adverse effects in the South San Jose community area with Alternative 4: Emergency Response Delay; Operational Noise; and Operational Traffic.

As discussed in Chapter 5 in the Final EIR/EIS, project benefits would help to offset some of these residual disproportionately high and adverse effects with Alternative 4:

- Operational Traffic: The increased travel options, transit connectivity, and regional vehicle miles travelled reduction associated with the project are considered to offset the temporary operational traffic delays (all alternatives).
- Operational Noise: While the project would reduce noise effects associated with airport and highway expansion, this would not fully offset adverse noise effects with Alternative 4.
- Emergency Response Delay: While the project would provide a safer long-distance travel option compared to passenger vehicle use and Alternative 4 would provide safety improvements to the existing rail corridor through fencing, four quad safety gates, median channelization, obstacle detection, and automated train controls, these benefits

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1654-1398

would not fully offset emergency vehicle response delays.

As discussed in Chapter 5, Environmental Justice, of the Final EIR/EIS, the Authority engaged with environmental justice communities including the City of San Jose, between the release of the Draft EIR/EIS and the Final EIR/EIS about potential community improvements in the South San Jose community area as offsetting mitigation to address residual disproportionately high and adverse effects to minority and/or low-income populations.

The Authority is proposing the following community improvements as offsetting mitigation measures for Alternative 4:

(1) The Authority would install noise insulation for up to 20 existing residences to reduce noise effects from existing traffic along the west side of US101 between Blossom Hill Road and SR 85. This measure would reduce community noise effects sufficient to offset the adverse noise effects with Alternative 4 in this community area.

(2) The Authority would provide funding to the City of San Jose to construct three new pedestrian/bicycle overcrossings of Monterey Road and the railroad corridor at Skyway Drive, Branham Lane, and Chynoweth Avenue. While these measures would not avoid emergency response delays, they would enhance pedestrian and bicycle safety along Monterey Road and the railroad corridor in South San Jose, which in combination with the proposed direct mitigation and the project's benefits related to safety are together considered sufficient to offset the emergency vehicle response delays with Alternative 4. As described in the Final EIR/EIS, if the improvements included in proposed direct mitigation measure SS-MM#4 are implemented by the City of San Jose with the Authority's proposed funding, then adverse emergency response delays can be avoided. Also, as described in the Final EIR/EIS, both the offsetting mitigation measure SSJ-MM#2 for new pedestrian/bicycle overcrossings at 3 locations along Monterey Road and direct mitigation measure SS-MM#4 have a provision that funding for these mitigation measures could be used instead to support grade separations at Skyway, Branham, or Chynoweth provided the City intends to implement these grade separations and the grade separations will be completed in time to avoid project effects on emergency vehicle response time.

1654-1398

(3) Installation of an all-weather turf and track at the Caroline Davis Intermediate School which will benefit students and the community at larger that utilized the facility (as exemplified by extensive community use during the COVID-19 emergency). This improvement was requested by the Oak Grove School District who identified this would be a welcome investment in the community and help offset general effects of the project.

After consideration of direct mitigation, project benefits and the proposed offsetting mitigation measures, there would be no disproportionately high and adverse effects with Alternative 4 in the South San Jose community area. Consequently, grade separations are not necessary to avert disproportionately high and adverse effects in South San Jose.

1654-1399

The request for a joint design process is noted. The Authority will coordinate with appropriate agencies during Detailed Design Post-ROD to address design, construction, and operational conflicts and connections with adjacent infrastructure and projects.

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1654-1400

The comment recommends joint station-specific planning and station access coordination to resolve issues of public access. Station access is required from both sides of the tracks. The Authority will coordinate with appropriate agencies during Detailed Design Post-ROD to address Capitol and Blossom Hill stations' design, construction, and operational conflicts and connections with adjacent infrastructure and projects. This will include addressing access and circulation and would be based on future land uses in place when Detailed Design occurs. An assessment of the consistency between HSR and Communications Hill Specific Plan Area Development Policy (City of San Jose 2014, as cited in Chapter 2 of the Final EIR/EIS), ADP Improvement 8: Capitol Caltrain Station Pedestrian/Bicycle Connection along Monterey Highway has been added to Section 3.12, Socioeconomics and Communities, in the Final EIR/EIS as well as Volume 2, Appendix 2-K, Policy Consistency Analysis. The comment provided a link to the City of Morgan Hill's comment submission SJM-1471. This letter was reviewed, and City Preferred Options were not identified and therefore could not be analyzed. Passenger access to platforms is provided via overcrossings; however, passenger access will be refined during Detailed Design Post-ROD in coordination with Caltrain and other appropriate agencies.

1654-1401

In response to this comment, Section 1.4.3, VTA Grade Separations in Santa Clara County, of the Final EIR/EIS has been deleted as these projects are unfunded.

1654-1402

Refer to Standard Response SJM-Response-GEN-2: Consideration of Diridon Integrated Station Concept and the Google Development at the San Jose Diridon Station.

1654-1403

Refer to Standard Response SJM-Response-GS-1: Requests for Grade Separations, SJM-Response-SS-1: At-Grade Crossing Safety, SJM-Response-TR-1: Site-Specific Mitigation for Traffic Impacts.

Please also see response to submission SJM-1654, comments 1397 and 1398 to address environmental justice concerns.

1654-1404

Refer to Standard Response SJM-Response-GEN-2: Consideration of Diridon Integrated Station Concept and the Google Development at the San Jose Diridon Station, SJM-Response-GS-1: Requests for Grade Separations.

The request for funding grade separations at Auzerais Avenue and West Virginia Street is noted.

1654-1405

The comment states that Alternative 4 evaluated in the Draft EIR/EIS would retain and enlarge at-grade crossings within the City of San Jose, in contradiction with the City's principles and policies related to safety. Please refer to Draft EIR/EIS Section 3.11.3, Consistency with Plans and Laws, for a summary of the analysis of the project's consistency with local plans and policies related to safety. The Authority is a state agency and therefore is not required to comply with local land use and zoning regulations; however, it has endeavored to design and construct the HSR project so that it is compatible with land use and zoning regulations. Furthermore, the HSR project will comply with applicable FRA safety standards, as described in Chapter 2, Alternatives, and explained further in Section 3.11, Safety and Security, of the Draft EIR/EIS. The provision of modern protected at-grade crossings for train movements is not in conflict with the Authority's Sustainability Policy.

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1654-1406

The comment recommends that Draft EIR/EIS should assess the historic merit and structural ability to serve design loads of the existing railroad bridges to be retained under Alternative 4. Please refer to Table 3.17-4 in Section 3.17, Cultural Resources, of the Draft EIR/EIS for a delineation of the historically significant infrastructure within the project's footprint, which includes the San Carlos Street viaduct that spans UPRR. Section 3.17.7.3, Historic Built Resources, of the Draft EIR/EIS provides a discussion of the project's potential impact on these resources. As the design loads for HSR trains are similar to those for Caltrain trains, it is assumed for purposes of environmental analysis that existing Caltrain bridges to remain would provide sufficient structural capacity for HSR trains.

1654-1407

The comment noted that the project should consider full replacement of several existing bridges with single bridge structures to reduce the project's footprint (rather than building new railroad bridges adjacent to existing ones). Please refer to Draft EIR/EIS Volume 3, Preliminary Engineering for Project Design Record, for drawings of the bridges proposed under the four project alternatives. Alternatives 1, 2, and 3 provide for full replacement of the bridges referenced by the comment (to keep Caltrain in operation), and Alternative 4 reuses or replaces the bridges in place.

1654-1408

As discussed in Impact TR#9 in Section 3.2.6.3, Parking, the EIR/EIS concludes that while the HSR project would increase parking demand, due to the available parking and the effect of planned transit service improvements to the San Jose Diridon Station, there would be adequate parking for the San Jose Diridon Station and the SAP Center, and the HSR project would not result in significant secondary environmental impacts. All directly displaced parking would be replaced on a 1:1 basis. No mitigation is proposed in the EIR/EIS because none is required to address identified significant impacts. As such, any potential Authority participation in the proposed Parking and Transportation Management District is not required to fulfill any mitigation commitments identified in the EIR/EIS. The Authority is one of the partner agencies for DISC and has conducted extensive collaboration with the City of San Jose during planning for the HSR project and will continue to do so. The Authority will consider separately to join the proposed Parking and Transportation Management District but doing so is not required to address a significant impact identified in the EIR/EIS.

1654-1409

Refer to Standard Response SJM-Response-GEN-2: Consideration of Diridon Integrated Station Concept and the Google Development at the San Jose Diridon Station.

Regarding the language referring to the San Jose Diridon Station Facilities Master Plan, the only reference in the EIR/EIS is in connection with an Authority grant to the VTA, and the language accurately describes what that grant required. Reference to the ongoing update to the Adopted Diridon Station Area Plan and DISC have been added to the same location per this comment.

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1654-1410

The analysis of blended operations between San Jose and Gilroy referenced in Impact TR#16 in Section 3.2, Transportation, of the Draft EIR/EIS also included an analysis of the capacity of San Jose Diridon Station to accommodate HSR service, Caltrain service, and service for the other passenger railroads (Capitol Corridor, Amtrak, and ACE) (Authority 2018b, as cited in Section 3.2 of the Draft EIR/EIS). With the two proposed dedicated platforms for HSR, there would remain adequate platform capacity on the other four platforms to serve Caltrain (up to 6 trains per hour per direction), ACE (up to 4 trains per hour per direction), and Capitol corridor (up to 2 trains per peak hour). Amtrak only has 2 trains per day, does not have the same platform capacity needs as the peak-hour services, and can also be accommodated. The analysis of operations regarding track capacity (Authority 2018b) also concluded that there would be adequate track capacity for ACE operations (up to 4 trains per hour per direction) on the non-electrified track between San Jose Diridon Station and the Michael Yard south of the Tamien Station and that Capitol Corridor could continue its current practice of daytime layover at the Diridon platform. This clarification has been added to Impact TR#16 in Section 3.2 in the Final EIR/EIS.

1654-1411

Refer to Standard Response SJM-Response-GS-1: Requests for Grade Separations.

The comment recommended that the Draft EIR/EIS should include grade separations at Skyway Drive, Branham Road, Chynoweth Avenue, Auzerais Avenue, and West Virginia Street as mitigation for project impacts on pedestrian and bicycle access; The comment also recommended that the project should construct pedestrian and bicycle facilities on the west side of Monterey Road. Please refer to Impact TR#18 and Impact#19 in Section 3.2, Transportation, of the Draft EIR/EIS for a discussion of the project's effects on pedestrians and bicycles. All four project alternatives were found to have less-than-significant impacts on pedestrian and bicycle facilities, and therefore mitigation is not required. The project would not materially degrade the performance of any nonmotorized facilities, and all existing facilities would be replaced upon the completion of construction.

1654-1412

The comment noted that Alternative 4 of the Draft EIR/EIS should construct pedestrian and bicycle facilities on the west side of Monterey Road as identified in City of San Jose planning documents. Please refer to Impact TR#18 and Impact TR#19 in Section 3.2, Transportation, of the Draft EIR/EIS for a discussion of the project's effects on pedestrians and bicycles. All four project alternatives were found to have less-than-significant impacts on pedestrian and bicycle facilities, and therefore mitigation is not required. The project would not materially degrade the performance of any nonmotorized facilities, and all existing facilities would be replaced upon the completion of construction.

1654-1413

The comment noted that the permanent impacts of the project as evaluated in the Draft EIR/EIS should not affect road right-of-way for planned and existing bikeways. Please refer to Impact TR#19 in Section 3.2, Transportation, of the Draft EIR/EIS for a discussion of the project's permanent effects on pedestrians and bicycles. The four project alternatives were found to have a less-than-significant impact on nonmotorized resources because the project would not conflict with adopted policies, plans, or programs regarding bicycle or pedestrian facilities, or otherwise materially decrease the performance of such facilities. The project would provide safe and accessible bike and pedestrian facilities. All roadways that are reconstructed would replace all bicycle and pedestrian facilities upon completion of construction. The map referenced within the comment does not appear to identify specific right-of-way for potential future nonmotorized improvements, although general corridors are identified.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1414

The comment noted that the Draft EIR/EIS should include provisions for pedestrian and bicycle access during construction. Please refer to Impact TR#17 in Section 3.2, Transportation, of the Draft EIR/EIS for a discussion of the project's effects on pedestrians and bicycles during construction. Please also refer to TR-IAMF#2, TR-IAMF#4, TR-IAMF#5, and TR-IAMF#12 in Section 3.2 of the Draft EIR/EIS for a description of the contractor's requirements to provide safe and adequate nonmotorized access during construction. To maintain pedestrian and bicycle access, project construction phasing would include specifications for vehicle lanes, passenger loading zones, sidewalks, crosswalks, bike lanes, trails, bus stops, parking, detours, and intersection controls. These features would address how pedestrian and bicycle accessibility would be provided and maintained across the HSR corridor, to and from stations, and on station property for the duration of construction.

1654-1415

Refer to Standard Response SJM-Response-SS-1: At-Grade Crossing Safety.

The City's perspective on quiet zones is noted.

1654-1416

The noise impact assessment prior to mitigation assumes that trains would sound horns and that there would not be quiet zones. Noise barriers without quiet zones are analyzed as the primary noise mitigation measures in Section 3.4.7, Mitigation Measures, of the Draft EIR/EIS.

1654-1417

Operating procedures relative to Caltrain stations are up to Caltrain as the host railroad. The Authority requested whether Caltrain was interested in discussing potential ways to reduce or eliminate station horn noise and they have not yet responded and thus the feasibility of this potential measure is unknown.

1654-1418

Refer to Standard Response SJM-Response-GS-1: Requests for Grade Separations, SJM-Response-SS-1: At-Grade Crossing Safety.

Please also see the response to comment SJM-1654-1417.

1654-1419

Refer to Standard Response SJM-Response-GS-1: Requests for Grade Separations.

1654-1420

Section 3.6.5.1, Public Utilities, of the Final EIR/EIS has been revised to incorporate text revisions provided by commenter concerning Edenvale, Coyote Valley, and Evergreen.

1654-1421

Please refer to Section 3.13.5.2, Planned Development, of the Draft EIR/EIS and Section 3.13.6.2, Alteration of Land Use Patterns. Many of the projects under the No Project Alternative encourage TOD, which would increase the density of both residential and commercial development around transit hubs. Under the No Project Alternative, TOD in the form of infill development, increased density, reduced parking demand, and better access to transit would be expected. Existing and planned uses include mixed-use, residential, commercial, office, business service, and light industrial development. Under the No Project Alternative, recent development trends are anticipated to continue, leading to impacts on public utilities.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1422

Impact PUE#9 in Section 3.6, Public Utilities and Energy, has been revised in the Final EIR/EIS for clarity to explain that direct discharge of wastewater into the local sanitary sewer system from station and maintenance facility operations would only occur if the receiving wastewater treatment facility approves such disposal and would be subject to coordination with the local wastewater treatment authority concerning system capacity and maintenance. Proposed discharges into municipal sanitary lines, including the City of San Jose's sanitary lines, during operations would be coordinated with the local wastewater treatment authorities to address capacity and maintenance.

With respect to the commenter's concerns pertaining to the localized wastewater infrastructure at Diridon Station, the HSR project would include the necessary upgrades to upsize the localized wastewater infrastructure to accommodate anticipated flows.

Please see Appendix 3.6-C, Water Use Assessment (located in Volume 2, Technical Appendices, of the Draft EIR/EIS), for details on the Authority's consideration of the relative increase in water demand to capacity and the overall reduction in water demand within the project footprint. The CEQA conclusion for Impact PUE#9 remains less than significant.

1654-1423

The analysis in the Draft EIR/EIS was based on a preliminary level of design that is sufficient for analysis of environmental impacts, in order to understand the basic project features, including the alignment plan and profile, roadway-crossing footprints, basic estimates of construction means and methods, and in some cases modifications to local streets and drainage facilities. The detailed design would be prepared by a design-build contractor, and as such much of the information the City of San Jose is requesting to be added to the Final EIR/EIS is not yet available. Please refer to the Roll Plots presented in Volume 3 of the Draft EIR/EIS for all available information regarding proposed modifications to streets and infrastructure within the City of San Jose. However, as design advances, the Authority will coordinate with local agencies, including the City of San Jose, regarding modifications to the City's streets and infrastructure. The Authority looks forward to working cooperatively with the City of San Jose through design and implementation of the project.

1654-1424

Refer to Standard Response SJM-Response-OUT-2: Consultation with Local Agencies and Consistency with Local Regulations.

The project must conform to the policies and objectives of the statutes and regulations under which the Authority operates. Since an agency of the State of California is the project proponent, the project is not subject to local government general plan policies or zoning regulations. The Authority has endeavored to develop a project design that minimizes local impacts and is made as consistent with local plans as possible. Stormwater management requirements applicable to the project are described in Section 3.8, Hydrology and Water Resources, of the Draft EIR/EIS.

1654-1425

The Authority understands that relocating water supply wells, especially those that are deep, productive, and serve large populations, would require specialized construction methods, design reviews and approvals, and appurtenances and enclosures to function effectively; Impact PUE#4 in Section 3.6.6.2, Public Utilities, of the Final EIR/EIS has been revised to include this information. The Authority would ensure replacement wells would be constructed and functional before abandoning and demolishing the existing wells in order to prevent disruptions to the City's water supply system. Alternatives 1-3 would not affect any of the water supply wells that serve the San Jose Municipal Water System. However, Alternative 4 (the Preferred Alternative) would require the relocation of three of the municipal water supply wells in the Coyote Valley that serve the San Jose Municipal Water Supply System. Refer to Volume 3 Roll Plots for the three public supply wells being relocated by Alternative 4.

1654-1426

Refer to Standard Response SJM-Response-SS-1: At-Grade Crossing Safety.

1654-1427

Refer to Standard Response SJM-Response-SS-2: Emergency Vehicle Response Times.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1428

Refer to Standard Response SJM-Response-GS-1: Requests for Grade Separations, SJM-Response-SS-2: Emergency Vehicle Response Times.

The Draft EIR/EIS analysis in Impact S&S#3 concerns the permanent impacts on emergency access and response times from permanent roadway and highway closures, relocations, and modifications. The analysis of the impact of the increased gate-down time at the at-grade crossings is presented in Section 3.11, Safety and Security, of the Draft EIR/EIS under Impact S&S#4. As explained therein, the potential impacts of additional gate-down time on emergency vehicle response times were assessed throughout the corridor for Alternative 4 (including the Skyway, Branham, and Chynoweth crossings). The Authority evaluated potential impacts on emergency response times through a geospatial assessment of fire station/first responder response times along both sides of the rail corridor. The screening used ArcGIS to evaluate the potential impact on travel time between 0.25-mile grid cells and the nearest fire station under a worst-case scenario that every responding fire station vehicle or first responder ambulance was required to take an alternate route via an existing grade-separated crossing because of added gate-down time at at-grade crossings. Figure 3.11 10 in Section 3.11 of the Draft EIR/EIS illustrates the results of the screening analysis.

Mitigation Measures SS-MM#3 and SS-MM#4 are identified to address the impacts identified in Impact S&S#4.

1654-1429

Refer to Standard Response SJM-Response-SS-2: Emergency Vehicle Response Times.

The analysis in Section 3.11, Safety and Security, of the Draft EIR/EIS does identify impacts related to increased gate-down time with Alternative 4, including potential increase of up to 180 seconds related to the service area of the fire station at 4430 Monterey Road to areas west of the railroad. As described in Section 3.11 of the Draft EIR/EIS, the Authority evaluated potential impacts on the nearest fire station under a worst-case scenario that every responding fire station vehicle or first responder ambulance was required to take an alternate route via an existing grade-separated crossing because of added gate-down time at at-grade crossings, which may overstate impacts. The Draft EIR/EIS recognizes delays in emergency vehicle response as a significant impact due to the potential impacts on health. Draft EIR/EIS Section 3.11.5.1, Emergency Services, in subsection Fire Station/First Responder Response described existing conditions in San Jose, including that response times were not meeting national best practice response times. Thus, the citation in this comment that some responses are not meeting current standards does not change the analysis in the Draft EIR/EIS. The existence of liquidated damages in the City's contract is noted, but it does not change the presentation of existing conditions or the impact analysis in the Draft EIR/EIS regarding emergency vehicle response times. The Draft EIR/EIS analysis identified a delay impact as significant if the delay in emergency vehicle response is more than 30 seconds, regardless of the existing service time, recognizing that delay has effects on potential health outcomes. With Alternative 4, there would be identified significant impacts, including in San Jose, before mitigation. The information cited in this comment does not change that conclusion. Thus, the information in this comment does not require any changes in the Draft EIR/EIS analysis.

A discussion of mitigation available to address emergency vehicle response times is provided in Standard Response SJM-Response-SS-2: Emergency Vehicle Response Times. In addition, as explained in revisions in Section 3.11, Safety and Security incorporated into the Final EIR/EIS, the Authority has included certain site-specific traffic mitigation measures as mitigation for delays to emergency vehicle response vehicle at at-grade crossings in the event that the other identified mitigation measures S&S-MM#3 and S&S-MM#4 do not fully address response time delay.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1429

1654-1430

Refer to Standard Response SJM-Response-SS-1: At-Grade Crossing Safety.

1654-1431

The commenter asserts that the impact discussion pertaining to rail-related hazards for motor vehicles, pedestrians and bicyclists is incomplete and requests a separation of the impact discussions to align with the Burbank to Los Angeles Project Section EIR/EIS. The San Jose to Merced Project Section differs from the Burbank to Los Angeles Project Section in that the Burbank to Los Angeles Project Section has no at-grade crossings, making having separate discussions of train accidents and motor vehicle, pedestrian, and bicycle accidents more straightforward. The Burbank to Los Angeles Project Section Draft EIR/EIS (Authority 2020d) discussion topics under Impact S&S#5 and Impact S&S#6 that are both covered in the San Jose to Merced Project Section discussions under Impact S&S#8 and Impact S&S#12. TR-IAMF#2, TR-IAMF#4, and TR-IAMF#5 in Section 3.2, Transportation, of the Draft EIR/EIS also include details on impact avoidance measures concerning train, motor vehicle, pedestrian, and bicycle access and accidents.

1654-1432

Refer to Standard Response SJM-Response-SS-1: At-Grade Crossing Safety.

1654-1433

Refer to Standard Response SJM-Response-GS-1: Requests for Grade Separations, SJM-Response-SS-1: At-Grade Crossing Safety.

The Authority has evaluated safety associated with HSR train operations at the at-grade crossings and determined that, with the improvements included in the project (right-of-way fencing, four-quadrant gates, traffic signal integration, intrusion detection, obstacle detection, and integrated track controls), there would be less-than-significant impacts. As such, grade separations are not required to address this impact.

The Authority recognizes that there are potential advantages to grade separation. The Authority recognizes that, with the HSR project, operation at the at-grade crossings, including in San Jose, would meet one or more of the conditions where the FHWA Technical Working Group Highway-Rail Crossing Handbook (FHWA 2019) recommends consideration of grade separations. The Authority has considered the potential for grade separations for Alternative 4 but has determined that (1) operations at at-grade crossings would not result in significant safety impacts (with the project safety improvements noted above) and thus grade separation are not required to address that impact and (2) grade separations would make Alternative 4 cost prohibitive.

The Authority, as described in its Business Plans, has not secured funding for constructing the entire Phase 1 system, including the San Jose to Merced Project Section and the San Francisco to San Jose Project Section. Cost has been and will continue to be a major concern for the HSR project as a whole. Given the high costs and disruptions associated with grade separations, the Authority cannot commit to grade separations as part of mitigation for Alternative 4 for the San Jose to Merced Project Section (or for the San Francisco to San Jose Project Section).

However, if Alternative 4 is ultimately selected, the Authority, in cooperation with local jurisdictions, transportation funding agencies, and state and federal agencies, would support community-initiated grade separation efforts over time as funding becomes available.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1434

Refer to Standard Response SJM-Response-SS-1: At-Grade Crossing Safety.

The Draft EIR/EIS analyzes the effect of increased HSR trains on safety for vehicles, bicycles, and pedestrians crossing at-grade crossings in Section 3.11, Safety and Security, Impact S&S#12.

As discussed in the Draft EIR/EIS, the operation of the HSR system would meet and/or exceed federal safety requirements for train operations for all at-grade crossings. The project would upgrade all existing at-grade rail crossings through the installation of four-quadrant gates (reducing potential vehicle intrusion) and median channelization where not present (also reducing potential vehicle intrusion). The project would also include integration of at-grade crossing gate functions with nearby traffic signals where not present (increasing traffic control approaching crossing), intrusion detection (to warn rail operators of intrusion at crossings), and obstacle detection (to detect obstacles in the railway). The project would also include integrated train control and signal systems (allowing for real-time feedback between on-the-ground detectors, train operators, and system operators).

These improvements are described in Chapter 2, Alternatives, of the Draft EIR/EIS. As described in Section 3.11 of the Draft EIR/EIS, the project also includes implementation of SS-IAMF#2 and SS-IAMF#3. With the proposed upgrades and implementation of the IAMFs, the Draft EIR/EIS concludes that the safety impact relative to at-grade crossing operations would be less than significant under CEQA and that the project would not have a substantial adverse effect under NEPA, and no mitigation is warranted. Based on this conclusion, the operation of at-grade crossings with the project is not expected to result in a significant increased exposure of firefighters to risks.

1654-1435

Refer to Standard Response SJM-Response-GS-1: Requests for Grade Separations, SJM-Response-SS-2: Emergency Vehicle Response Times.

The commenter states that San Jose has already implemented emergency vehicle preemption at many locations, and the Draft EIR/EIS should take account of this. The comment also states that the Authority should fund its proportionate share of grade separations at key intersections as mitigation for emergency vehicle response time impacts.

SS-MM#3 applies to areas where San Jose's EVP is not in place and in Morgan Hill and Gilroy. The text of Section 3.11, Safety and Security, has been clarified in the Final EIR/EIS to note San Jose's EVP and to describe its applicability. Specifically, at the San Jose locations where the EVP does exist, Impacts S&S#1 and S&S#3 related to emergency access and response times are less than significant, and therefore no mitigation is required. The same impacts are significant before mitigation in places where EVP does not exist in San Jose and in Morgan Hill and Gilroy; SS-MM#3 still applies to these areas.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1436

The comment describes that there may be delays in emergency vehicle response access to southbound Monterey Road due to implementation of Mitigation Measure SS-MM#1 to construct new access to Fire Station 18 with Alternative 2, Variant B and that a new fire facility may be required instead.

The comment is correct that the access included in Mitigation Measure SS-MM#1 would require emergency vehicles from Fire Station 8 to travel along the new access road that connects to the Houndshaven/Skyway intersection and then travel west to the new underpass to access southbound Monterey Road, which would add approximately 0.2 mile travel compared to the existing direct access to Skyway Drive. Assuming a speed of 30 mph, this additional distance would take approximately 24 seconds, which is less than the 30 second significance criteria used in relation to emergency vehicle response in the Draft EIR/EIS. As a precaution, if the delays were to exceed the 30 second significance criteria, Mitigation Measure SS-MM#1 was modified in the Final EIR/EIS to include a potential relocated fire facility on the eastern portion of the property as suggested in this comment. Since the potential relocation property is already included in the temporary construction easement for the project, this would not result in additional property acquisition or effects to additional areas.

1654-1437

Refer to Standard Response SJM-Response-GS-1: Requests for Grade Separations.

The Authority has adopted IAMFs, which are programmatic commitments that would be incorporated as part of the project to avoid or minimize environmental or community impacts and are designed to be applicable to the statewide HSR system as a whole. The IAMFs are equally applicable to all four alternatives, even though the alternatives differ in structural design. For instance, Alternatives 1, 2, and 3 are grade separated, while Alternative 4 retains existing at-grade crossings. The commenter also points to impacts from at-grade crossings. In addition to the IAMFs described above, the Authority has also separately identified a number of mitigation measures applicable to such impacts. Mitigation measures are proposed where impacts cannot otherwise be avoided or reduced through project features, design standards, or best management practices during construction or project operations. Several of the mitigation measures identified in the Draft EIR/EIS were proposed to address impacts from at-grade crossings associated with Alternative 4. Mitigation measures are listed in Section 3.x.17 in each resource chapter.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1438

The reference to operations and maintenance in LU-IAMF#1 is intended to establish the timeframe by which the Authority will prepare a memorandum for each station describing how the Authority's station area development principles and guidelines would be applied to achieve the anticipated benefits of station area development. The IAMF commits the Authority to preparing this memorandum prior to commencing operations and maintenance of the HSR system.

The Authority's HSR Station Area Development General Principles and Guidelines (Authority 2011, as cited in Section 3.16, Aesthetics and Visual Quality, of the Draft EIR/EIS) was developed to ensure that implementation of the HSR system would maximize station area development in a way that serves the local community and economy while increasing HSR ridership. While the Authority acknowledges that these guidelines do not address all station area planning considerations, they are still relevant guiding principles for the station planning process. Accordingly, no revisions have been made to LU-IAMF#1. It should be noted that the Authority has been working with the City of San Jose regarding the update of the adopted San Jose Diridon Station Area Plan (City of San Jose 2014, as cited in Section 3.13, Station Planning, Land Use, and Development, of the Draft EIR/EIS), the Diridon Intermodal Station Concept (DISC) and the Google Downtown West Plan. Prior to commencing operations and maintenance of the HSR system, the Authority memorandum would consider how Authority station area guidelines have informed the Diridon Station Area Plan update and the resulting benefits. The Authority has a signed Station Area Planning Agreement with the City of San Jose.

1654-1439

Refer to Standard Response SJM-Response-GEN-2: Consideration of Diridon Integrated Station Concept and the Google Development at the San Jose Diridon Station.

Because neither the Diridon Integrated Station Concept (DISC) nor the Downtown West Mixed-Use Plan (Google project) are approved projects, they are not considered part of the environmental baseline and are not reflected in the planned land uses shown on Figure 3.13-7 in Section 3.13, Station Planning, Land Use, and Development, of the Draft EIR/EIS. Section 3.13.5.2, Planned Development, of the Draft EIR/EIS included a discussion of the Downtown West Mixed-Use Plan; however, this discussion has been further expanded in the Final EIR/EIS.

1654-1440

Refer to Standard Response SJM-Response-GEN-2: Consideration of Diridon Integrated Station Concept and the Google Development at the San Jose Diridon Station.

The Authority is one of the Diridon Integrated Station Concept (DISC) partner agencies and is committed to working with the DISC partner agencies to plan for the future of the San Jose Diridon Station; its integration with the surrounding area; and passenger flows to, from, and through the station. DISC will be planned, environmentally reviewed, and approved separately from the HSR project, and, as a result, the Authority's commitments to project features (IAMFs) as part of the HSR San Jose to Merced Project Section do not apply to the DISC planning process. Accordingly, the requested revisions have not been implemented.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1441

Refer to Standard Response SJM-Response-GS-1: Requests for Grade Separations.

The comment correctly notes that LU-IAMF#1 would not avoid incompatibility of HSR infrastructure and the San Jose Diridon Station with adjacent land uses. Accordingly, this statement has been removed from Impact LU#4 in Section 3.13, Station Planning, Land Use, and Development, of the Final EIR/EIS. However, the conclusion remains the same—none of the four project alternatives would result in alterations of existing or planned land use patterns near the San Jose Diridon Station because the HSR station would be consistent with current uses as an existing transit facility and would be consistent with land use plans and policies, such as the Diridon Station Area Plan. As a result, no mitigation is required under CEQA to address this impact.

With respect to the comment about NV-IAMF#1 not addressing operations noise impacts, mitigation to reduce noise and vibration during operations is discussed in Section 3.4.7, Mitigation Measures, of the Draft EIR/EIS. As part of NV-MM#3, the Authority would implement noise mitigation to reduce or offset severe operations noise impacts, including noise barriers, sound insulation, and noise easements.

1654-1442

Refer to Standard Response SJM-Response-GEN-2: Consideration of Diridon Integrated Station Concept and the Google Development at the San Jose Diridon Station, SJM-Response-GS-1: Requests for Grade Separations.

The comment expressed concern about the accuracy of a statement regarding adoption of the 2012 San Jose Visual Design Guidelines for California High-Speed Rail Infrastructure. To address this comment, the text under Impact LU#4 has been revised to remove reference to the visual design guidelines as part of the Cooperative Agreement between the City of San Jose and the Authority.

While the comment is correct that the visual design guidelines do not specifically address all four alternative alignments evaluated in the Draft EIR/EIS, the design guidelines would apply to all four project alternatives, inasmuch as they provide for high-quality aesthetic design for HSR infrastructure that fits the context of San Jose. Further, the visual design guidelines would be considered and incorporated as part of the project design. The Draft EIR/EIS concludes that none of the four project alternatives would result in alterations of existing or planned land use patterns near the San Jose Diridon Station because the HSR station would be consistent with current uses as an existing transit facility and would be consistent with land use plans and policies, such as the Diridon Station Area Plan. As a result, no mitigation is required under CEQA to address this impact.

The comment also requests that the Authority consider mitigation for the visual impact of the blended corridor. As discussed under Impact AVQ#3 in Section 3.16, Aesthetics and Visual Quality, of the Draft EIR/EIS, it is anticipated that viewers would not perceive a change to visual quality under Alternative 4 because modifying the baseline Caltrain and UPRR railway and Diridon Station platforms to permit blended HSR operations would conform to the baseline character of the area. Therefore, CEQA does not require mitigation for visual impacts of the blended system under Alternative 4. However, the Authority is one of the DISC agency partners and is committed to working with the DISC agency partners through a separate planning process that is proceeding independently of this environmental process.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1443

Refer to Standard Response SJM-Response-GS-1: Requests for Grade Separations.

As described in Section 3.13.4.5, Method for Determining Significance under CEQA, of the Draft EIR/EIS, the project would result in a significant impact on existing land uses if it would "cause a substantial change in land use patterns by introducing incompatible uses." The determination that impacts on existing land use patterns from increase noise, light, and glare would be less than significant under CEQA is based on this CEQA threshold and the determination that land uses along the existing railway have been historically exposed to train noise and have continued to operate, which indicates that introduction of intermittent noise from HSR service would not cause changes in land use patterns. This conclusion has been further clarified in Impact LU#5 in Section 3.13, Station Planning, Land Use, and Development, of this Final EIR/EIS. The conclusion for Impact LU#5 does not imply that nearby residences would not be affected by increased noise impacts, only that these impacts are not anticipated to result in an alteration of land use patterns, such as the conversion of residential land uses to other land uses. Refer to Section 3.4, Noise and Vibration, of the Draft EIR/EIS for a discussion of the project's construction- and operations-related noise impacts and the several mitigation measures that would be implemented to address these impacts. Refer to Section 3.12, Socioeconomics and Communities, of the Draft EIR/EIS for a discussion of the project's impacts on community cohesion.

1654-1444

Refer to Standard Response SJM-Response-GEN-3: Consideration of Caltrain Business Plan, Including the 2040 Caltrain Service Vision, SJM-Response-GS-1: Requests for Grade Separations.

As described in Section 3.13.4.5, Method for Determining Significance under CEQA, in the Draft EIR/EIS, the project would result in a significant impact on existing land uses if it would "cause a substantial change in land use patterns by introducing incompatible uses." The determination that impacts on existing land use patterns from increase noise, light, and glare would be less than significant under CEQA is based on this CEQA threshold and the determination that land uses along the existing railway have been historically exposed to train noise and have continued to operate, which indicates that introduction of intermittent noise from HSR service would not cause changes in land use patterns. This conclusion has been further clarified in Impact LU#5 in Section 3.13, Station Planning, Land Use, and Development, of the Final EIR/EIS.

Table 3.4.7 and associated text in Section 3.4 describe the assumptions of train service including Caltrain service. The EIR/EIS did not consider the Caltrain Service Vision because it is not funded, has not been environmentally reviewed, and is not yet a part of capital planning. Thus it is not reasonably foreseeable at this time. Caltrain would analyze the increases in Caltrain service when they are actually proposed as a project.

The conclusion for Impact LU#5 does not imply that nearby residences would not be affected by increased noise impacts, only that these impacts are not anticipated to result in an alteration of land use patterns, such as the conversion of residential land uses to other land uses. Refer to Section 3.4, Noise and Vibration, of the Draft EIR/EIS for a discussion of the project's construction and operations-related noise impacts and the mitigation measures that would be implemented to address these impacts resulting from the operation of the HSR. Refer to Section 3.12, Socioeconomics and Communities, of the Draft EIR/EIS for a discussion of the project's impacts on community cohesion.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1445

Refer to Standard Response SJM-Response-GS-1: Requests for Grade Separations.

Section 3.4, Noise and Vibration, of the Draft EIR/EIS includes the use of noise barriers as the primary noise mitigation measure. Other noise mitigation options are to install building sound insulation or acquire noise easements.

1654-1446

The Draft EIR/EIS statements about noise diminishing with distance from the railway is intended to provide an example of noise levels at a particular distance. In certain portions of the alignment, residential uses may be closer than 75 feet to the railway, and, at these locations, the noise level would be higher than the provided example. Refer to Section 3.4, Noise and Vibration, of the Draft EIR/EIS for a detailed discussion of noise impacts associated with the project alternatives, as well as mitigation measures to address these impacts. These mitigation measures include installation of temporary and permanent noise barriers, avoiding nighttime construction in residential neighborhoods, installation of building sound insulation (considered on a case-by-case basis), and potential acquisition of noise easements. Prior to operation of the HSR, the Authority would install noise barriers where they can achieve between 5 and 15 dB of exterior noise reduction. The Authority would also support implementation of Quiet Zones by local jurisdictions and require specific engineering considerations to minimize noise impacts.

The statement about new noise sources not being as noticeable in rural portions of the alignment relative to areas along existing transportation corridors has been removed from the Final EIR/EIS in response to this comment. However, the conclusion remains the same, inasmuch as the increased noise in areas adjacent to existing transportation corridors and in rural areas is not anticipated to result in a substantial change in or to alter land use patterns, such as the conversion of residential land uses to other land uses.

1654-1447

Reference to mitigation measure LU-MM#1 has been removed from Section 3.13, Station Planning, Land Use, and Development, of the Final EIR/EIS, as this was already included as an IAMF as part of the project. Consistent with this project feature, the Authority would document how the Authority's station area development principles are applied to each HSR station to achieve the anticipated benefits of station area development. Accordingly, these principles and guidelines are incorporated into the project design process to mitigate impacts and enhance the benefits of the station.

1654-1448

To address this comment, the agency with jurisdiction in Table 3.15-2 in Section 3.15, Parks, Recreation, and Open Space, has been modified in the Final EIR/EIS to state that Caltrans has jurisdiction over the Highway 87 Bikeway North. The Authority would consult with Caltrans and the City of San Jose on an amended or new joint use agreement during the design phase of the project.

1654-1449

To address this comment, Table 3.15-2 in Section 3.15, Parks, Recreation, and Open Space, of the Final EIR/EIS has been revised to state that Three Creeks Trail, between Lonus Street and the Falcon Place cul-de-sac, is open to the public. Figure 3.15-2 has also been updated to reflect this in the Final EIR/EIS. However, please note that the eastern part of the trail, which is the part of the trail that would be impacted by the project alternatives, has not been built yet.

1654-1450

To address this comment, Table 3.15-2 in Section 3.15, Parks, Recreation, and Open Space, of the Final EIR/EIS has been revised as suggested for Guadalupe River Trail (Reach 6), Los Gatos Creek Trail, Three Creeks Trail, and Communications Hill Trail.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1451

With respect to Impact PK#2 in Section 3.15, Parks, Recreation, and Open Space, the Final EIR/EIS finds that the impact on Fisher Creek Trail would be less than significant after mitigation, which is the correct determination based on the effects analysis and evidence presented. The impacts on Fisher Creek Trail under Alternatives 1, 2, and 3 would be temporary during construction, resulting in temporary decreased access. The Authority would implement mitigation measures to minimize impacts on access or use of parks. PR-MM#1 involves alternative access via a temporary detour of the trail using existing roadways or other public rights-of-way. PR-MM#2 involves maintaining connections to unaffected park portions or nearby roadways during construction. PR-MM#4 would make certain the project design features from the technical memorandums are implemented. These actions would be documented in technical memorandums prepared by the Contractor that would be submitted to the Authority for review and approval. With implementation of mitigation measures, access to Fisher Creek Trail would be maintained during construction.

1654-1452

The fact that the Highway 87 Bikeway North was mitigation for a prior project has no bearing on the analysis in the Draft EIR/EIS per CEQA and NEPA. Assessment of the temporary loss of the Highway 87 Bikeway North is permissible under CEQA because the analysis of impacts in the Draft EIR/EIS is based on existing conditions as of the year 2016. Highway 87 Bikeway North was in existence in 2016, therefore it must be analyzed as such.

1654-1453

The commenter is correct that access to the Highway 87 Bikeway Trail would be limited during project construction. More specifically, due to the proximity of this resource to the HSR project corridor, portions of the trail would need to be temporarily closed for approximately 6 months during construction. As described in Draft EIR/EIS Section 3.15, Parks, Recreation, and Open Space, access would be temporarily reduced under all four project alternatives but would not permanently be eliminated. To minimize construction impacts associated with interruptions in trail use, mitigation measure PR-MM#1 is proposed. As described in Section 3.15, this measure, which would require the contractor to provide a detour during construction while portions of the bikeway are closed, would be effective in avoiding or minimizing impacts on the Highway 87 Bikeway Trail related to loss of access. The bikeway also would be permanently realigned in order to maintain access and use. Under Alternatives 1, 2, and 3, near the Tamien Caltrain Station, the bikeway would be shifted slightly to the west at a few locations to avoid the new columns required to support the viaduct, the new tracks, retaining wall, and bridge reconstruction. Under Alternative 4, permanent realignment to the west would be required at Almaden Expressway due to track shifts. As concluded in Section 3.15, implementation of mitigation measure PR-MM#3, which requires the contractor to prepare and submit to the Authority a technical memorandum documenting how access to parks and trails will be maintained following completion of construction activities, would be effective in avoiding or minimizing impacts related to permanent park access. Mitigation measure PR-MM#5 also would apply to the Highway 87 Bikeway to ensure that access is maintained through realignment of the trail prior to construction. This mitigation measure also would be effective in avoiding or minimizing impacts related to access. The Authority is aware that during the environmental justice engagement process community members expressed concern regarding the connectivity and accessibility of parks and trails in San Jose. However, the concerns raised by minority populations and low-income populations during the environmental justice engagement process would be addressed through project features and identified mitigation to minimize temporary disruption during construction and to allow restored functioning of parks, trails, recreational facilities, and play areas after construction so that substantial permanent diminishment of these resources, including the Highway 87 Bikeway Trail, would not occur. Therefore, as concluded in Chapter 5, Environmental Justice, the temporary and permanent adverse effects on parks, recreational facilities, and school district play areas would not disproportionately affect minority populations and low-

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1453

income populations.

1654-1454

Please refer to the response to submission SJM-1654, comment 1452.

1654-1455

Thank you for your comment. The Authority will work with the City's Public Art program to integrate public art into HSR structures within City limits during future phases of design and implementation.

1654-1456

Design plans issues relating to landscaping would be undertaken in the project's detailed design phase of the project. AVQ-IAMF#2 ensures community input on the aesthetics of non-station structures aesthetics. Furthermore, mitigation measure AVQ-MM#3 requires the incorporating of design criteria for non-station structures, such as fencing, retaining walls, aerial structures, and overcrossings, that can adapt to fit within the local context. The measure specifically requires the design/build contract or to prepare and submit to the Authority a technical memorandum that describes how they are coordinated with local jurisdictions on the design of the non-station structures so that they fit in with the visual context of the areas near them (please refer to page 3.16-156 of the Draft EIR/EIS). Mitigation measures AVQ-MM#4 and AVQ-MM#5 detail landscaping mitigation along the HSR corridor.

Impact AVQ#6 acknowledges that the aerial structure in Alternatives 1 and 3 would be visible from surrounding neighborhoods, and that residential viewers would experience a decline in visual quality, as aesthetic treatments can soften or obscure the appearance of aerial structures, but do not eliminate their presence appearance, due to their height. Furthermore, Impact AVQ#6 for Alternatives 1 and 3 states that "mitigation measures would soften and obscure the conflicting aesthetic of the HSR infrastructure, but they would not be able to obscure tall HSR infrastructure from adjacent residential areas. Therefore, the impact would be significant and unavoidable."

For at-grade Alternatives 2 and 4, potential landscaping and design treatments are depicted at KVP 14. Alternative 2 includes decorative fencing along the safety barrier separating Monterey Highway from the railway and new landscaping and multi-modal pathway along the highway. Alternative 4 shows the shared corridor with minimal visual changes from the existing conditions.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1457

Thank you for the input. Design issueplanss relating tofor landscaping along the alignment. would be undertaken in the project's detailed design phase of the project. AVQ-IAMF#2 ensuresoutlines a process for obtaining local community input on the aesthetics of non-station structureaesthetics. Furthermore, mMitigation measure AVQ-MM#3 requires the incorporation of design criteria for non-station structures, such as fencing, retaining walls, aerial structures, and overcrossings, that can adapt to fit within the local context. The measure specifically requires the design/build contract or to prepare and submit to the Authority a technical memorandum that describes how they it coordinated with local jurisdictions on the design of the non-station structures so that they fit in with the visual context of the areas near them (please refer to Section 3.16.7, Mitigation Measures, of the Draft EIR/EIS).

1654-1458

With respect to the alternatives' impact on the Southern Pacific Depot, Section 3.17.3, Regional and Local Policy Analysis, states, "The Authority is a state agency and therefore is not required to comply with local land use and zoning regulations; however, it has endeavored to design and construct the project to be as compatible as possible with land use and zoning regulations." As such, for the purposes of NEPA and CEQA impacts analysis, the Authority is not able to assume the same finding that would be required through the local planning process for City Landmarks. As a result, the impact of the four alternatives on the Southern Pacific Depot would remain significant.

1654-1459

The Authority appreciates this summary of the City of San Jose's process regarding changes of status in Candidate City Landmarks. Please refer to submission JM-1654, comment 1458, regarding the responsibilities of the Authority with respect to local land use and zoning regulations. Additionally, the City of San Jose's general plan has been added to the list of documents reviewed for this section and analyzed for consistency with the project.

1654-1460

Thank you for your comment and summary of the City of San Jose's early referral consultation process. Please refer to submission JM-1654, comment 1458, regarding the responsibilities of the Authority with respect to local land use and zoning regulations. Additionally, the City of San Jose's general plan has been added to the list of documents reviewed for this section and analyzed for consistency with the project.

1654-1461

Alternative 4 does increase gate-down time at at-grade crossings, as described in Section 3.2.6, Environmental Consequences, Impact TR#6. In addition, there are also delays associated with traffic at stations.

1654-1462

Refer to Standard Response SJM-Response-GEN-2: Consideration of Diridon Integrated Station Concept and the Google Development at the San Jose Diridon Station.

1654-1463

Refer to Standard Response SJM-Response-GS-1: Requests for Grade Separations.

1654-1464

Refer to Standard Response SJM-Response-GS-1: Requests for Grade Separations.

Because the project is not proposing grade separations, under Alternative 4, trains are presumed to sound horns while approaching Caltrain stations following Caltrain operating policy. Trains sound the warning horns approaching at-grade crossings because it is required by FRA as a safety precaution. Noise barriers and quiet zones are proposed mitigation measures in Section 3.4, Noise and Vibration.

1654-1465

Refer to Standard Response SJM-Response-GEN-3: Consideration of Caltrain Business Plan, Including the 2040 Caltrain Service Vision.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1466

Table 8-1, Community and Environmental Factors by Alternative, includes severe noise impacts in the comparison of alternatives with noise barrier mitigation with and without quiet zones; it does not combine moderate and severe impacts. As indicated in Section 3.4.4.5, Method for Determining Significance under CEQA, a significant impact is one that would generate a substantial temporary or permanent increase in ambient noise levels in excess of standards for a severe impact established by FRA for high-speed ground transportation and by FTA for transit projects. Therefore, Section 8.4.4, Alternative Comparison, is correct as written, with Alternative 1 having the most residual noise impacts after the combined implementation of noise barrier mitigation and local quiet zones. Refer to Tables 3.4-28 through 31 in Section 3.4, Noise and Vibration, for more detailed information.

1654-1467

The commenter is correct. Alternative 3 would have the lowest number of residual noise impacts after noise barrier mitigation and with the addition of quiet zones as indicated in Table 8-1, Community and Environmental Factors by Alternative. Alternative 4 would have the highest number of severe noise impacts after implementation of noise barrier mitigation. As stated in Section 3.4.7.1, Noise Mitigation Analysis, Alternative 4 would cause HSR horn noise throughout the shared Caltrain corridor from San Jose to Gilroy. Therefore, an analysis of the potential benefit that could be provided by implementing Quiet Zones is provided under Alternative 4. NV-MM#4 states that the Authority would assist with the preparation of technical analysis and provide input for the Quiet Zone application, which local communities could then use as part of their application to FRA to establish quiet zones.

1654-1468

Refer to Standard Response SJM-Response-GEN-3: Consideration of Caltrain Business Plan, Including the 2040 Caltrain Service Vision.

The Caltrain Business Plan has not been adopted as of April 2021, which was after release of the San Jose to Merced Project Section Draft EIR/EIS. No environmental analysis has been conducted for the Caltrain Business Plan. The specific physical improvements have not yet been designed, and full funding has not been identified yet. As such, the Caltrain Business Plan (including the Caltrain Service Vision) is not “reasonably foreseeable” as defined under NEPA or CEQA, and the information necessary to include them in a specific analysis of the cumulative impacts of the HSR project is not available.

1654-1469

The list of applicable design standards is noted. The Authority is not required to comply with local transportation regulations; however, it has endeavored to design and build the project so that it is consistent with local transportation goals, including meeting design standards and guidance for transportation facilities. Design standards and guidance incorporated into Volume 3, Preliminary Engineering for Project Design Record, are listed in Appendix 2-D, Applicable Design Standards, and Technical Memorandum 1.1.1. Design standards and guidelines will be reviewed, updated, and incorporated where applicable during Detailed Design Post-ROD.

1654-1470

Please refer to the response to submission SJM-1654, comment 1469.

1654-1471

Please refer to the response to submission SJM-1654, comment 1469.

1654-1472

Please refer to the response to submission SJM-1654, comment 1469.

1654-1473

Please refer to the response to submission SJM-1654, comment 1469.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1474

Please refer to the response to submission SJM-1654, comment 1469.

1654-1475

Please refer to the response to submission SJM-1654, comment 1469.

1654-1476

Volume 3, Preliminary Engineering for Project Design Record, conforms to Caltrans Highway Design Manual, as will Detailed Design Post-ROD.

1654-1477

Please refer to the response to submission SJM-1654, comment 1469. Volume 3, Preliminary Engineering for Project Design Record, conforms to Caltrans Standard Plans and Highway Design Manual, American Association of State Highway and Transportation Officials standards, as will Detailed Design Post-ROD. Additional guidance such the NACTO design guides will be considered for incorporation where applicable.

1654-1478

The list of applicable design standards is noted. The Authority is not required to comply with local transportation regulations; however, it has endeavored to design and build the project so that it is consistent with local transportation goals, including meeting design standards and guidance for transportation facilities. Design standards and guidance incorporated into Volume 3, Preliminary Engineering for Project Design Record, are listed in Appendix 2-D, Applicable Design Standards, and Technical Memorandum 1.1.1. Design standards and guidelines will be reviewed, updated, and incorporated where applicable during Detailed Design Post-ROD.

1654-1479

The list of applicable design standards is noted. The Authority is not required to comply with local transportation regulations; however, it has endeavored to design and build the project so that it is consistent with local transportation goals, including meeting design standards and guidance for transportation facilities. Design standards and guidance incorporated into Volume 3, Preliminary Engineering for Project Design Record, are listed in Appendix 2-D, Applicable Design Standards, and Technical Memorandum 1.1.1. Design standards and guidelines will be reviewed, updated, and incorporated where applicable during Detailed Design Post-ROD.

1654-1480

Volume 3, Preliminary Engineering for Project Design Record, conforms to Caltrans Highway Design Manual, as will Detailed Design Post-ROD.

1654-1481

The list of applicable design standards is noted. The Authority is not required to comply with local transportation regulations; however, it has endeavored to design and build the project so that it is consistent with local transportation goals, including meeting design standards and guidance for transportation facilities. Design standards and guidance incorporated into Volume 3, Preliminary Engineering for Project Design Record, are listed in Appendix 2-D, Applicable Design Standards, and Technical Memorandum 1.1.1. Design standards and guidelines will be reviewed, updated, and incorporated where applicable during Detailed Design Post-ROD.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1482

Refer to Standard Response SJM-Response-GEN-2: Consideration of Diridon Integrated Station Concept and the Google Development at the San Jose Diridon Station, SJM-Response-GS-1: Requests for Grade Separations.

The Authority recognizes and acknowledges that coordination with the City of San Jose on these issues is ongoing. The Authority will continue to collaborate with the City as the design and engineering progress. The comment requests that additional coordination to integrate the DISC with the HSR project design occur. The Authority will coordinate with appropriate agencies during Detailed Design Post-ROD to address design, construction, and operational conflicts and connections with adjacent infrastructure and projects.

1654-1483

The reconciliation column for “Land Use Compatibility Guidelines for Community Noise in San Jose, Table 4” refers to reconciliation described on page 2-K-5. This text does not reference LU-IAMF#1. NV-MM#3, NV-MM#4, NV-MM#5, and NV-MM#6 would be implemented to reduce project noise levels. As described on page 2-K-5 in the reconciliation column, although the mitigation measures would be effective at reducing noise impacts, not all noise impacts would be mitigated. Table 3 accurately describes the consistencies and inconsistencies between HSR and the Envision San Jose 2040 General Plan (City of San Jose 2011, as cited in Chapter 2 of the Draft EIR/EIS), Land Use Compatibility Guidelines for Community Noise in San Jose, Table 4.

1654-1484

Refer to Standard Response SJM-Response-GEN-3: Consideration of Caltrain Business Plan, Including the 2040 Caltrain Service Vision.

1654-1485

Refer to Standard Response SJM-Response-GEN-3: Consideration of Caltrain Business Plan, Including the 2040 Caltrain Service Vision.

1654-1486

To address this comment, the discussion of Fisher Creek Trail under Impact PK#2 in Section 3.15, Parks, Recreation, and Open Space, in the Final EIR/EIS has been revised to clarify that Alternative 2 would be on embankment along the Monterey Road corridor, not Alternatives 1 or 3.

1654-1487

The proposed rebuild of the College Park Caltrain Station in Alternative 4 is compatible with HSR service as described in Section 2.8, Operations and Service Plan, of this Final EIR/EIS.

1654-1488

Refer to Standard Response SJM-Response-PUE-2: Coordination with Local Government Entities and Utility Owners.

Under Alternative 4, the proposed floodwalls are within the existing Caltrain right-of-way. The floodwall would not conflict with the proposed Highway 87 Bikeway realignment.

Under Alternative 4, a trail underpass of the Almaden Expressway is proposed to avoid unnecessary reconstruction of the roadway overhead structure. The underpass is essentially on tangent with good sight lines. The trail is of a sufficient width for maintenance vehicles and law enforcement access. No other feasible solution was identified.

1654-1489

Refer to Standard Response SJM-Response-PUE-2: Coordination with Local Government Entities and Utility Owners.

Alternative 4 does not propose improvements on the west side of Highway 87 and would not interfere with a trail connection from the Three Creeks Trail to Alma Avenue along the west side of Highway 87. Alternative 4 would not conflict with the designs proposed in the 2015 Skyline Trail Vision Study (City of San Jose 2015). The elevated trail over Highway 87 and VTA light rail shown in Figures 15 and 19 of the Vision Study (City of San Jose 2015) would also span the at-grade Alternative 4 alignment. Between the HSR and Highway 87, there appears to be sufficient width to provide for a Class I bikeway ramp connection from the Bikeway down to either side of West Alma Avenue.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1490

The project is a state agency (the Authority) undertaking. In addition, the Authority is acting as the federal lead agency pursuant to the MOU executed by the FRA and the Authority on July 23, 2019. The project must conform to the policies and objectives of the statutes and regulations under which the Authority operates, including all applicable state and federal regulations. Since a State of California agency is the project proponent, the project is not subject to local government general plan policies or zoning regulations, such as the City's Construction Impact Ordinance mentioned in the comment. Nevertheless, the Authority recognizes that the project can be most successful if designed in a manner that is as sensitive as possible to the local environment through which it must travel, while still meeting the unique design constraints of HSR service.

Construction noise impacts and associated mitigation are discussed in Section 3.4. Air quality impacts from construction and associated mitigation measures are discussed in Section 3.3. Construction impacts on socioeconomics and communities are discussed in Section 3.12. Section 3.2 provides a discussion of construction traffic and related transportation issues.

The mitigation measures identified in the Draft EIR/EIS are sufficient. CEQA requires the Authority to analyze the potential impacts of the HSR and identify enforceable mitigation for each significant effect of the project and to mitigate or avoid the significant effects on the environment by adopting feasible mitigation measures as part of the project (Public Resources Code Section 21001.2). NEPA requires that all relevant, reasonable mitigation measures are to be identified, even if they are outside the jurisdiction of the lead agency or the cooperating agencies, and thus would not be committed as part of the RODs of these agencies (40 CFR 1502.16(h), 1505.2(c)).

As explained throughout Chapter 3, Affected Environment, Environmental Consequences, and Mitigation Measures, of the Draft EIR/EIS, the project definition developed by the Authority incorporates certain programmatic mitigation strategies that were adopted at the conclusion of the program EIR/EIS processes, which include mechanisms to avoid and minimize impacts through careful planning and design. The Draft EIR/EIS also identifies further strategies and measures to avoid or reduce adverse impacts resulting from construction or operation of the project. These measures are

1654-1490

identified broadly in each resource section as IAMFs (Impact Avoidance and Mitigation Features). These will be enforced through the Mitigation Monitoring Enforcement Plan and the Mitigation Monitoring and Reporting Program, required under NEPA and CEQA, respectively, that will be included with the Authority decision documents. Where the detailed impacts analysis revealed adverse impacts that required mitigation, the Draft EIR/EIS includes detailed mitigation measures to address the adverse impacts. Many of the project level mitigation measures are refinements of the programmatic mitigation strategies, while others are newly developed and specific to the Draft EIR/EIS. Additional details for certain of the mitigation measures that require detailed information available during final design would be developed during the final design phase, prior to project construction. Implementation of some mitigation measures could have secondary impacts on environmental resources. These secondary impacts are discussed in the applicable resource sections within Chapter 3 of the Draft EIR/EIS.

The construction transportation plan (CTP), as described in TR-IAMF#2, would describe in detail the activities to be carried out in each construction phase. The CTP would implement a traffic control plan that would identify when and where temporary closures and detours would occur, with the goal of maintaining traffic flow, especially during peak travel periods, and would include methods to minimize construction traffic.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1491

The expectation that the Authority enter into a mutually-beneficial master cooperative agreement with the City of San Jose is noted. The Authority and contractor will coordinate with the City as appropriate to fulfill the requirements of TR-IAMF#2, TR-IAMF#7, TR-IAMF#9, TR-IAMF#11, described in Volume 2, Appendix 2-E, Project Impact Avoidance and Minimization Features, of the Draft EIR/EIS. These IAMFs address street, rail, and transit closures, alternate routes, traffic and transportation management during construction, minimizing disruptions to businesses, residents, and other visitors, and truck haul routes during construction. Impacts on trails are addressed with PK-IAMF#1. Temporary impacts due to construction easements and/or damages would be minimized using IAMFs as described in Impact SOCIO#1, based on the mechanism of the impact. The Authority will implement SOCIO-IAMF#2 and SOCIO-IAMF#3 where easements and relocations are required.

1654-1492

The Authority will continue to coordinate with local agencies and jurisdictions during the design and operational phases of the project to ensure that mitigation is adequately addressed to reduce significant impacts. Resource-specific mitigation measures were developed during the environmental review process. The San Francisco Bay Area to Central Valley High-Speed Train Program Final EIR/EIS (Authority and FRA 2008, as cited in Chapter 1, Project Purpose, Need, and Objectives, of the Draft EIR/EIS) identified mitigation strategies to be considered on a project-specific level. These strategies were incorporated into the mitigation identified for the San Jose to Merced Project Section.

1654-1493

Section 1.1.5, Lead Agencies, Cooperating Agencies, and Responsible Agencies, of the Draft EIR/EIS includes agencies with discretionary authority to approve or permit aspects of the HSR project. While the City of San Jose is a key local agency and would be involved in carrying out and/or approving certain aspects of mitigation, it is not considered a Responsible Agency in the sense of the CEQA Guidelines Section 15220 et seq. or CEQA Guidelines Section 15096. As a state agency, the Authority is exempt from local permit requirements; however, in order to coordinate construction activities with local jurisdictions, the Authority plans to pursue local permits as part of construction processes consistent with local ordinances. These local permits may include, but are not limited to major encroachment permits, alternatives grading and drainage permits, and major improvement permits. Local agencies would be given advance review and discretion to request changes to permit applications and commitments.

1654-1502

Refer to Standard Response SJM-Response-GEN-2: Consideration of Diridon Integrated Station Concept and the Google Development at the San Jose Diridon Station.

To address this comment, Section 2.6.1.2, Planned Land Use, of the Final EIR/EIS has been updated to reflect that the Google campus is 85 acres within the 250-acre Diridon Station Area.

1654-1500

The objectives of the proposed HSR System include providing an interface with major commercial airports, mass transit, and the highway network. The Authority has engaged with other key transportation agencies, and the Draft EIR/EIS considers other agency plans, policies, and programs in the project corridor.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1503

The text referenced in the comment is located in Section 1.2.4.1, Travel Demand and Capacity Constraints, of the Draft EIR/EIS, and the Authority has updated this language to reflect the current status of each project in the Final EIR/EIS. Section 1.3, Relationship to Other Agency Plans, Policies, and Programs, and Section 1.4, Relationship to Other Transportation Projects in the Study Area, have also been reviewed for updates, and status revisions have been made accordingly throughout Chapter 1, Project Purpose, Need, and Objectives, of the Final EIR/EIS.

1654-1494

Refer to Standard Response SJM-Response-TR-1: Site-Specific Mitigation for Traffic Impacts.

The comment asserts that the Draft EIR/EIS should address adverse effects on City of San Jose intersections. Please refer to Mitigation Measure TR-MM#1 in Section 3.2, Transportation, of the Final EIR/EIS for the site-specific mitigation measures identified to reduce NEPA LOS effects. While CEQA currently prohibits the use of automobile delay and intersection LOS in the assessment of environmental impacts, mitigation measures are proposed for identified NEPA effects. It should be noted that in response to comments, the Authority conducted further analysis and developed site-specific mitigation measures for consideration that could reduce identified adverse traffic effects identified in the EIR/EIS. The site-specific mitigation measures include improvements at locations within the City of San Jose and are delineated within Mitigation Measure TR-MM#1.

1654-1499

The comment noted that the Draft EIR/EIS should evaluate sight distance at at-grade intersection crossings. Please refer to Draft EIR/EIS Impact S&S#8 in Section 3.11, Safety and Security, of the Draft EIR/EIS for a description of the evaluation and conclusions relative to traffic hazards at at-grade crossings. There would be a less-than-significant impact under CEQA on traffic hazards under all four alternatives. The project would install four-quadrant gates and other physical improvements at at-grade crossings to be retained. For additional details regarding four-quadrant gates and their associated improvements, please refer to Impact S&S#4 in Section 3.11 of the Draft EIR/EIS. At-grade crossings to be maintained would meet all design standards for sight distance.

1654-1501

To address this comment, references to the baseball stadium have been removed from Section 2.6.1.2, Planned Land Use, of the Final EIR/EIS.

1654-1497

Refer to Standard Response SJM-Response-SS-1: At-Grade Crossing Safety.

The comment noted that the Draft EIR/EIS should evaluate pedestrian and bicycle safety at at-grade intersection crossings. Please refer to Impact S&S#8 in Section 3.11, Safety and Security, of the Draft EIR/EIS for a description of the evaluation and conclusions relative to pedestrian and bicycle safety at at-grade crossings. There would be a less-than-significant impact under CEQA on traffic hazards associated with pedestrian and bicycle travel under all four alternatives. The alternatives would either grade separate existing at-grade crossings or install four-quadrant gates and other physical improvements at at-grade crossings to be retained. For additional details regarding four-quadrant gates and their associated improvements, please refer to Impact S&S#4 in Section 3.11 of the Draft EIR/EIS.

1654-1498

The comment asks for parking numbers required by the project and queries where employees will park. The parking analysis in Section 3.2, Transportation, of the Draft EIR/EIS includes both visitor and employee parking estimates. Please refer to pages Section 3.2.5.3, San Jose Diridon Station and SAP Center Parking, and Section 3.2.6.3, Parking, for the parking analysis.

There would be no designated employee parking at Diridon. Employees would be responsible for their own parking if they choose to drive. During construction, employee parking locations would be planned according to TR-IAMF#2 and TR-IAMF#3.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1495

The comment states that the Draft EIR/EIS should evaluate queuing at all left turn pockets at study intersections. Please refer to Draft EIR/EIS Sections 3.2.4.4, Method for Evaluating Impacts under NEPA, and 3.2.4.5, Method for Determining Significance under CEQA, for a description of the methods and impact criteria incorporated within the transportation assessment. As Lead Agency, the Authority developed the methodology and significance criteria used within the assessment in accordance with CEQA and NEPA guidelines. At study signalized and unsignalized intersections, adverse NEPA effects are identified within LOS E or F wherein the project generates a material increase in vehicular delay. These conditions also represent those instances wherein adverse queuing issues would be expected. The mitigation measures proposed to ameliorate the project's contributions to vehicular delay at these locations would also work to resolve queuing issues, including the potential for the lengthening of turn pockets, should they exist.

1654-1496

The comment noted that the Draft EIR/EIS should evaluate the changes to access and circulation to properties affected by the alternatives. Please refer to Table 3.2-14 in Section 3.2, Transportation, of the Draft EIR/EIS for a list and description of changes to access and circulation for roadways and access points affected by the project. All of these modifications are reflected in the transportation assessment presented in Section 3.2 of the Draft EIR/EIS.

1654-1509

To address this comment, the Park Avenue and St. John Street projects have been removed from Table 2-5 in the Final EIR/EIS.

1654-1506

Please refer to Volume 3, Preliminary Engineering for Project Design Record, Sheet TT-Y0001 for typical viaduct sections (General Information Book).

1654-1507

To address this comment, Section 2.6.1.2, Planned Land Use, of the Final EIR/EIS has been revised to reflect that the Stockton Avenue seven-story development is under construction and nearly completed.

1654-1510

HSR will be responsible for constructing modifications, improvements, or replacement irrigation and drainage facilities that are affected by the project.

1654-1504

Please refer to the response to submission SJM-1654, comment 1455.

1654-1505

Design issues/decisions relating to the style, and materials and other aesthetic components of embankments or other project-related structures and their artistic embellishment would be undertaken in the project's detailed design phase of the project. AVQ-IAMF#2 ensures community input on non-station aesthetics. Furthermore, mitigation measure AVQ-MM#3 requires the incorporation of design criteria for non-station structures, such as aerial structures, fencing, retaining walls, and overcrossings, that can adapt to local context. The measure specifically requires the design/build contractor to prepare and submit to the Authority a technical memorandum that describes how it coordinated with local jurisdiction on the design of the non-station structures so that they fit in with the visual context of the areas near them (please refer to page 3.16-156 of the Draft EIR/EIS). Implementation of these measures ensure that the City's Public Art Master Plan will inform the aesthetic components of the HSR infrastructure.

1654-1508

To address this comment, Section 2.6.1.2, Planned Land Use, of the Final EIR/EIS has been revised to reflect that a multifamily (not single-family) residential project is moving forward on Communications Hill adjacent to the proposed project alignment.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1511

The Authority will coordinate with appropriate agencies and projects north of Diridon Station during Detailed Design Post-ROD to address design, construction, and operational conflicts with adjacent infrastructure and projects.

1654-1520

The comment is noted and does not indicate any specific concern regarding any of the conclusions in the Draft EIR/EIS.

1654-1521

The comment noted that the Draft EIR/EIS identified a number of existing bicycle parking facilities at the San Jose Diridon Station that is less than are currently provided. Please refer to Draft EIR/EIS Section 3.2.5.5, Nonmotorized Travel, for a description of the bicycle parking spaces present at the time of the NOP publication. As noted by the comment, the station now includes an additional 24 electronic bike lockers.

1654-1512

Refer to Standard Response SJM-Response-GEN-2: Consideration of Diridon Integrated Station Concept and the Google Development at the San Jose Diridon Station.

The Authority will coordinate with appropriate agencies and projects near Diridon Station during Detailed Design Post-ROD to address design, construction, and operational conflicts with adjacent infrastructure and projects. Plans related to resource-specific construction impacts will be provided based on the IAMFs and mitigation measures included in the Final EIR/EIS.

1654-1513

Table 2-17 has been revised in the Final EIR/EIS to reflect the correct jurisdiction for the staging area East of Lafayette Street. The remainder of the comment is noted and does not indicate any specific concern regarding any of the conclusions in the Draft EIR/EIS. The Authority will coordinate with appropriate agencies during Detailed Design Post-ROD to address construction conflicts with land use, other infrastructure, and other projects.

1654-1514

Table 2-17 includes an entry for two 1.7-acre, one 2.3-acre, and one 1.8-acre sites. This was incorrectly located as "Between Hillsdale Ave, Caltrain/UPRR, and Granite Rock Way". To address this comment, the entry in Table 2-17 of the Final EIR/EIS has been corrected to Blossom Hill Road.

1654-1516

The comment noted that the Draft EIR/EIS should reference the City of San Jose's policy on Vehicle Miles of Travel. Please refer to Table 1 in Appendix 2-J, Regional and Local Plans and Policies (located in Volume 2, Technical Appendices, of the Draft EIR/EIS), for a listing of all local regulations, plans, and policies associated with transportation resources that existed at the time of NOP publication. As referenced by the comment, the City of San Jose subsequently passed an additional policy relevant to Vehicle Miles of Travel. The analysis within the Draft EIR/EIS provides a full assessment of the project's effects on VMT and is consistent with the City's current policies.

1654-1517

The comment noted that the Draft EIR/EIS should evaluate the changes to driveway access and circulation to properties affected by the alternatives. Please refer to Table 3.2-14 in Section 3.2, Transportation, of the Draft EIR/EIS for a list and description of changes to access and circulation for roadways and access points affected by the project. These modifications are reflected in the transportation assessment presented in Section 3.2 of the Draft EIR/EIS. Please refer to Table 3.2-1 in Section 3.2 of the Draft EIR/EIS for a description of how individual transportation resources were selected for analysis based on the project's potential effects. LOS analysis was performed at intersections and driveways found to meet these criteria.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1518

The comment noted that the Draft EIR/EIS should provide additional information regarding where passenger loading/unloading would occur and how shuttles would be provided by the project. Please refer to Figure 2-54 and Figure 2-56 in Chapter 2, Alternatives, of the Draft EIR/EIS for illustrations of the locations of passenger loading/unloading at both locations. Access to off-site rental car facilities and remote parking lots could be provided by either private operators (i.e., rental car companies or remote parking lot operators) or the Authority.

1654-1519

The comment noted that the Draft EIR/EIS did not incorporate a scenario required by the City of San Jose in their normal assessment of intersection LOS. Please refer to Draft EIR/EIS Sections 3.2.4.4, Method for Evaluating Impacts under NEPA, and 3.2.4.5, Method for Determining Significance under CEQA, for a description of the methods and impact criteria incorporated within the transportation assessment. As Lead Agency, the Authority developed the methodology, scenarios, and significance criteria used within the assessment in accordance with CEQA and NEPA guidelines. The Draft EIR/EIS transportation section includes both 2029 No Project and 2029 Plus Project scenarios, which reflect conditions forecast to prevail when Phase 1 rail service would commence. These scenarios include growth associated with approved and pending projects, which would be reflected in a typical City of San Jose baseline analysis.

1654-1515

To address this comment, additional text has been added to Section 2.12, Permits, of the Final EIR/EIS to clarify that local permits may include, but are not limited to major encroachment permits, grading and drainage permits, and major improvement permits.

1654-1523

The comment noted that the Draft EIR/EIS should provide an updated map and discussion of existing and planned bicycle facilities in the San Jose Diridon Station area. Please refer to Draft EIR/EIS Section 3.2.5.5, Nonmotorized Travel, and Section 3.2.6.5, Nonmotorized Travel, for descriptions of the existing and planned bicycle and pedestrian networks at the time of NOP publication. As referenced in the comment, the City of San Jose has recently completed a number of nonmotorized improvements within the San Jose Diridon Station area. In addition, the City is currently in the process of updating its bicycle plan which, when approved, would potentially modify planned nonmotorized resources within the Project Section.

1654-1522

The comment noted that the existing bicycle facilities identified in the Draft EIR/EIS may change over time as development occurs and modifications are made to the study area's transportation resources. Please refer to Section 3.2.6.5, Nonmotorized Travel, and Table 3.2-19 in Section 3.2, Transportation, of the Draft EIR/EIS for a description of the known proposed changes to the nonmotorized transportation network at the time of NOP publication. These modifications include a number of nonmotorized improvements within the San Jose Diridon Station.

1654-1526

The comment noted that the Draft EIR/EIS should identify coordination with VTA in the development and deployment of improvements to mitigate temporary impacts during project construction. Please refer to Impact TR#10 and TR-IAMF#11 in Section 3.2, Transportation, of the Draft EIR/EIS for a description of the project's construction impacts on bus service and the contractor's requirements to maintain transit access during construction. While this impact was identified as significant and unavoidable within the Draft EIR/EIS, the contractor is required to coordinate with VTA and other transit providers to maintain transit flows and access, minimize operations hazards through alternative access and bus route detour provisions, minimize transit schedule disruptions, identify temporary bus stops away from construction locations, and separate transit users from construction locations.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1524

The comment noted that the Draft EIR/EIS should evaluate the transportation-related effects of roadway closures and modifications within its technical assessments of VMT and LOS. Please refer to Impact TR#3, Impact TR#4, Impact TR#5, Impact TR#6, and Impact TR#7 in Section 3.2, Transportation, of the Draft EIR/EIS for discussions on the impacts of roadway closures and modifications. The Draft EIR/EIS evaluates the impacts associated with all proposed roadway closures and modifications, including volume shifts to adjacent streets and alterations to property access. Separate CEQA clearances for these features of the project are not required.

1654-1525

As described in Impact TR#8 in Section 3.2, Transportation, of the Draft EIR/EIS, construction activities in urban areas associated with station, platform, and track alignment construction would require temporary removal of public parking. These activities would result in decreased parking availability and increased vehicle congestion and queuing around areas with decreased parking supply. MOWFs and construction activities in rural areas are not expected to remove or disrupt existing parking.

Any closure or removal of parking areas or roadways during construction would be temporary. Every attempt would be made to minimize their removal, shorten the length of time that these facilities are inoperable, and provide signage directing users to alternate facilities. Upon completion of construction, all parking areas would be restored.

To minimize effects on public on-street parking, the contractor would identify temporary locations to accommodate off-street parking for all construction-related vehicles (TR-IAMF#3). If adequate parking cannot be provided on the construction sites, the contractor would designate existing off-site remote parking areas in the CTP and, if the remote parking areas are distant from the construction site, would provide shuttles to carry construction workers to and from the construction area.

Permanently impacted private residential parking would be replaced in kind or compensated for through the ROW process. Roadway relocations, including grade separations, would replace existing parking. Parking would be reduced where cul-de-sacs are constructed next to the tracks. Parking would be removed where roadways are closed, as disclosed in Table 3.2-14 in Section 3.2, and Appendix 2-A: Roadway Crossings, Modifications, and Closures. Alternatives 1 and 3 limit roadway changes and maintain connectivity under the viaduct. Alternative 2 would affect more residential parking due to the greater number of road closures required for this alternative (described under Impact TR#3). Roadway changes and closures in Alternative 4 in residential areas, such as installing quad gates and closing rail crossings would not affect public parking on residential roads. Impacts to public parking on residential streets do not have associated significance thresholds under CEQA and therefore do not have associated impact determinations provided in the Final EIR/EIS.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1531

The Authority will show minor utilities on the 60% design drawings, which will be developed after ROD, expected in August 2021.

1654-1533

Comment noted. Thank you.

1654-1530

Refer to Standard Response SJM-Response-SS-1: At-Grade Crossing Safety.

The noise impact assessment prior to mitigation assumes that trains would sound horns and that there would not be quiet zones. Noise barriers without quiet zones are analyzed as the primary noise mitigation measures in Section 3.4.7, Mitigation Measures, of the Draft EIR/EIS.

1654-1527

The comment noted that the Draft EIR/EIS should clarify a reference to the North Railroad Trail within the transportation section. Please refer to Draft EIR/EIS Table 3.2-19 in Section 3.2, Transportation, for the reference in question. This reference refers to a proposed Class I bike path east of Autumn Street between Santa Clara Street and Julian Street (parallel to SR 87 and the Guadalupe River). The proposed improvement was shown on Figure 2.6.8 of the Diridon Station Area Plan (City of San Jose 2014, as cited in Section 3.2 of the Draft EIR/EIS). The reference to the North Railroad Trail has been modified in the Final EIR/EIS to better describe the location of this connection. Improvements listed within Draft EIR/EIS Table 3.2-19 referenced within the comment are part of the "No Project" conditions. They would be implemented by others (i.e., not the Authority) in accordance with design standards and are reflected in the Draft EIR/EIS baseline conditions.

1654-1528

The comment noted that a portion of a mitigation measure identified within the Draft EIR/EIS would be ineffective as implementing transit signal priority on Cahill, Montgomery, and Autumn Streets and would conflict with transit signal priority on Santa Clara Street. Please refer to Mitigation Measure TR-MM#2 in Section 3.2, Transportation, of the Draft EIR/EIS for a discussion of the mitigation referenced in the comment. The installation of transit signal priority on connecting roadways such as those referenced by the comment and within the proposed mitigation measure would require coordination and interconnection within the City's overall traffic signal network. The provision of transit signal priority on intersecting streets can provide benefit and prove effective for transit movements on both facilities.

1654-1532

Major utilities include wastewater lines that have an outside diameter equal to or greater than 24 inches. Section 3.6.1, Introduction, of the Final EIR/EIS has been revised to reflect this definition. Section 3.6.1 has also been revised to note that fiber optics are not major utilities. The comment noted that the Draft EIR/EIS is missing at least one 21-inch sanitary sewer line. Volume 3, Preliminary Engineering for Project Design Record, shows major utilities that were analyzed in the Draft EIR/EIS. Utilities were incorporated into Volume 3 of the Draft EIR/EIS according to TM 0.1 PEPD Guidelines. The Authority will show minor utilities, including 21-inch sanitary sewer lines, on the design drawings as part of detailed design post-ROD.

1654-1529

As discussed under Impacts TR#8 and TR#9 in Section 3.2, Transportation, of the Draft EIR/EIS, the HSR project would replace displaced parking spaces within the Diridon Area available for SAP events on a 1:1 basis during construction and on a 1:1 basis for permanent displacements. The comment is correct that Alternative 4 would require the least amount of displacement (see Table 3.2-15).

1654-1538

Impact PUE#1 in the Final EIR/EIS has been revised to incorporate text revisions provided by commenter.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1539

Critical facilities planned to be interrupted would be identified during final the engineering design and construction.

1654-1540

Refer to Standard Response SJM-Response-PUE-2: Coordination with Local Government Entities and Utility Owners.

Impact PUE#2 evaluates temporary impacts from water usage during construction activities. Water usage during construction may be sourced from permitted commercial sources of potable (not portable) water, recycled water, and groundwater. Water sources (potable, recycled, other) will be determined based on availability and applicability based on the construction use. Potable water would be used where potable water is required, for example, staff facilities. The Authority will avoid and minimize water use according to the water conservation plan (Authority 2015, as cited in Section 3.6, Public Utilities and Energy, of the Draft EIR/EIS). The average increase in water usage by the project of 10 percent includes all water types, potable, non-potable, recycled, reclaimed, and groundwater. According to SCVWD, the estimated project construction water consumption in Santa Clara County is approximately 11 percent of the projected surplus. The impacts of the project on water use are less than significant, as described in Impact PUE#2, because the project avoids and minimizes water use and there is sufficient projected surplus in water supplies (including in Santa Clara County). No mitigation is proposed for impacts that are less than significant.

Excess on-site water will be disposed of according to project permits. Disposal locations may include sanitary sewers, storm drains, creeks, or the water may be re-used on site where appropriate. The Authority will coordinate with permitting authorities and the appropriate utility and service providers to ensure discharge locations have sufficient capacity and that discharges meet water quality requirements.

1654-1541

Refer to Standard Response SJM-Response-OUT-2: Consultation with Local Agencies and Consistency with Local Regulations.

The project must conform to the policies and objectives of the statutes and regulations under which the Authority operates. Since an agency of the State of California is the project proponent, the project is not subject to local government general plan policies or zoning regulations. The Authority has endeavored to develop a project design that minimizes local impacts and is made as consistent with local policies, as possible. The high-speed rail right-of-way would be permanently fenced and secured. In order to coordinate construction activities with local jurisdictions, the Authority plans to pursue local permits as part of construction processes consistent with local ordinances. These local permits may include, but are not limited to, major encroachment permits, alternative grading and drainage permits, and major improvement permits.

1654-1536

Section 3.6.5.1, Public Utilities, of the Final EIR/EIS has been revised to incorporate text revisions provided by commenter.

1654-1535

Section 3.6.5.1, Public Utilities, of the Final EIR/EIS has been revised to incorporate text revisions provided by commenter concerning Edenvale, Coyote Valley, and Evergreen.

1654-1534

High-risk and major utility data were compiled from as-built plans, utility company and city records. Utilities were incorporated into Volume 3, Preliminary Engineering for Project Design Record, of the Draft EIR/EIS according to TM 0.1 PEPD Guidelines. Appendix 3.6-A, Public Utilities and Energy Facilities, lists all utility conflicts that are identified on the PEPD. Table 3.6-3 was developed from Appendix 3.6-A by tabulating utilities by type, subsection, and alternative.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1537

Section 3.6.5.1, Public Utilities, of the Final EIR/EIS has been revised to incorporate text revisions provided by commenter.

1654-1543

As noted in the comment, construction of any of the project alternatives could require relocation of existing groundwater well and pump station facilities operated by the San Jose Municipal Water System. Impact PUE#4 in Section 3.6, Public Utilities and Energy, in the Final EIR/EIS has been revised to acknowledge potential impacts to groundwater well and pump stations. Specific facilities that could require relocation or protection in place are identified in Appendix 3.6-A, Public Utilities and Energy Facilities. The additional detail that the comment requests Impact PUE#4 has not been to Impact PUE#4 because it is either already addressed in the impact discussion or because the requested level of detail will be developed in coordination with utility providers as described in the last two paragraphs of Impact PUE#4.

1654-1544

In Volume 3, Preliminary Engineering for Project Design Record, of the Draft EIR/EIS, existing public utilities are typically relocated to other public rights-of-way and would not require private land acquisition. Permanent maintenance access easements within private rights-of-way would be needed in some cases. Please refer to Section 3.13, Station Planning, Land Use, and Development, for an analysis of impacts on existing and planned land use and CEQA impact determinations. Please refer to Section 3.12, Socioeconomics and Communities, and the Draft Relocation Impact Report for additional information on private property impacts and CEQA impact determinations.

1654-1542

Relocation plans for all city storm and sanitary sewer lines will be provided for coordination during detailed design post-ROD. For sanitary and storm relocations, maintenance access to City utilities post-construction of project will be provided, typically in the form of easements.

Based on Volume 3, Preliminary Engineering for Project Design Record, of the Draft EIR/EIS, the relocation of the storm pump stations (Taylor, Delmas, Willow, Alma, and Almaden) are within rail or public right-of-way and would not require private land acquisition. Coordination with City Real Estate would occur as needed.

1654-1551

Impact PUE#9 in Section 3.6, Public Utilities and Energy, of the Final EIR/EIS has been revised to explain that direct discharge of wastewater into the local sanitary sewer system from station and maintenance facility operations would only occur if the receiving wastewater treatment facility approves such disposal and would be subject to coordination with the local wastewater treatment authority concerning system capacity and maintenance. Proposed discharges into municipal sanitary lines, including the City of San Jose's sanitary lines, during operations would be coordinated with the local wastewater treatment authorities to address capacity and maintenance of wastewater pump stations. Please also see response to submission SJM-1654, comment 1550.

1654-1545

Refer to Standard Response SJM-Response-PUE-2: Coordination with Local Government Entities and Utility Owners.

A number of pump stations were added as a precautionary measure in case stormwater could not be retained or conveyed off site with a gravity system. Appendix 3.6-A, Public Utilities and Energy Facilities, reflects the addition of these pump stations. This will be refined in Detailed Design Post-ROD in coordination with the City of San Jose.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1550

Impact PUE#9 in the Final EIR/EIS has been revised for clarity to explain that direct discharge of wastewater into the local sanitary sewer system from station and maintenance facility operations would only occur if the receiving wastewater treatment facility approves such disposal and would be subject to coordination with the local wastewater treatment authority concerning system capacity and maintenance. Proposed discharges into municipal sanitary lines, including the City of San Jose's sanitary lines, during operations would be coordinated with the local wastewater treatment authorities to address capacity and maintenance.

With respect to the commenters concerns pertaining to the localized wastewater infrastructure at Diridon Station, the HSR project would include the necessary upgrades to upsize the localized wastewater infrastructure to accommodate anticipated flows. The CEQA conclusion for Impact PUE#9 remains less than significant.

1654-1546

Refer to Standard Response SJM-Response-PUE-2: Coordination with Local Government Entities and Utility Owners.

Relocations of essential facilities will be coordinated during Detailed Design Post-ROD with the appropriate utility to ensure that service can be maintained during construction. Details of relocation will be refined during Detailed Design Post-ROD and coordinated with the City as needed.

1654-1547

Refer to Standard Response SJM-Response-PUE-2: Coordination with Local Government Entities and Utility Owners.

Discharges into City of San Jose's sanitary lines during construction or operation will be coordinated with the City to address capacity and maintenance.

1654-1548

Impacts PUE#5 and PUE#6 have been revised to incorporate text revisions provided by commenter. SWPPP requirements are summarized in Section 3.8.2, Laws, Regulations, and Orders.

1654-1549

The CEQA conclusion for Impact PUE#8 has been revised to clarify the finding of less than significant, noting that sufficient water supplies would be available to serve the project, including water consumption for stations and maintenance facilities. Please see Appendix 3.6-C, Water Use Assessment (located in Volume 2, Technical Appendices, of the Draft EIR/EIS), for details on the Authority's consideration of the relative increase in water demand to capacity and the overall reduction in water demand within the project footprint.

1654-1554

The Authority understands that relocating water supply wells, especially those that are deep, productive, and serve large populations, would require specialized construction methods, design reviews and approvals, and appurtenances and enclosures to function effectively; Impact PUE#4 in Section 3.6.6.2, Public Utilities, of the Final EIR/EIS has been revised to include this information. The Authority would ensure replacement wells would be constructed and functional before abandoning and demolishing the existing wells in order to prevent disruptions to the City's water supply system. Alternatives 1-3 would not affect any of the water supply wells that serve the San Jose Municipal Water System. However, Alternative 4 (the Preferred Alternative) would require the relocation of three of the municipal water supply wells in the Coyote Valley that serve the San Jose Municipal Water Supply System. Refer to Volume 3 Roll Plots for the three public supply wells being relocated by Alternative 4.

1654-1553

The Drainage Report and sizing calculations for stormwater treatment are not available for the current preliminary design. Refer to the Volume 3 Roll Plots for all available information regarding proposed modifications to drainage infrastructure within the City of San Jose. The design-build contractor would prepare additional engineering reports and the stormwater management and treatment plan, both of which may contain this information. The Authority would coordinate with the City of San Jose as the design-build contractor develops this information and detailed drainage design during the final design phase.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1552

As stated in response to a previous comment from the City of San Jose (SJM-1654, comment 1423), the analysis in the Draft EIR/EIS was based on a preliminary level of design that is sufficient for purposes of environmental analysis and impact determination, and allows the reader to understand the basic project features, including the alignment plan and profile, roadway-crossing footprints, basic estimates of construction means and methods, and in some cases modifications to local streets and drainage facilities as well as proposed flood control facilities. However, detailed design would be developed by a design-build contractor, and as such the specific locations where stormwater treatment facilities would be constructed within the City of San Jose is not yet available. Stormwater treatment facilities constructed within the City of San Jose would be consistent with the Municipal Regional Phase 1 MS4 Permit. Please refer to the Volume 3 Roll Plots for all available information regarding proposed modifications to streets and infrastructure within the City of San Jose.

1654-1555

Refer to Standard Response SJM-Response-SS-1: At-Grade Crossing Safety.

1654-1558

The noise and vibration impact assessments for the project adhere to FRA criteria. As stated in Section 3.4.2.3, Regional and Local, of the Draft EIR/EIS, the HSR system is not subject to local general plan policies and ordinances related to noise limits or to locally based criteria concerning noise and vibration for the project alternatives.

1654-1560

The comment correctly noted that in the first paragraph under the Monterey Corridor Subsection subheading on page 3.13-7 of the Draft EIR/EIS, the description of the project alternatives' locations relative to the Caltrain and UPRR right-of-way was inaccurate. To address this comment, the paragraph has been corrected to state the following in the Final EIR/EIS: "Alternatives 1, 2, and 3 would be on the east side of the Union Pacific Railroad (UPRR) alignment within the median of Monterey Road, and Alternative 4 would be located within the Caltrain and UPRR right-of-way. This would result in an approximately 200-foot shift in the RSA to the west for Alternative 4 and to the east for Alternatives 1, 2, and 3."

1654-1556

Section 3.11, Safety and Security, has been revised in the Final EIR/EIS to identify the pedestrian-only at-grade crossing at the College Park Caltrain Station. The Final EIR/EIS was reviewed for other locations where this correction was necessary and determined this change was only applicable to Section 3.11.

1654-1557

Section 3.4, Noise and Vibration, of the Draft EIR/EIS includes a vibration impact assessment which was conducted following FRA methodology and criteria. The FRA criteria are consistent with the FTA criteria. This section includes discussion of potential vibration mitigation measures to mitigate significant vibration impacts, including NV-MM#8, which requires that specific vibration mitigation measures be identified during the design phase of the project based on site-specific analysis. As stated in Section 3.4.2.3, Regional and Local, of the Draft EIR/EIS, the HSR system is not subject to local general plan policies and ordinances related to noise limits or to locally based criteria concerning noise and vibration for the project alternatives.

1654-1559

Refer to Standard Response SJM-Response-GEN-2: Consideration of Diridon Integrated Station Concept and the Google Development at the San Jose Diridon Station.

1654-1561

To address this comment, Figure 3.13-1 has been updated in the Final EIR/EIS to reflect recent high-density residential developments at 808 W San Carlos Street and 333 Sunol Street, a greater extent of park land at Del Monte Park, and commercial uses on the east side of SR 87. No associated text changes were required or identified. Proposed commercial/mixed uses associated with the Downtown West Mixed-Use Plan (Google Project) have not been included in this figure, as it is intended to depict existing land uses only.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1562

Refer to Standard Response SJM-Response-GEN-2: Consideration of Diridon Integrated Station Concept and the Google Development at the San Jose Diridon Station.

Because the Google project, which is also referred to as the Downtown West Mixed-Use Plan, is not an approved project, it is not considered part of the environmental baseline or reflected in the planned land uses shown on Figure 3.13-7. As such, this figure has not been revised. Section 3.13.5.2, Planned Development, of the Draft EIR/EIS, includes a discussion of the Downtown West Mixed-Use Plan. This discussion, however, has been further expanded in this Final EIR/EIS.

1654-1566

To address this comment, the definition of parks in Section 3.15.1.1, Definition of Resources, in the Final EIR/EIS has been slightly modified per the commenter's suggestion. Privately Owned, Public Open Space is not included in this analysis because it is not always open to the public.

1654-1568

To address this comment, a cross-reference to Section 3.2, Transportation, has been added in Section 3.15.5.1, Parks, Recreation, and Open Space Resources, of the Final EIR/EIS.

1654-1563

Refer to Standard Response SJM-Response-GEN-2: Consideration of Diridon Integrated Station Concept and the Google Development at the San Jose Diridon Station.

The Authority is one of the Diridon Intermodal Station Concept (DISC) partner agencies and is committed to working with the DISC partner agencies to plan for the future of the San Jose Diridon Station; its integration with the surrounding area; and passenger flows to, from, and through the station. DISC will be planned, environmentally reviewed, and approved separately from the HSR project, and, as a result, the Authority's commitments to project features (IAMFs) as part of the HSR San Jose to Merced Project Section would not apply to the DISC planning process. Accordingly, the requested revisions have not been implemented in this Final EIR/EIS.

1654-1565

The commenter states that the estimate in Table 3.13-6 of existing commercial uses that will be permanently converted by the project alternatives is an underestimate in Table 3.13-6. This table 3.13-6 is based on the existing land uses shown in Figure 3.13-1 in Section 3.13, Station Planning, Land Use, and Development, of the Draft EIR/EIS. As such, the project's permanent impacts on existing commercial land uses are not underestimated. While other the comments in this letter recommended that proposed commercial/mixed uses associated with the Downtown West Mixed-Use Plan (Google Project) be included in Figure 3.13-1 and reflected in the impacts in Table 3.13-6, this inclusion would not accurately reflect existing land uses. The Draft EIR was published in October 2020, and as of May 2021 the project has not been approved. As such, the project's permanent impacts on existing commercial land uses are not underestimated. In addition, see the response to comment 1654-1562.

1654-1567

To address this comment, the definition of parks in Section 3.15.1.1, Definition of Resources, in the Final EIR/EIS has been slightly modified per the commenter's suggestion.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1564

Refer to Standard Response SJM-Response-GEN-2: Consideration of Diridon Integrated Station Concept and the Google Development at the San Jose Diridon Station.

The commenter states that the estimate of existing commercial uses that will be permanently converted by the project alternatives is an underestimate in Table 3.13-5. This table is based on the existing land uses shown in Figure 3.13-1 in Section 3.13, Station Planning, Land Use, and Development, of the Draft EIR/EIS. As such, project's permanent impacts on existing commercial land uses are not underestimated. While the comment has recommended that proposed commercial/mixed uses associated with the Downtown West Mixed-Use Plan (Google Project) be included in Figure 3.13-1 and reflected in the impacts in Table 3.13-5, this inclusion would not accurately reflect existing land uses. As of Fall 2020, the environmental review process for the Google Project is underway, and no approvals are anticipated before Spring 2021. In addition, see the response to comment 1654-1562.

1654-1570

To address this comment, Figure 3.15-2 in Section 3.15, Parks, Recreation, and Open Space, of the Final EIR/EIS has been revised to show the correct location of Discovery Dog Park. The level of impact described for Discovery Dog Park is correct as is. Figure 3.15-2 has also been revised to include a label for Communications Hill Trail, to show part of Three Creeks Trail as existing, and to show part of Guadalupe River Trail as planned. The shading for Arena Green has also been corrected.

1654-1569

To address this comment, Figure 3.15-1 in Section 3.15, Parks, Recreation, and Open Space, of the Final EIR/EIS has been revised to show the correct location of Guadalupe River Park and Guadalupe River Trail. College Park is a park site; it is very small but does contain a bench and landscaping. San Jose's Riverview Park and Santa Clara's Rivermark Park are not included in the analysis or on the figure because they are outside the Resource Study Area.

1654-1571

To address this comment, Figure 3.15-3 has been revised in Section 3.15, Parks, Recreation, and Open Space, of the Final EIR/EIS to show the correct extent of Guadalupe River Park.

1654-1572

Guadalupe Gardens, Arena Green, John P. McEnery Park, and Discovery Meadows are included in the Guadalupe River Park resource listing; see clarifying revisions to Table 3.15-2 and Figure 3.15-1 in Section 3.15, Parks, Recreation, and Open Space, of the Final EIR/EIS. River Glen Park, Viera Park, William Lewis Manly Park, Solari Park, and Parkview III Park are outside of the RSA and are not included in this analysis. Hillsdale Fitness Park (planned) is not included on any publicly available City of San Jose maps or on the City's parks and recreation website. Del Monte Park, Roberto Antonio Balermio Park, and Elaine Richardson Park are within the RSA and have been added to Section 3.15 of the Final EIR/EIS. Southside Community Center, Evandale Library, Seven Trees Community Center, Dairy Hill Open Space, and Tuscany Hills Open Space fall outside of the definition of Parks, Recreation, and Open Space provided in Section 3.15.1.1, Definition of Resources, of the Draft EIR/EIS.

1654-1573

A resource is considered urban if it is located within a highly populated area of a city. A resource is considered residential if it is located in a residential area of a city or county. A resource is considered industrial if it is located in an industrial area of a city or county. A park may be both urban and residential.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1578

Refer to Standard Response SJM-Response-PUE-2: Coordination with Local Government Entities and Utility Owners.

As described in Impact PK#2 in Section 3.15, Parks, Recreation, and Open Space, of the Draft EIR/EIS, connectivity of trail segments cannot be guaranteed during project construction. The Authority would implement mitigation measures to minimize impacts on access or use of parks: PR-MM#1, PR-MM#2, PR-MM#4, and PR-MM#7. The mitigation measures would be effective because the contractor would be required to maintain access during construction, allowing the resources to remain usable during project construction. While an off-street route would be preferable in some instances, that might not always be possible.

1654-1577

To address this comment, "planned expansion" has been revised to "planned development" under Impact PK#6 in Section 3.15, Parks, Recreation, and Open Space, in the Final EIR/EIS. Per the Tamien Park Master Plan site drawings, it does not appear that the project alternatives would adversely affect access or internal circulation of the park.

1654-1575

To address this comment, the description of Los Gatos Creek Trail in Impact PK#2 in Section 3.15, Parks, Recreation, and Open Space, has been revised in the Final EIR/EIS.

1654-1576

Tamien Park is described in Impact PK#6 in Section 3.15, Parks, Recreation, and Open Space, of the Draft EIR/EIS because there would be a permanent acquisition under Alternatives 1, 2, and 3. Tamien Park is not listed under Impact PK#4 in Section 3.15 of the Draft EIR/EIS because the impacted area would not affect access to the park; rather, it would only affect the planned soccer field.

1654-1574

Refer to Standard Response SJM-Response-PUE-2: Coordination with Local Government Entities and Utility Owners.

As described under Impact PK#2 in Section 3.15, Parks, Recreation, and Open Space, of the Draft EIR/EIS, approximately 0.70 acre of the Guadalupe River Trail is located within a proposed TCE under Alternatives 1, 2, and 3. This would be a temporary impact during construction. The TCE is to tie in the track realignment for the Lenzen Wye. The track would cross the trail, so a temporary trail closure would be required. Due to the short stretch of track work required, the trail would only be closed for one day and a detour would be provided, i.e., bicyclists and pedestrians would have to cross the street, or use the east trail. The width of the trail would be addressed during the coordination process with local government entities and utility owners. There are no impacts on this trail in Alviso, because it is 6 miles north of the project alternatives. Safety considerations for bicyclists are discussed in Section 3.2, Transportation, of the Draft EIR/EIS.

1654-1580

The description of the RSA provides examples of regionally important features that may be located outside of the RSA but would be visible from views within the RSA that would be considered as part of the impact to aesthetics and visual quality if the project resulted in a potential change to those views, such as blocking a view of a mountain ridgeline. Public art is too broad a category to accurately survey for inclusion in the RSA and a survey of a broader definition of public art is beyond the necessary scope of the aesthetic analysis. Using the City's Public Art database (City of San Jose 2021c) public art in the vicinity of Diridon Station would include the Five Skaters on the east side of SAP Arena, of which views of it would not have a clear view to any be obstructed by any of the alternatives. Another example is "We Live Here" at Alma and Almaden Avenues. It is at the edge of the 0.25-mile RSA, but has no clear view to views of it would also not be obstructed by any of the alternatives. A survey of a broader definition of public art would be beyond the necessary scope of the aesthetic analysis. This description of the RSA provides examples of regionally important features that would be considered from a greater viewing distance. The RSA used for the analysis not only considered the absolute distance from the project footprint, but also the existence of views to each alternative from within the RSA.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1581

The Modera project was under construction at the time impacts on aesthetics and visual quality were analyzed for the Draft EIR/EIS. The location of the mural (as of summer 2020) is not clearly visible from east of the existing railway due to billboards and trees. Viewers from west of the station would have no change in their ability to see the mural. Plant 51 is a separate development and does not have a mural facing the station.

1654-1584

With respect to Impact AVQ#4, in the Draft EIR/EIS finds that the impact would be less than significant, which is the correct determination based on the effects analysis of existing conditions and the proposed project design and evidence presented. Both the aerial structures for HSR approaching Diridon Station and the elevated station platforms for Alternatives 1, 2, and 3 are narrower than the SR 87 freeway. For HSR, the 4-track aerial is 85 feet wide, and the 2-track aerial is 43 feet wide. Above the existing platforms at Diridon Station, the elevated HSR tracks and platforms would be 150 feet wide. For comparison, the SR 87 overcrossings are 200 feet wide at West Santa Clara Street, 300 feet wide at West San Fernando Street (with a small gap), and 240 feet wide at West San Carlos Street. The higher and narrower HSR viaducts would allow more light to fall under the structures. The majority of the aerial structures would be 2-track, resembling a freeway-to-freeway connector ramp, like the tall ramps at SR 87/US 101. In locations where the aerial structures are built above active railways or highways, the likelihood of homeless encampments is very low. In other locations, aesthetic and visual quality mitigation measure AVQ-MM#4 describes actions that will be undertaken by the Authority to address ongoing maintenance of landscaping and structures, including fencing to limit access to property under HSR structures susceptible to habitation by the unhoused.

1654-1582

For the analysis of aesthetics, the primary visual asset of the Guadalupe River Park is its contribution to the natural landscape environment of the RSA. Please refer to the response to submission SJM-1654, comment 1580 for a discussion of the issues of defining and identifying public art within the and the project RSA. Using the City's Public Art database at (City of San Jose 2021) the only public art in Guadalupe River Park near the RSA is the "Sensing You / Sensing Water" installation beneath the SR 87 viaduct over West Santa Clara and West San Fernando Streets would not be affected by any alternative because views of it would not be obstructed by neither location would have a clear view of the project.

1654-1583

The photographs document the existing conditions at the time of analysis of aesthetics and visual quality for the Draft EIR/EIS. The bike lanes on Hedding Street were implemented after the analysis was performed. Changing the lane markings on the street to include Class II Bike Lanes would not change the visual quality rating determined by the simulations of alternatives without the bike lanes. The new street configuration may result in a potential slight change to the perceptions of travelers with the new street configuration would be the presence of more cyclists and slower auto speeds, due to the lane reduction. However, the but any minor potential increase in the viewers awareness of Alternatives 2 and 3 would not be great enough to affect the overall visual quality determination.

1654-1579

The compilation of plans and policies listed were based on items specific to the HSR project. The goal of integrating high impact public art throughout the community from the City of San Jose's General Plan was determined to be too broad for inclusion in the Draft EIR/EIS, due to the scope being "throughout the community".

1654-1590

The commenter is correct that the elevated embankment under Alternative 2 would be in the Monterey Road right-of-way, not in the UPRR right-of-way. This has been clarified in Section 8.4.4 of the Final EIR/EIS.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1591

The requirement for a construction impact mitigation plan is noted. As a state agency, the Authority is exempt from local permit requirements; however, in order to coordinate construction activities with local jurisdictions, the Authority plans to pursue local permits as part of construction processes consistent with local ordinances. The Authority will coordinate with the City of San Jose during Detailed Design Post-ROD to address construction impacts and mitigation planning.

1654-1587

Refer to Standard Response SJM-Response-GS-1: Requests for Grade Separations.

As stated in Section 2.4.5, Grade Separations in Chapter 2, Alternatives, grade separations are not proposed where the HSR system would be blended with other train operations, as is the case for Alternative 4. The Authority is not considering grade separations as mitigation for emergency vehicle delays. As a result, no changes were made to the text in this Final EIR/EIS.

1654-1585

As described in Chapter 2.6.2.7 of the Final EIR/EIS (the current location of the analysis found in Section 3.20.2.1 of the Draft EIR/EIS), the DDV would make small adjustments to the horizontal placement of tracks around Diridon Station, including freight and electrified passenger rail tracks. The project design without the DDV would also have resulted in shifts in the horizontal alignments; as such the design in Alternative 4, both with and without the DDV, would have some temporary disruption to rail operations, but would not have noticeably different temporary effects. These effects are analyzed in Section 3.2, Transportation.

The DDV would not affect different "transportation facilities," (e.g., roadway infrastructure), and the construction of the DDV would not affect existing train operations differently than the alternatives without the DDV because the construction effort would be approximately the same.

1654-1586

See response to comment 1461.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1588

The Diridon Station Approach Subsection under Alternatives 1, 2, and 3 would require realignment of the Caltrain tracks and overhead contact system (OCS) that are currently under construction as part of the Caltrain electrification program. For Alternative 4, the alignment has been provided to Caltrain for their consideration in the construction of their OCS. For OCS poles that are proposed by the Authority to be outside the existing Caltrain right-of-way (ROW), relocation of Caltrain OCS poles would be required. Track installation or relocation outside of Caltrain ROW are shown in Volume 3, Preliminary Engineering for Project Design Record, for example the new track installed under Alternative 4 over SR-87, which places a new electrified track outside of JPB ROW. Precise locations for OCS poles and potential relocations of poles installed as part of Caltrain electrification would be confirmed as part of Detailed Design Post-ROD.

Subsequent coordination between the Authority and Caltrain will ensure compatibility of the Selected Alternative and Caltrain electrification. As stated in Section 1.4, Relationship to Other Transportation Projects in the Study Area, several projects have been considered in the planning and development of the San Jose to Merced Project, including Caltrain Modernization, which is considered to be the baseline for the analysis in this EIR/EIS. All of the alternatives are designed to be compatible with the Caltrain electrification project.

1654-1589

As indicated in Chapter 1, Purpose and Need, the Authority's mandate under the High-Speed Rail Act is to develop an HSR system that coordinates with the state's existing transportation network, which includes intercity rail and bus lines, regional commuter rail lines, urban rail and bus transit lines, highways, and airports. Where possible, the system would use state-of-the-art, electrically powered, steel-wheel-on-steel-rail technology, including contemporary safety, signaling, and automatic train control systems, with trains capable of operating speeds of up to 220 miles per hour in HSR sections that are fully grade-separated and on a dedicated track alignment. The commenter is correct; Alternatives 1, 2, and 3 do not assume blended service; they were developed to provide fully dedicated HSR service, which is not compatible with blended Caltrain service. Alternative 4 is the blended service alternative.

1654-1592

To address this comment, Envision San Jose 2040 General Plan policies ES-3.1 and ES 3.24 have been added to Table 11 of Appendix 2-J, Regional and Local Plans and Policies, of the Final EIR/EIS.

1654-1593

The comment noted that the Draft EIR/EIS references an outdated version of a City of San Jose General Plan Policy. Please refer to Table 1 in Appendix 2-J, Regional and Local Plans and Policies (located in Volume 2, Technical Appendices, of the Draft EIR/EIS), for a listing of all local regulations, plans, and policies associated with transportation resources that existed at the time of NOP publication. As referenced by the comment, the City of San Jose subsequently passed a policy relating to the use of VMT rather than LOS as part of a project's evaluation and approval process. The analysis within the Draft EIR/EIS provides a full assessment of the project's effects on VMT and is consistent with the City's current policies related to VMT. An assessment of intersection LOS is also presented within the Draft EIR/EIS; however, the City's prior General Plan Policy on LOS was not used to determine adverse NEPA effects.

1654-1594

The two 48-inch sanitary sewer lines identified at Station 2996+56 and 2997+61 were obtained from Caltrain track charts. All utility locations, activity, and ownership would be confirmed during detailed design post-ROD.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1597

Refer to Standard Response SJM-Response-PUE-2: Coordination with Local Government Entities and Utility Owners.

Please refer to Section 3.6.1, Introduction, for a description of the major utilities that were analyzed. Major utilities (including stormwater canals, conduits, and pipes greater than or equal to 42 inches) are shown in Volume 3, Preliminary Engineering for Project Design Record, of the Draft EIR/EIS. Utilities were incorporated into the PEPD according to TM 0.1, Preliminary Engineering for Project Definition Guidelines (Authority 2015). The marked up Alternative 4 drawings mentioned in the comment were not received from the City of San Jose as part of this submission so they could not be reviewed. However, the Authority will coordinate with and review drawings from the City of San Jose, as well as other jurisdictions and utility providers, and reflect this infrastructure and minor utilities on the design drawings developed through the post-ROD detail design process.

1654-1596

The status of projects listed in Appendix 3.19-A, Cumulative Nontransportation Plans and Projects Lists and Appendix 3.19-B, Cumulative Transportation Projects Lists (located in Volume 2, Technical Appendices), have been updated in the Final EIR/EIS.

1654-1595

To address this comment, rows for the San Jose Municipal Water Well and Pump Facilities have been added to Appendix 3.6-A, Public Utilities and Energy Facilities, Table 1d. Text has been added to Impact PUE#4 in Section 3.6, Public Utilities and Energy, of the Final EIR/EIS to address the impact, adding groundwater well and pump stations to the list of surface structures that may need to be permanently relocated or permanently removed as a result of construction.

1654-1598

Refer to the response to submission SJM-1654, comment #1597. Volume 3, Preliminary Engineering for Project Design Record, shows major utilities that were analyzed in the Draft EIR/EIS. Utilities were incorporated into Volume 3 of the Draft EIR/EIS according to TM 0.1 PEPD Guidelines. Responses provided to comments received in 2018 clarified that only major and high-risk utilities (including stormwater canals, conduits, and pipes greater than or equal to 42") are indicated on the PEPD drawings. Many requested additions are shown on the PEPD drawings in Volume 3 of the Draft EIR/EIS. The Authority will show minor utilities on the design drawings as part of detailed design post-ROD.

1654-1601

Comment noted. The Los Gatos Creek Trail UC Project designs would be integrated with the selected HSR alternative during Detailed Design Post-ROD.

1654-1600

Appendix E to this submission contains the City of San Jose's January 2018 comments received on the May 2017 Draft PEPD for Alternative 1, Alternative 2, and Alternative 3. The Authority provided responses to the City's comments on the May 2017 Draft PEPD in an appended comment-response matrix. Those responses are not included in Volume 4 of the Final EIR/EIS because they were not comments on the Draft EIR/EIS. As appropriate, further design revisions will be made as part of Detailed Design Post-ROD, in coordination with the City of San Jose.

1654-1599

Construction staging shown on the PEPD is assumed to be needed for construction of Alternatives 1–3. Detailed Design Post-ROD would confirm that these areas are needed for construction. Once funding is secured for construction, the availability of staging areas would be confirmed and coordinated with the City and other collocated projects as needed.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1607

Refer to Standard Response SJM-Response-PUE-1: Major and High-Risk Utilities/Utility Infrastructure, SJM-Response-PUE-2: Coordination with Local Government Entities and Utility Owners.

Major utilities (including wastewater lines over 20 inches) are shown in Volume 3, Preliminary Engineering for Project Design Record, of the Draft EIR/EIS. Utilities were incorporated into Volume 3 according to TM 0.1, Preliminary Engineering for Project Definition Guidelines (Authority 2015). The Authority will show minor utilities on the design drawings as part of detailed design post-ROD. Please refer to Section 3.6.1, Introduction, for a description of the major utilities that were analyzed.

1654-1604

Major utilities (stormwater canals, conduits and pipes over 42 inches) are shown in Volume 3, Preliminary Engineering for Project Design Record, of the Draft EIR/EIS. Utilities were incorporated into Volume 3 according to TM 0.1 PEPD Guidelines. The Authority will show minor utilities on the design drawings as part of Detailed Design Post-ROD. Please refer to Section 3.6.1, Introduction, for a description of the major utilities that were analyzed.

1654-1608

Refer to Standard Response SJM-Response-PUE-1: Major and High-Risk Utilities/Utility Infrastructure, SJM-Response-PUE-2: Coordination with Local Government Entities and Utility Owners.

Major utilities (including wastewater lines over 20 inches) are shown in Volume 3, Preliminary Engineering for Project Design Record, of the Draft EIR/EIS. Utilities were incorporated into Volume 3 according to TM 0.1, Preliminary Engineering for Project Definition Guidelines (Authority 2015). The Authority will show minor utilities on the design drawings as part of detailed design post-ROD. Please refer to Section 3.6.1, Introduction, for a description of the major utilities that were analyzed.

1654-1610

Appendix E to this submission contains the City of San Jose's January 2018 comments received on the May 2017 Draft PEPD for Alternative 4. The Authority provided responses to the City's comments on the May 2017 Draft PEPD in an appended comment-response matrix. Those responses are not included in Volume 4 of the Final EIR/EIS because they were not comments on the Draft EIR/EIS. As appropriate, further design revisions will be made as part of Detailed Design Post-ROD, in coordination with the City of San Jose.

1654-1606

Refer to Standard Response SJM-Response-PUE-1: Major and High-Risk Utilities/Utility Infrastructure, SJM-Response-PUE-2: Coordination with Local Government Entities and Utility Owners.

The location where the sewer would be relocated to is indicated on the plans. The plans show the relocated sewer starting near station 458+50 (Sheet TT-D0603) and tying into the existing sewer line near station 298+00 (Sheet TT-D0602), with a 54-inch to 48-inch pipe diameter transition near Capitol Expressway.

1654-1609

To address this comment, "Future" has been removed from the PEPD Alt 3 sheet TT-D0401 in the Final EIR/EIS. Aerial imagery would be updated during final design.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1602

Refer to Standard Response SJM-Response-PUE-2: Coordination with Local Government Entities and Utility Owners.

The comment noted that Alternative 1 in Volume 3, Preliminary Engineering for Project Design Record, is missing an 12-inch sanitary sewer and 36-inch storm drain. Major utilities are indicated in Volume 3 in accordance with HSR Guidelines, TM 2.7.4 Designer's Responsibilities and Utility Requirements for 15% Design Level, and TM 1.1.19 Capital Cost Estimating Methodology for the 15% Design Level. The Authority will show minor utilities on the design drawings as part of Detailed Design Post-ROD. Please refer to Section 3.6.1, Introduction, of the Draft EIR/EIS for a description of the major utilities that were analyzed.

1654-1603

The comment noted that there is a conflict between the 48-inch sanitary sewer PVC pipe and proposed columns. The location where the sewer will be relocated to is indicated on the PEPD plans. The plans show the relocated sewer starting near station 458+50 (Sheet TT-D0603) and tying into the existing sewer line near station 298+00 (Sheet TT-D0602), with a 54-inch to 48-inch pipe diameter transition near Capitol Expressway.

1654-1614

Refer to Standard Response SJM-Response-PUE-2: Coordination with Local Government Entities and Utility Owners.

For Alternative 4, there is no modification of the Los Gatos Creek Trail rail overcrossing. The PEPD (Volume 3 of the Draft EIR/EIS) notes that the existing Los Gatos Creek Bridge would remain. Coordination with the City's Los Gatos Creek Trail under-crossing project would be done as part of HSR final design, if needed.

1654-1605

Refer to Standard Response SJM-Response-PUE-1: Major and High-Risk Utilities/Utility Infrastructure.

Major utilities (stormwater canals, conduits and pipes over 42 inches) are shown in Volume 3, Preliminary Engineering for Project Design Record, of the Draft EIR/EIS. Utilities were incorporated into Volume 3 according to TM 0.1, Preliminary Engineering for Project Definition Guidelines (Authority 2015). The Authority will show minor utilities on the design drawings as part of detailed design post-ROD. Please refer to Section 3.6.1, Introduction, for a description of the major utilities that were analyzed.

1654-1611

The Authority modified the name of the subsection in this title block in the Errata sheet for Volume 3, PEPD in the Final EIR/EIS per this comment.

1654-1612

Drawings TT-D4002 through TT-D4005 show the project limits within the city of San Jose and currently identify existing and proposed track centers.

1654-1613

A cross section and elevation for the proposed structure are shown on Drawing ST-T4004. Additional plans for Taylor Street will be provided as part of Detailed Design Post-ROD, if Alternative 4 is adopted.

1654-1615

Permanent impacts to the Guadalupe River Trail are analyzed in Section 3.15, Parks, Recreation, and Open Space, of the Draft EIR/EIS. The Guadalupe River Trail is not within the temporary construction easement for Alternative 4; therefore, access to the trail would not be affected. There would be no permanent acquisition of the trail needed as part of Alternative 4. The new Guadalupe River Trail bridge would be similar to the existing bridge, which would not be modified. Additional views of the new bridge would be provided during final design.

Response to Submission 1654 (Lorraine Valentine, City of San Jose Department of Transportation, June 23, 2020) - Continued

1654-1616

The comment noted that Alternative 4 of the Draft EIR/EIS should construct pedestrian and bicycle facilities on both sides of Monterey Road as identified in City of San Jose planning documents. Please refer to Impact TR#18 and Impact TR#19 for a discussion of the project's effects on pedestrians and bicycles. All four project alternatives were found to have less-than-significant impacts on pedestrian and bicycle facilities, and therefore mitigation is not required. The project would not materially degrade the performance of any nonmotorized facilities, and all existing facilities would be replaced upon the completion of construction.

1654-1617

The comment noted that the project should reconstruct several existing streets to current City of San Jose design standards under Alternative 4. Please refer to Draft EIR/EIS Volume 3, Preliminary Engineering for Project Design Record, for drawings of the roadways mentioned in the comment. Under Alternative 4, the project would reconstruct the portions of the referenced streets within the project footprint to City design standards. Alternatives that close crossings and reroute streets to provide replacement access would construct these facilities to City design standards.

Submission 1716 (Reena Brilliot, City of Santa Clara, Community Development Department, June 23, 2020)



Community Development

1716-620

San Jose to Merced: Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) – City of Santa Clara Comments
Page 2 of 3

June 23, 2020

High Speed Rail Authority
Attn: Draft San Jose to Merced Project Section EIR/EIS
100 Paseo de San Antonio, Suite 300
San Jose, CA 95113

Subject: High Speed Rail Project: San Jose to Merced: Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) – City of Santa Clara Comments

Via mail and email: san_jose_merced@hsr.ca.gov

To Whom it May Concern:

Thank you for providing the City of Santa Clara the opportunity to review the Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the San Jose to Merced segment of the High Speed Rail Project (Project).

1716-618

The City has valued the coordination with High Speed Rail Authority (Authority) staff and appreciated your attendance at City Council meetings to discuss this important regional transportation project. As a reminder, per the attached September 10, 2019 letter to the Authority, the City of Santa Clara strongly supports the Authority staff-recommended preferred alternative (Alternative 4) for the San Jose to Merced project segment. Alternative 4 is a viable alternative to deliver this important project but more importantly does not significantly impact the City of Santa Clara as compared to the other alternatives being analyzed.

1716-619

The City has reviewed the Draft EIR/EIS and have the following comments:

1. **Transportation:** Alternatives 2 and 3 require grade separation at De La Cruz Boulevard which will likely result in complete reconstruction of De La Cruz Boulevard. Traffic will need to be rerouted for an extended length of time and Level of Service (LOS) analysis for the purpose of operational analysis should be completed to determine how traffic is affected, what the alternate routes would be, and if improvements are necessary.

2. **Construction/Permitting:** The rail alignment through Santa Clara from Scott Blvd. is within 100-feet of existing residences along Washington Street and Main Street. Furthermore, Scott Lane Elementary School is located along Scott Blvd. approximately 500-feet from the existing rail. Please consider the following:
 - a. Construction
 - i. Hours of operation should not disrupt existing households especially during morning hours.
 - ii. Construction traffic - construction worker parking should be secured to prohibit parking near neighborhoods
 - iii. Haul routes and other heavy equipment - Prohibit any use of the neighborhood streets under any circumstance for haul routes. Access to the rail is available through the industrial areas from Memorex Drive and Lafayette Street
 - b. Potential impacts to residential neighborhoods
 - i. Any heavy equipment such as pile drivers, etc. can cause permanent damage to foundations, provide potential mitigation or plan to address any claims or damage to existing residential structures.
 - ii. Noise - mitigation measure for noise, dust impacts should be implemented
 - c. Encroachment Permits/Engineering Standards
 - i. Any work within Santa Clara's jurisdiction requires an encroachment permit, please contact Michael Liw, Assistant Director of Public Works at 408-615-3002 for more information on how to obtain an encroachment permit.
 - ii. Any construction related work in Santa Clara or modification to City facilities (i.e. roads, sidewalks, streetlights, sanitary/storm sewers, potable and recycled water, communications, traffic signals, etc.) shall be constructed or modified per City of Santa Clara engineering standards, details, specifications, and procedures.
 - d. Public Outreach - for all impending work within Santa Clara the following steps should be implemented at least 4 weeks prior to commencing work:
 - i. Planned and published construction schedule
 - ii. Advanced notice of work to be done
 - iii. Map of all haul routes, construction entrances, and any traffic diversions
 - iv. Telephone number of HSR and contractor contact people
 - e. Other unforeseen impacts
 - i. With any construction project, there are unforeseen circumstances and impacts. Please prepare a plan to document the procedures for addressing these impacts.
 - ii. There are a number of storm sewers, sanitary sewers, fiber optics, and PG&E and other utilities currently located under the existing rail. The project is proposing to protect in place and is not proposing to relocate or reconstruct any utilities in Santa Clara;

Submission 1716 (Reena Brilliot, City of Santa Clara, Community Development Department, June 23, 2020) - Continued

San Jose to Merced: Draft Environmental Impact Report/Environmental Impact Statement
(EIR/EIS) – City of Santa Clara Comments
Page 3 of 3

1716-620

however, since these utilities are so close to existing residential neighborhoods and likely serve those residents, the project should have a plan in place if any damage or disconnection of utilities occurs.

We look forward to continuing to coordinate on this important project for the Authority. Should you have any questions regarding this letter, please contact either Michael Liw, Assistant Director of Public Works via email at mliw@SantaClaraCA.gov or phone at 408-615-3002.

Best regards,



for Andrew Crabtree
Director of Community Development

CC: Manuel Pineda, Assistant City Manager
Michael Liw, Assistant Director of Public Works
Reena Brilliot, Planning Manager
Dave Shpak, High Speed Rail Authority

Attachment: September 10, 2019 City of Santa Clara letter to HSRA

Response to Submission 1716 (Reena Brilliot, City of Santa Clara, Community Development Department, June 23, 2020)

1716-618

Refer to Standard Response SJM-Response-ALT-1: Alternatives Selection and Evaluation Process.

The comment supports Alternative 4.

1716-619

Refer to Standard Response SJM-Response-TR-2: Construction Traffic and Parking Management Details.

1716-620

Refer to Standard Response SJM-Response-OUT-2: Consultation with Local Agencies and Consistency with Local Regulations, SJM-Response-PUE-2: Coordination with Local Government Entities and Utility Owners.

The comment noted construction impacts will occur. Section 3.2.4.2, Impact Avoidance and Minimization Features, identifies IAMFs that address each of these issues including restriction on construction hours, off-street parking for construction-related vehicles, construction truck routes, and construction noticing. The comment noted construction vibration could damage buildings. Please refer to NV-MM#2, which provides for compensation for any construction vibration damages. The comment noted construction noise impacts. Please refer to NV-MM#1 for construction noise mitigation measures. The comment noted requirements for encroachment permits. Please refer to Section 2.12, Permits, for information about HSR complying with local permit processes. The comment noted numerous utilities in Santa Clara below the existing rail line.

Submission 1310 (Rob Eastwood, County of Santa Clara, May 21, 2020)

San Jose - Merced - RECORD #1310 DETAIL

Status : Action Pending
Record Date : 5/27/2020
Submission Date : 5/21/2020
Interest As : Local Agency
First Name : Rob
Last Name : Eastwood

Stakeholder Comments/Issues :

Boris / Morgan / Dave -

1310-98

The County of Santa Clara (County) respectfully requests an extension of time for the public comment period of the California High-Speed Rail Project - San Jose to Merced Project Section Draft EIR/EIS. As posted, the DEIR/DEIS is available for public review for 45 days, ending on June 8, 2020.

1310-99

This is a highly complex, high-profile project. Even under normal circumstances at least 60 if not 75 days should be provided for public review and comment. However, these are not normal circumstances. The County, like many other public agencies, organizations and private individuals throughout California, has had to endure disrupted work schedules and other complications from the current Statewide stay-at-home order at a time when we are normally very busy.

Moreover, due the large linear extent of this project and the various County resources it would affect, County staff is coordinating reviews of the EIR/EIS by three separate departments—Planning and Development, Parks and Recreation, and Roads and Airports. A 45-day comment is simply not sufficient to time for such an effort given the size of the document.

Therefore, the County formally requests that the public comment period for the San Jose to Merced Project Section DEIR/DEIS be extended by a minimum of two weeks and would strongly recommend that the HSR Authority extend the period for a full 30 days beyond this initial 45-day comment period.

Thank you very much for your consideration.

Rob

Response to Submission 1310 (Rob Eastwood, County of Santa Clara, May 21, 2020)

1310-98

Refer to Standard Response SJM-Response-OUT-1: Public Outreach.

1310-99

Refer to Standard Response SJM-Response-OUT-1: Public Outreach.

Submission 1703 (Rob Eastwood, County of Santa Clara, June 23, 2020)

County of Santa Clara

Office of the County Executive

County Government Center, East Wing
70 West Hedding Street
San Jose, California 95110
(408) 299-5105



If you have questions related to these comments, please contact the individuals listed within each attached letter.

Sincerely,

DocuSigned by:

Jeffrey V. Smith

215-605481108417

Jeffrey V. Smith, M.D., J.D.,

County Executive, County of Santa Clara

- c: Board of Supervisors
- Miguel Márquez, Chief Operating Officer
- Sylvia Gallegos, Deputy County Executive
- Jacqueline Onciano, Planning and Development Director

June 23, 2020

Attn: San Jose to Merced: Draft EIR/EIS California High-Speed Rail Authority

100 Paseo de San Antonio, Suite 300
San Jose, CA 95113

Dear California High-Speed Rail Authority staff:

Please find enclosed letters from the County of Santa Clara Departments of **Planning and Development, Roads and Airports,** and **Parks and Recreation,** concerning the Draft Environmental Impact Report / Environmental Impact Statement published by the California High-Speed Rail Authority for the San Jose to Merced Section of the Proposed High-Speed Rail train.

The letters identify issues and concerns the County has identified regarding the High-Speed Rail's potential impacts to the County's facilities, infrastructure, resources, and residents.

1703-621

Specifically, the County has identified potential impacts from the proposed High-Speed Rail alignment to the County's road system, parkland, and regional trail system. These include identified impacts to the County roads and trails network that will impair auto, bike, and pedestrian connections, and impacts to County parkland that will affect sensitive natural communities currently protected within these lands.

1703-622

In addition, the High-Speed Rail alignment will impact the rural community of San Martin. The County requests that High-Speed Rail incorporate design enhancements and related improvements to minimize impacts on this rural community. **Finally, the County requests that High-Speed Rail mitigate for its impacts to agricultural lands by funding agricultural preservation actions and programs implemented under the County's Santa Clara Valley Agricultural Plan.**

The County appreciates the opportunity to provide comments on the California High-Speed Rail Project – San Jose to Merced Project Section Draft Environmental Impact Report/Environmental Impact Statement.

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Board of Supervisors: Mike Wasserman, Cindy Chavez, Dave Cortese, Susan Ellenberg, S. Joseph Simitian
County Executive: Jeffrey V. Smith



Submission 1703 (Rob Eastwood, County of Santa Clara, June 23, 2020) - Continued

County of Santa Clara
Department of Planning and Development
 County Government Center, East Wing, 7th Floor
 70 West Hedding Street
 San Jose, CA 95110
 Phone: (408) 299-5700
 www.sccplandev.org



June 23, 2020

Attn: San Jose to Merced: Draft EIR/EIS California High-Speed Rail Authority
 100 Paseo de San Antonio, Suite 300
 San Jose, CA 95113

To California High-Speed Rail Authority staff:

The County of Santa Clara Department of Planning and Development submits the following comments on the San Jose to Merced Project Section Draft EIR/EIS:

Preferred Alternative

1703-6199

We concur with the High-Speed Rail Authority's (Authority) selection of Alternative 4 as the preferred alternative. This Alternative was recommended as the preferred alternative by the County Administration as described in the September 24, 2019 report to the Board of Supervisors (attached) and responds to previous feedback provided from the County Board of Supervisors to the High Speed Rail Authority to pursue alternatives that minimize impacts to rural communities and natural resources, associated with the other three rail alignment alternatives proposed. This alternative would have lesser overall impacts to agricultural and aesthetic/visual resources and rural communities than the other alternatives, due to its reduced physical project "footprint" as a result of being predominantly located within the existing UPRR Right of Way.

1703-6200

Aesthetics/Visual Quality

The Draft EIR/EIS concludes that Alternative 4 would have a less-than-significant impact in the Morgan Hill-San Martin Landscape Unit under California Environmental Quality Act (CEQA) because modifying the UPRR/Cal train railway to support blended HSR/Cal train operations at grade within and adjacent to baseline railway facilities would conform to the existing character of the area and would result in no change to the existing visual quality. Therefore, no mitigation was proposed. However, as the proposed alignment will transverse the community of San Martin and will widen and expand the width of the existing rail infrastructure with the installation of electrified overhead wires, it will substantially change the visual quality within this community. The County encourages the Authority to install landscaping and implement other visual buffering methods to minimize the visual impacts to the community of San Martin, also considering other impacts, such as noise, and inconveniences from construction activities.

Board of Supervisors: Mike Wasserman, Cindy Chavez, Dave Cortese, Susan Ellenberg, S. Joseph Simitian
 County Executive: Jeffrey V. Smith

1703-6201

Agricultural Resources

Although the Preferred Alternative would reduce permanent conversion of Important Farmland within Santa Clara County compared to the other alternatives, it would still convert a significant amount of farmland to a non-agricultural use, especially in the Pacheco Pass subsection. Under Mitigation Measure AG-MM#1, the Authority proposes to fund the California Farmland Conservancy Program's work to identify suitable agricultural land for mitigation of impacts and to fund the purchase of agricultural conservation easements from willing sellers.

1703-6201

The County is currently implementing a regional agricultural conservation easement purchasing program and preservation strategy inclusive of other voluntary financial incentives as outlined in the Santa Clara Valley Agricultural Plan ("Valley Ag Plan"), <https://www.sccgov.org/sites/dpd/OrdinancesCodes/Studies/Pages/CAPP.aspx> which was funded in part by the State Department of Conservation and Strategic Growth Council.

Under the Valley Ag Plan, which entailed extensive community outreach, mapping, and experimentation, the County has developed approaches to conserving agricultural lands that are tailored to the unique local circumstances and dynamism of our working landscapes. This includes the purchase of agricultural conservation easements and the implementation of other innovative agricultural preservation strategies, including an Agricultural Resilience Incentive Grant program. The County requests the Authority mitigate for agricultural impacts from High Speed Rail within the County and the Authority partner with the County to fund the purchase of agricultural conservation easements and other agricultural preservation programs as outlined under the Valley Ag Plan.

1703-6203

Land Use

Alternative 4 would install quad gates across East San Martin Street at Monterey Road. There is currently no designated pedestrian crossing of the UPRR tracks in San Martin, however this crossing is used by pedestrians because East San Martin Street is in the center of the community. The quad gates would discourage pedestrian crossings and represent a further division of the San Martin community. The County urges the Authority to consider design options for establishing an above- or below-grade pedestrian crossing, as well as funding Safe Routes to Schools projects. The Authority can also invest in improving pedestrian and bicycle facilities along San Marin Ave and Monterey Road to improve access to the San Martin station especially in consideration of other impacts, such as noise, and inconveniences from construction activities.

1703-6204

Noise

The Draft EIR/EIS identified a significant impact from permanent exposure of sensitive receptors to noise from train operations from all four alternatives. However, Alternative 4 (Preferred Alternative) would have the most moderate and severe impacts due to use of HSR train horns near at-grade crossings. The Department recognizes the effectiveness of mitigation measure NV-MM#4 (Support Potential Implementation of Quiet Zones by Local Jurisdictions), as it would assist in the establishment of horn-free Quiet Zones where there is support from the local community. As noted on page 3.4-6 of the Draft EIR/EIS, under the Locomotive Horn Rule (49 C.F.R. Part 222 & Part 229) the Federal Railroad Administration (FRA) allows public authorities to establish a quiet zone, which is a segment of a rail line, within which is situated one or a number of consecutive public road-rail

Submission 1703 (Rob Eastwood, County of Santa Clara, June 23, 2020) - Continued

County of Santa Clara

Roads and Airports Department
 Planning, Land Development and Survey

101 Skyport Drive
 San Jose, CA 95110-1302
 (408) 573-2460 FAX 441-0276



1703-6204

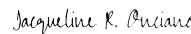
crossings at which locomotive horns are not routinely sounded, provided sufficient safety measures are implemented at the crossing to prevent/minimize the potential for accidents to occur. Railroad authorities, including Cal train, CHSRA and railroad companies (such as UPRR) cannot establish quiet zones; only local cities and counties can establish them by applying to the FRA. Per Mitigation Measure NV-MM#4, HSR should assist local communities such as the County with this process through the installation of four-quad gates and channelization at all at-grade crossings that presently lack them, which would help the County implement Quiet Zones. Establishing Quiet Zones would eliminate train warning horns for all trains approaching at-grade highway and rail crossings under normal, nonemergency situations.

1703-6205

Under Alternative 4, one sensitive noise receptor was identified less than 23 feet from the nearest track; residents at that location would be initially startled by approaching trains traveling at up to 110 mph in areas where the receptors currently experience passing trains at up to 79 mph and this is considered significant because the onset noise rate would exceed the identified threshold for sudden onset noise. The Draft EIR/EIS states that mitigation to address this impact is identified in Section 3.4.9, CEQA Significance Conclusions, and that Section 3.4.7, Mitigation Measures, describes the mitigation in detail. However, it is not clear what specific mitigation measures would address this situation. The County requests clarification.

The County of Santa Clara Department of Planning and Development appreciates the opportunity to provide comments on the California High Speed Rail Project – San Jose to Merced Project Section Draft Environmental Impact Report/Environmental Impact Statement. If you have questions related to these comments, please contact Planning Manager Rob Eastwood at (408) 299-5792 or e-mail at <mailto:Rob.eastwood@pln.sccgov.org>.

Sincerely,

DocuSigned by:

 Jacqueline R. Onciano
 Director, Department of Planning and Development
 County of Santa Clara
 County Government Center, East Wing, 7th Floor

Attachment – September 24, 2019 Board of Supervisors Report

June 16, 2020

SUBJECT: San Jose to Merced Project Section Draft Environmental Impact Report/ Environmental Impact Station (EIR/EIS)

Dear California High Speed Authority,

The County of Santa Clara Roads and Airports Department (The County) appreciates the opportunity to review the San Jose to Merced Project Section Draft Environmental Impact Report/ Environmental Impact Station (EIR/EIS), and we submit the following comments:

1703-6206

1. With the fast growing of both commercial and residential developments in the San Martin/Morgan Hill/Gilroy areas, the need to connect communities on either side of the railroad tracks have become more difficult. The proposed project is a great candidate to provide these needed connections along the project corridor by grade-separating the trains at County and other intersections. Providing grade-separated connections would also provide a better quality of life for residents and safer environment especially for bicyclists and pedestrians crossing the train tracks.

1703-6207

2. The County recommends that the project install fiber optic for preemption related purposes and appropriate signal operation management. We recommend that fiber optic line should be connected to existing County fiber line at Capitol Expressway/Monterey Road along the rail line to South county border in Gilroy and connecting all signals in County's jurisdiction (E. Middle, San Martin, Church, Masten, Rucker, Buena Vista, Cohansey). The project should also install video cameras at all County crossings for train preemption and intersection operation monitoring.

1703-6208

3. The County recommends that the project provide pedestrian and bicycle over/undercrossing at existing trails crossing rail tracks, or at signalized intersections. We strongly believe that the current rail line is a barrier and divides the community. Without grade separation for pedestrians, bicyclists, and others needing to cross, these users are forced onto overly circuitous paths for many miles. We think that this project cannot further divide this community and needs to more appropriately incorporate opportunities to create pedestrian and bicycle under crossings at regular intervals. This promotes safety and prevents desire for people to illegally cross across the tracks.

1703-6209

4. The County suggests that the project produce the Traffic Impact Analysis (TIA) per the local Congestion Management Agency's (CMA) guidelines to include analysis at County intersections with either aerial or at-grade alignment. Analysis should also include, but not limited to, lane geometry at proposed signalized intersections, turning pocket lengths, queuing analysis, sight distance analysis, truck turning templates, Level-of-Service (LOS) analysis, etc.

1703-6210

5. The County reminds the project staff that at County maintained roads where TPF substations are proposed, and where there are any new proposed access roads, those facilities connecting to County roads need to follow the County Encroachment Permit Process and County Board of Supervisors' Approval Process led by the Roads and Airports Department.

Board of Supervisors: Mike Wasserman, Dave Cortese, Susan Ellenberg, S. Joseph Simitian, Cindy Chavez
 County Executive: Jeffrey V. Smith

Submission 1703 (Rob Eastwood, County of Santa Clara, June 23, 2020) - Continued

1703-6211
1703-6212
1703-6213
1703-6214

- 6. The County believes that the project provides advance pre-emption warning time requirement per LA-DOT methodology. Adequate advance preemption time should be provided such that active pedestrian calls should not be reduced or terminated before starting pre-emption cycle.
- 7. Please Provide details for any proposed pedestrian undercrossing/overcrossing.
- 8. The County wants to remind that all crossings within County areas need to be analyzed to make sure large vehicles (trucks) can safely cross rail crossings without bottoming out.
- 9. At southern Santa Clara County limit, the proposed realignment of SR 25 has not been determined at time of comments. The new SR 25 alignment should be confirmed in relation to HSR alignment when leaving San Benito County and entering Santa Clara County.

Thank you for coordinating with the County and Roads and Airports Department throughout this project. If you have any questions or concerns about these comments, please feel free to contact Ellen Talbo, County Transportation Planner, at 408-573-2482 or ellen.talbo@rda.sccgov.org

Thank you,
DocuSigned by:
Harry Freitas
Harry Freitas
Director

County of Santa Clara Parks and Recreation Department

298 Garden Hill Drive
Los Gatos, California 95032-7669
(408) 355-2200 FAX (408) 355-2290
Reservations (408) 355-2201
www.parkhere.org



June 16, 2020

Attn: Draft San Jose to Merced Project Section EIR/EIS
100 Paseo de San Antonio, Suite 300
San Jose, CA 95113

SUBJECT: San Jose to Merced Project Section: Draft Environmental Impact Report/ Environmental Impact Statement

The County of Santa Clara, Parks and Recreation Department (Department) submits the following comments in response to the California High-Speed Rail Authority (Authority)'s California High-Speed Rail Project – San Jose to Merced Project (Proposed Project) Section Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS). The Proposed Project is an electrified steel-wheel-on-steel-rail system capable of speeds up to 220 miles per hour (mph). The Draft EIR/EIS will enable the Authority to evaluate the potential impacts of the Proposed Project, select the preferred alignment, and define mitigation strategies to address any potentially significant adverse impacts.

1703-6215

The Department is responsible to provide, protect, and preserve regional parklands, including management of natural resources, protected species, and sensitive habitats. The Department is supportive of efforts to improve mass transit infrastructure throughout the region but is concerned that the Draft EIR/EIS does not adequately address potential impacts from the Proposed Project on owned or managed parklands and trails. The Department's concerns are focused upon potential impacts to regional parks resources including natural resources, trails, and other recreational facilities.

The Department participated in previous agency meetings held by the Authority and submitted several comment letters on the Proposed Project. Many of the concerns identified in previous comment letters remain unaddressed in the Draft EIR/DEIS. The Department is providing the following comments, related to impacts to recreation, open space, trails/transportation, and take of parklands, to be included in the Draft EIR/EIS and requesting further analysis for potentially significant adverse impacts.



Board of Supervisors: Mike Wasserman, Cindy Chavez, Dave Cortese, Susan Ellenberg, S.Joseph Simitian

County Executive: Jeffrey V. Smith

Submission 1703 (Rob Eastwood, County of Santa Clara, June 23, 2020) - Continued

1703-6216	<p>Impacts to Department-Owned or Managed Lands</p> <ul style="list-style-type: none"> • SCP-1: Section 3.15.5.1, Parks, Recreation, and Open Space Resources, of the Draft EIR/EIS identifies 44 parks, recreational facilities, and open space resources and four larger open space areas in more rural areas of Santa Clara County and Merced County. The Draft EIR/EIS incorrectly identifies areas within Santa Clara County under jurisdiction of the Department. The Draft EIR/EIS needs to correctly identify the areas as: Field Sports County Park, Tulare Hill County Park, and Coyote Creek Parkway County Park. Anderson Lake County Park is correctly identified. 	1703-6219
1703-6217	<ul style="list-style-type: none"> • SCP-2: The Draft EIR/EIS limits the analysis to information found in local and regional land plans and policies but did not consider Master Plans or Site Plans, which are adopted by the County Board of Supervisors. These land use plans contain detailed information and descriptions of County Parks, parkland and facilities, and have undergone environmental review. The Draft EIR/EIS needs to review the Coyote Creek Parkway County Park Integrated Natural Resources Management Plan and Master Plan and reevaluate the potential impacts of the Project on proposed recreation and natural resources enhancements in that plan. 	1703-6220
1703-6218	<ul style="list-style-type: none"> • SCP-3: The Draft EIR/EIS classifies each Park, Recreation Facility, or Open Space resources using a single definition for “type” in Section 3.15. A single definition for the Department’s facilities is inaccurate based on the Santa Clara County General Plan. The Draft EIR/EIS defines Open Space as any open piece of land that is undeveloped and accessible to the public, while Parks is defined as publicly owned properties set aside for recreational use by the public and maintained in a natural or landscaped condition for recreational and ornamental purposes. The Santa Clara County General Plan, however, classifies parkland as open space and calls for environmental preservation. C-PR 4 further states that the public open space lands system should: (a.) preserve visually and environmentally significant open space resources; and (b.) provide for recreation activities compatible with the enjoyment and preservation of each site’s natural resources, with trail linkages to adjacent and nearby regional park lands. <p>The Draft EIR/EIS needs to classify County parkland as both open space and park, in accordance with the General Plan and evaluate them based on both their environmental resources and recreational potential. The Draft EIR/EIS needs to analyze the natural resources in these open space areas and assess the Projects impacts to the habitats and natural resources they contain.</p>	1703-6221
1703-6219	<p>The Draft EIR/EIS incorrectly categorizes the following County Parks and as a result the analysis and Project’s potential impacts is incomplete and inaccurate. Table 3.15-2 of the Draft EIR/EIS needs be updated to adequately define County Parks and parklands and correctly show the classification type for parks, recreation, and open space resources under the jurisdiction of the Department. The correct classification for the Draft EIR/EIS is:</p>	1703-6222
1703-6219	<p>The Draft EIR/EIS incorrectly categorizes the following County Parks and as a result the analysis and Project’s potential impacts is incomplete and inaccurate. Table 3.15-2 of the Draft EIR/EIS needs be updated to adequately define County Parks and parklands and correctly show the classification type for parks, recreation, and open space resources under the jurisdiction of the Department. The correct classification for the Draft EIR/EIS is:</p>	1703-6223

- Anderson Lake County Park - open space, park;
- Field Sports County Park – open space, park;
- Coyote Creek Parkway County Park - open space, park;
- Tulare Hill County Park - open space, park.

• **SCP-4:** Federal and state laws provide protections for public parks, recreation areas, wildlife refuges, and open space resources to avoid loss or diminishment of these public resources. The Draft EIR/EIS (Figure 4-3 and sections 4.6.1.15 and 4.1.1.16) indicates that a de minimis determination would be sought for Coyote Creek Parkway County Park and Coyote Creek Trail. The Department does not concur with a de minimis determination.

Coyote Creek Parkway County Park is a significant riparian corridor with riparian and upland habitats, known breeding and rearing habitat for steelhead and chinook salmon, and an active, thriving wildlife corridor. The High-Speed Rail Authority has not communicated or met with County Parks to discuss the applicability of a de minimis finding or how to preserve the features, attributes, and activities that make Coyote Creek Parkway County Park and Coyote Creek Trail a significant resource. Until such meetings occur and a public meeting to discuss 4(f) assessment a preliminary determination cannot be made.

The Draft EIR/EIS should omit the preliminary determination until Coyote Creek Parkway County Park is adequately assessed and until discussions with the Department and public hearings regarding the 4(f) assessments occur. If it is determined that there is no prudent and feasible alternative to using the land and that all possible planning to minimize harm to the Section 4(f) property resulting from the use has occurred and that there will be a permanent use (loss) of County parkland, or significant and permanent impacts to park resources, the Department will seek adequate compensation.

• **SCP-5:** Table 3.2-24 *CEQA Significance Conclusions and Mitigation Measures for Transportation*: Impact TR#11 (page 3.2-114) discusses temporary impacts to existing bus, passenger and freight rail operations by Project-related construction, staging, and traffic. The Draft EIR/EIS identifies at least one staging area that will impact Coyote Creek Parkway County Park. The Draft EIR/EIS needs to discuss temporary and permanent impacts to parkland and recreation resulting from temporary staging areas at Coyote Creek Parkway County Park and any other parklands during construction. The Draft EIR/EIS must include a map with the proposed location of staging areas and project construction at Coyote Creek Parkway, as well as any other trails or parklands.

• **SCP-6:** Section 3.2 of the Draft EIR/EIS needs to identify the locations of any proposed staging areas and construction routes for the Project. The Draft EIR/EIS also needs to discuss permanent and temporary closures of existing access to parklands. The Department needs access for emergency response vehicles, ranger patrols, maintenance, concessionaires, lessees, and natural resource management. The Draft EIR/EIS needs to discuss how the Project will not restrict access within any easements, and if it does restrict use, how it will be mitigated.



Board of Supervisors: Mike Wasserman, Cindy Chavez, Dave Cortese, Susan Ellenberg, S.Joseph Simitian
 County Executive: Jeffrey V. Smith



Board of Supervisors: Mike Wasserman, Cindy Chavez, Dave Cortese, Susan Ellenberg, S.Joseph Simitian
 County Executive: Jeffrey V. Smith

Submission 1703 (Rob Eastwood, County of Santa Clara, June 23, 2020) - Continued

1703-6224 | **Impacts to Trails under the Countywide Trails Plan**

The Department is charged with implementing and managing The Santa Clara County Countywide Trails Master Plan Update (Countywide Trails Plan) (1995), an Element of the County General Plan adopted by the County of Santa Clara Board of Supervisors on November 14, 1995. Major national, state, and regional trail routes identified in the Countywide Trails Master Plan, which provide both recreation and non-vehicular transportation, will be impacted by the Project. The regional trail routes include the Coyote Creek/Llagas Creek Trail, the Juan Bautista de Anza National Historic Trail, the Bay Area Ridge Trail, Benito-Clara Trail, and the Monterey-Yosemite State Trail.

1703-6227 |

1703-6228 |

1703-6229 |

- **SCPK-7:** Implementation of the Countywide Trails Master Plan is a long-term process. Putting together numerous property acquisitions, easements, and agreements is a painstaking process that requires both perseverance and patience. The Department has been working for decades to assemble critical pieces for various regional, sub-regional, and connector trails identified in the Countywide Trails Master Plan, which has been approved and updated by the County Board of Supervisors several times. The Draft EIR/EIS does not consider impacts to future recreation because it does not provide any analysis on the planned trail routes in the Countywide Trails Master Plan. The Department and numerous other agencies and municipalities have devoted a significant amount of time and funding towards its implementation. Section 3.15 of the Draft EIR/EIS must analyze potential impacts on all existing and planned trail alignments identified in the Countywide Trails Master Plan.

1703-6225 |

- **SCPK-8:** The Draft EIR/EIS must add the Benito-Clara Trail and Juan Bautista de Anza Historic Trail in Table 3.15-2 and analyze potential impacts to the construction and use of the trails. The Benito-Clara Trail is a loop trail linking recreational resources in northern San Benito County with those in southern Santa Clara County and with the cities of Morgan Hill, Gilroy, Hollister, and San Juan Bautista. Based on the Proposed Project Site imprint, there will be several impacts to the Benito-Clara Trail related to its planned alignment and access, including a trail easement through Silveira Park (owned by the City of Morgan Hill).

1703-6226 |

- **SCPK-9:** Table 3.15-2 of the Draft EIR/EIS must include the City of Campbell, the City of San Jose, and the Santa Clara Valley Water District as agencies with jurisdiction for the Los Gatos Creek Trail. The Los Gatos Creek Trail is an example of successful inter-jurisdictional cooperation between the cities of Los Gatos Campbell, and San Jose, the County of Santa Clara, and Valley Water. The trail traverses several jurisdictions and provides a continuous hiking and bicycling trail through parks and open space.

1703-6231 |

- **SCPK-10:** There are numerous permanent impacts to existing trails. To minimize or avoid impacts to existing travel modes, the Draft EIR/EIS identifies that technical memorandums will be prepared and submitted to the Authority. To avoid impacts to future recreation, the Draft EIR/EIS needs the same level of analysis for all planned and existing trails in the Countywide Trails Master Plan. In addition, the Department should review technical memorandums to ensure concurrence with local, State, and federal Guidelines and Regulations prior to acceptance by the Authority. All trail standards identified in the Countywide Trails Master Plan must be included in the technical memorandums for any impacts to trails.

Impacts to Parkland Access

The Draft EIR/EIS does not adequately assess impacts to habitat, natural resources, or wildlife species. The Draft EIR/EIS must fully assess impacts to these resources, in addition to recreational uses, and provide adequate mitigation measures for any permanent or temporary impacts to natural resources and recreation resources.

- **SCPK-11:** Coyote Creek Parkway County Park is a linear park with few access points and no service roads. Park users and emergency vehicles access the park through the few access points that exist. Additionally, the Park contains no staging areas or parking lots. Park users park in the parking areas along the edge of the park adjacent to Monterey Road. Because of the limited access points and limited parking areas, any permanent or temporary use or loss of access points or parking areas would significantly impact and substantially impair the protected activities, features, and attributes that qualify the park under Section 4(f).

The Draft EIR/EIS needs to fully consider these impacts to access and provide adequate mitigation measures to address any diminished, temporary or permanent loss of access. Additionally, the Authority must include the Department in discussion and review of any associated technical memoranda that identify project design features intended to minimize impacts on parks and recreation facilities, as well as any documentation related to how the contractor would maintain connections to the Park or nearby roadways during construction. The Authority must coordinate with the Department regarding detours, traffic control measures, signage and other design solutions that would be implemented in an effort to minimize impacts on access, visitor parking, traffic, and staff and emergency vehicle access would be maintained during construction.

Impacts to Public Utilities on Parklands

Section 3.6 of the Draft EIR/EIS needs to identify any County-owned parkland or trails that are impacted by overhead utilities and easements, or any relocation of transmission lines, and include a discussion of how those will be impacted as a result of the Project.



Board of Supervisors: Mike Wasserman, Cindy Chavez, Dave Cortese, Susan Ellenberg, S.Joseph Simitian
 County Executive: Jeffrey V. Smith



Board of Supervisors: Mike Wasserman, Cindy Chavez, Dave Cortese, Susan Ellenberg, S.Joseph Simitian
 County Executive: Jeffrey V. Smith

Submission 1703 (Rob Eastwood, County of Santa Clara, June 23, 2020) - Continued

1703-6232

- **SCPK-12:** The Metcalf Energy Center is identified in the Draft EIR/EIS, however, it does not mention the impacts to nearby Field Sports County Park or PG&E easements within County parkland. The PG&E easement in Coyote Creek Parkway is a source of revenue for Santa Clara County Parks. The Draft EIR/EIS needs to evaluate the take of revenue for the Department. If the PG&E transmission lines need to be moved to Field Sports County Park, the Draft EIR/EIS must analyze that construction for impacts to the park and park access, including access roads, vegetation management, or reduced public use. An encroachment permit will be required if transmission lines need to be relocated.

1703-6233

- **SCPK-13:** Table 3.6-1 *Definition of Public Utilities and Energy Resource Study Areas*, describes how the Resource Study Area (RSA) for direct impacts from the project include the project footprint or across public utilities or energy infrastructures. The RSA for indirect impacts includes the area that would extend beyond the project footprint including impacts of utility relocations or use of non-HSR resources and facilities necessary for project construction and operation. The Draft EIR/EIS needs to also identify specifically what easements over County-owned parkland may be impacted as a result of the Project.

The County of Santa Clara Parks and Recreation Department appreciates the opportunity to provide comments on the California High Speed Rail Project – San Jose to Merced Project Section Draft Environmental Impact Report/Environmental Impact Statement. If you have questions related to these comments, please contact me at (408) 355-2200 or e-mail at Don.Rocha@prk.sccgov.org.

Sincerely,

Don Rocha

Don Rocha, Director
County of Santa Clara Parks and Recreation Department



County of Santa Clara
Department of Planning and Development

98281 A

DATE: September 24, 2019

TO: Board of Supervisors

FROM: Jacqueline R. Onciano, Director, Dept. of Planning and Development

SUBJECT: High Speed Rail Report Back

RECOMMENDED ACTION

Held from September 10, 2019 (Item No. 80): Receive report from Administration relating to High Speed Rail and an analysis of the proposed fourth alternative for High Speed Rail alignment in Santa Clara County for conformance with Board of Supervisors recommendations. (Department of Planning and Development)

COMMITTEE RECOMMENDATIONS

The Housing, Land Use, Environment and Transportation Committee (HLUET) considered the item on May 30, 2017. The Committee forwarded a favorable recommendation to the Board regarding the Administration’s recommendations on avoiding rail alignment through San Martin and minimizing conflicts with the Santa Clara Valley Habitat Plan, while expressing concerns about an East Gilroy High Speed Rail station.

FISCAL IMPLICATIONS

There are no impacts to the County General Fund as a result of receiving this report. Proposed future work on the project would be funded by the High Speed Rail Authority (HSRA).

CONTRACT HISTORY

On November 15, 2016, the Board approved an agreement, managed by the Roads and Airports Department, with HSRA for \$150,000 to secure local consultants to provide technical assistance on HSRA’s planning of the Central Valley to Silicon Valley segment of High Speed Rail (HSR).

REASONS FOR RECOMMENDATION

This report provides a report back to the Board regarding the proposed HSR project, and specifically, the identification of a preferred alignment for the HSR train through Santa Clara County. On November 15, 2016, the Board directed the Administration to provide reports to the Board at key milestones during the HSR planning process. On September 12, 2017, the



Board of Supervisors: Mike Wasserman, Cindy Chavez, Dave Cortese, Susan Ellenberg, S. Joseph Simitian

County Executive: Jeffrey V. Smith

Board of Supervisors: Mike Wasserman, Cindy Chavez, Dave Cortese, Susan Ellenberg, S. Joseph Simitian
County Executive: Jeffrey V. Smith

Submission 1703 (Rob Eastwood, County of Santa Clara, June 23, 2020) - Continued

Board received a report from the Administration regarding three high speed rail alignment alternatives for the San Jose to Merced section of the rail corridor within Santa Clara County. The report included constraints analysis of potential impacts of the three alignments on County resources. In receiving the report, the Board directed the Administration to provide the following recommendations to HSRA:

- Pursue design options and alignment alternatives that avoid alignment of the rail through rural unincorporated, agricultural land in Gilroy and Morgan Hill;
- Pursue design options and alignment alternatives that avoid alignment of the rail through central San Martin;
- Pursue design options and alignment alternatives that avoid the construction of a viaduct north of Coyote Valley;
- Pursue design options and alignment alternatives that avoid or minimize conflicts as identified in the County's constraints analysis and the Santa Clara Valley Habitat Plan as identified in the memo from the Habitat Agency Executive Director;
- Request to HSRA to consider such information in any and all decisions made; and
- Direct Administration to encourage HSRA to solicit input and feedback on proposed actions or decisions from all potentially affected stakeholders, including residents, and to incorporate their input as appropriate.

Since 2017, HSRA staff has developed a new, fourth alternative for the San Jose to Merced section of the HSR corridor in Santa Clara County. This new alternative predominantly locates the HSR line within the existing Union Pacific Railroad (UPRR) right of way between San Jose and Gilroy, proposing a blended HSR and Caltrain service for this section with reduced HSR train speeds. HSRA staff has identified this fourth alternative as the preferred alternative. On September 17, 2019, the HSRA Board is scheduled to meet in the County of Santa Clara Board Chambers to identify a preferred alternative for the San Jose to Merced section.

This report provides an analysis of the new, fourth alignment alternative and evaluates if the alternative reduces impacts on County resources in comparison to the three previous alternatives, and if the fourth alternative responds to the Board of Supervisors' recommendations.

Based on this analysis, the Administration has determined that the proposed fourth alternative for the San Jose to Merced section of HSR in Santa Clara County will have lesser impacts upon County resources in comparison with the other three alternatives. As such, this fourth alternative, which is the HSRA staff recommended preferred alternative, substantially responds to the Board's recommendations from the September 12, 2017 meeting.

Planning for High Speed Rail in California

Initial planning for a California HSR project began in the early 1990s through Federal and State initiatives, culminating in the creation of the California HSRA in 1996. California

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voters approved Proposition 1A in 2008, authorizing bond funding for the HSR project. In 2015, construction of the HSR line began in the Central Valley on the section between Bakersfield and Merced.

In 2016, HSRA developed a new business plan that prioritized the construction and operation of an HSR train between the San Francisco Bay Area and the Central Valley as the first phase of High Speed Rail. The proposed San Jose to Merced section of the HSR line through Santa Clara county included three different alignment alternatives. In 2018, HSRA staff developed a fourth rail alternative for this section. The 2018 High Speed Rail Business Plan calls for opening the initial operating segment between San Jose and Bakersfield in 2027.

San Jose to Merced—Alternative Rail Alignments

HSRA has proposed four possible rail alignment alternatives for the San Jose to Merced section of the rail line in Santa Clara County. These include three rail alternatives that were previously reviewed by the Board in 2017 and a new fourth alternative. These rail alternatives include four types of rail design, including location of the rail above ground on a raised platform (viaduct), placement of the rail line in a tunnel, placement of the rail line on an earthen embankment above grade, or operation of the rail line at grade.

As the HSR alignment for the San Jose to San Francisco section of the rail line is predominantly located within the existing Caltrain right of way, the Administration has focused on the different proposed alignments for the San Jose to Merced section of the rail line within the County, which predominantly traverses through rural unincorporated areas.

As it enters the southeastern portion of Santa Clara County and crosses through the Pacheco Pass/Highway 152 corridor, the proposed HSR alternatives would all predominantly be located within tunnels, with portions of the alignment located on a viaduct. The four alternatives differ in proposed alignment and design for the section beginning south of Gilroy and extending through San Martin and Morgan Hill into San Jose.

First Alternative

The First Alternative proposed by HSRA would locate an HSR station within downtown Gilroy. North of Gilroy, the alignment would travel in a viaduct (elevated above grade) along Monterey Road through central San Martin, but then traverse east of Highway 101, avoiding downtown Morgan Hill. The rail line would traverse back west of Highway 101 in Coyote Valley before continuing along Monterey Road north to San Jose.

Second Alternative

The Second Alternative also includes a new HSR station in downtown Gilroy. North of Gilroy, the alignment would travel on a grade separated earthen embankment along Monterey Road through central San Martin, downtown Morgan Hill, and then Coyote Valley north to San Jose.

Third Alternative

The Third Alternative proposed the construction of the Gilroy High Speed Rail station in an agricultural area east of Gilroy, identified as the "East Gilroy Station." North of Gilroy, the rail alignment would be the same as the first alternative, traveling in a viaduct (elevated

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above grade) along Monterey Road through central San Martin, but then traverse east of Highway 101, avoiding downtown Morgan Hill. The rail line would traverse back west of Highway 101 in Coyote Valley before continuing along Monterey Road north to San Jose.

The Board reviewed these three alternatives in September 2017.

Fourth Alternative

The Fourth Rail Alternative is a new alignment proposed by HSRA staff in 2018. This alignment also includes a new HSR station in downtown Gilroy. North of Gilroy, the alignment would remain within the Union Pacific Railroad (UPRR) right of way, along Monterey Road, traversing through central San Martin, Morgan Hill, and Coyote Valley, north into San Jose. Under this proposal, HSR service would be provided as blended service with Caltrain between San Jose and Gilroy, with reduced train speeds of 110 miles per hour for this section. HSRA staff has identified this fourth alternative as the preferred alternative.

September 2017 Board of Supervisors Review

In 2017, the Administration hired an environmental consultant to conduct a constraints analysis of the initial three proposed alternatives to evaluate the potential impacts of the alignments on County resources. Areas evaluated included potential impacts on parkland, traffic and circulation, County assets, agricultural resources, historic resources, heritage trees, noise and air quality, and community cohesiveness. The constraints analysis (please refer to Attachment A) disclosed that several of the proposed alternatives would have extensive and extreme impacts to these resource areas. These included identifying that the new East Gilroy HSR Station proposed under the Third Alternative would have extensive impacts to agricultural resources and create new urban growth within rural areas, in conflict with County General Plan policies. The constraints analysis also disclosed that all three alignments that traversed through central San Martin would have significant impacts upon the community cohesion of this rural community.

The Board reviewed the constraints analysis prepared by the Administration and made the recommendations displayed in the bulleted list at the top of this Reasons for Recommendation section. The Board directed the Administration to convey these recommendations to HSRA and to collaborate with the City of San Jose relating to final recommendations regarding planning of the HSR at the Diridon Station.

In August 2018, the Administration provided an off-agenda report back to the Board planning for an HSR station at Diridon Station (please refer to Attachment B).

Evaluation of the Fourth Alternative

The Administration has conducted an analysis of the new fourth alternative, specifically to evaluate if the alternative is less impactful upon County resources and whether it responds to the September 12, 2017 Board recommendations.

Using GIS Analysis, staff within the Departments of Planning and Development, Parks and Recreation (Parks), and Roads and Airports, has evaluated the fourth alignment to compare it with the initial three alignments. In conducting this analysis, the departments have conducted

a constraints analysis evaluating the potential impacts of the fourth alternative upon County resources (please refer to Attachment C).

In comparison with the other three proposed alignments, the fourth alternative has lesser overall impacts on County resources. As the proposed fourth alternative is predominantly located within the existing UPRR right of way, its impact upon natural resources and upon rural communities, in comparison with the other three alternatives, is reduced. The physical project “footprint” of the fourth alternative is smaller than the other alternatives, encompassing 4,601 acres compared with Alternatives 1-3 that encompass 5,193 to 6,006 acres. Impacts on resources such as agricultural resources, historic resources, heritage trees, and parkland and traffic/circulation are also less under the fourth alternative.

Parks has concluded that while the fourth alternative may have potential impacts on County parkland, including parkland and park facility access, sensitive species and habitats, utility easements (i.e., potential loss of revenue), and connectivity to open space, the alignment will have less impact than Alternative 1 and 3 alignments, and similar impacts to the Alternative 2 alignment. The Roads and Airports Department has determined that the alignment will be less impactful upon the County roads and transportation system than the other three alignments, in terms of vehicle travel time and the number of permanent road closures. In the San Martin area, Alternative 4 would improve the existing Llagas Creek railroad bridge by widening it and improving its structural condition. Railroad gates and crossing signals would be improved from their existing condition at East Middle Avenue near Monterey Road.

HSRA staff analysis of the four alternatives discloses that the fourth alternative may result in greater noise impacts upon adjacent residents. This is due to the need for the HSR trains to use train horns at road intersections for safety requirements. HSRA is evaluating the potential to provide mitigation measures or alternatively the County or neighboring cities may designate “quiet zones” along the corridor to reduce the train noise.

Based on the results of this constraints analysis, the Administration has evaluated if the proposed fourth alternative responds to the Board recommendations from September 2017. These recommendations are listed in italics below, followed by staff analysis in standard text.

- *Pursue design options and alignment alternatives that avoid alignment of the rail through rural unincorporated, agricultural land in Gilroy and Morgan Hill;*

As the fourth alternative locates the HSR line within the existing UPRR right of way, there are fewer impacts upon rural unincorporated agricultural land in areas around Gilroy and Morgan Hill. As shown in the attached analysis, the fourth alternative will only potentially impact 319 acres of prime farmland, while alternatives 1-3 would impact approximately 489-752 acres of prime farmland. In addition, as the fourth alternative would locate the Gilroy High Speed Rail station within downtown Gilroy, it avoids impacts to farmland associated with the East Gilroy Station.

- *Pursue design options and alignment alternatives that avoid alignment of the rail through central San Martin;*

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The proposed fourth alternative will use the existing UPRR right of way as it traverses the rural community of San Martin. Under this alignment, the HSR train would still be aligned to traverse through central San Martin along Monterey Road. However, as the proposed fourth alternative uses the UPRR right of way, it would be less impactful upon the San Martin community compared with the other three alternatives. Use of the UPRR right of way would predominantly avoid the acquisition of private property along the HSR alignment within central San Martin and minimize potential demolition of existing residential and commercial buildings. In addition, as the rail alignment will be at grade, consistent with the existing Caltrain alignment, it would not create the visual impacts associated with the embankment or viaduct alternatives. However, HSRA staff has disclosed that potential noise impacts under this alternative would be greater to adjacent residents due to the use of a train horn for safety needs.

Overall, the fourth alternative would reduce impacts to the central San Martin community in comparison with the other three alternatives.

- *Pursue design options and alignment alternatives that avoid the construction of a viaduct North of Coyote Valley;*

The fourth alternative entails construction of the HSR alignment at grade within the UPRR right of way north of Coyote Valley, leading into San Jose and San Jose Diridon station, avoiding the use of a viaduct.

- *Pursue design options and alignment alternatives that avoid or minimize conflicts as identified in the County's constraints analysis and the Santa Clara Valley Habitat Plan as identified in the memo from the Habitat Agency Executive Director;*

The Administration's analysis shows that the overall footprint of the HSR alignment will be reduced and have less impacts upon biological communities and natural resources in comparison with the other three alternatives. HSRA staff has identified several potential enhancements proposed along the HSR alignment to improve habitat corridor connectivity as it traverses southern Santa Clara County. The Habitat Agency Executive Director has verbally reported that HSRA staff is working with the Habitat Agency to install design features in the rail alignment to allow wildlife connectivity and to avoid impacts to sensitive habitat areas. The Administration has requested written feedback from the Habitat Agency, which has not been received by the time this report was completed. Any correspondence received from the Habitat Agency Executive Director will be forwarded to the Board.

- *Request to HSRA to consider such information in any and all decisions made; and, direct Administration to encourage HSRA to solicit input and feedback on proposed actions or decisions from all potentially affected stakeholders, including residents, and incorporate their input as appropriate.*

HSRA staff has conducted ongoing outreach within Santa Clara County and in the South County area regarding the proposed alignments and the proposed fourth alternative. This includes an outreach meeting with the San Martin Neighborhood Alliance in October 2018 and several Community Working Group meetings in Gilroy, Morgan Hill, and San Jose.

Summary

Based on this analysis, the proposed fourth alternative for the San Jose to Merced section of HSR in Santa Clara County will have lesser impacts upon County resources compared with the other three alternatives. As such, this fourth alternative, which is HSRA staff recommended preferred alternative, substantially responds to the Board's recommendations provided at the September 12, 2017 hearing.

CHILD IMPACT

The recommended action will have no impact on children and youth.

SENIOR IMPACT

The recommended action will have no impact on seniors.

SUSTAINABILITY IMPLICATIONS

The construction and operation of an HSR train in California is intended to have beneficial sustainability implications by reducing dependence upon automobile travel that predominantly uses fossil fuels (petroleum) and creates greenhouse gas emissions.

BACKGROUND

HSR in California

The broad objectives of the HSR project is to provide high speed electrified rail service between Los Angeles and San Francisco in under three hours, with trains traveling over 200 miles per hour. The operation of an HSR train is intended to modernize California's transportation system, reduce dependence upon automobile travel, minimize environmental impacts and reduce greenhouse gas emissions.

Initial planning for a California HSR project began in the early 1990s through Federal and State initiatives, culminating in the creation of the California HSRA in 1996. The first Business Plan for the HSR project was released in 2000, identifying a HSR alignment between the San Francisco Bay Area and Southern California. Funding for the HSR project has been approved by both the California Legislature and by the voters of California through a series of actions since 2000, including Proposition 1A in 2008, a voter-authorized bond measure.

Initial alignment planning for sections of the HSR project through Santa Clara County began in 2009 with a series of community workshops and engagement between HSRA staff and local agency staff, including the County of Santa Clara. A program-level Environmental Impact Report was published in 2010 that evaluated the environmental impacts of the HSR segments within Santa Clara County at a broad, programmatic level within the context of a larger Bay Area to Central Valley segment. Active planning of the HSR alignments through

Submission 1703 (Rob Eastwood, County of Santa Clara, June 23, 2020) - Continued

Santa Clara County ceased in 2012, as HSRA focused on the Central Valley and Southern California segments.

With the release of its 2016 Business Plan, the HSRA redirected its attention to alignment planning in the San Francisco Bay Area, as the Business Plan prioritized the initial construction of an operation segment of HSR between Silicon Valley and the Central Valley by 2025.

As part of this renewed alignment planning effort, HSRA staff began contracting with local cities and counties along the HSR alignment to request technical assistance from local staff and consultants. On November 15, 2016, the Board approved an agreement with HSRA in an amount of up to \$150,000 for these technical services.

The Board also directed at County staff at the November 15, 2016 meeting to return the HSR project to the Board during critical milestones in the HSR planning process, to allow the Board to review and provide feedback to the HSRA regarding design and alignments in Santa Clara County.

At the September 12, 2017 meeting, the Board directed County staff to forward to HSRA the various recommendations outlined in the Reasons for Recommendation section of this report, and to provide a report back to the Board with the results of those recommendations.

In August 2018, the Administration provided an off-agenda report back to the Board planning for an HSR station at Diridon Station.

CONSEQUENCES OF NEGATIVE ACTION

The Board would not receive the report and analysis and the Administration would revise the report back based on direction from the Board.

STEPS FOLLOWING APPROVAL

The Clerk of the Board is requested to notify Rob Eastwood in the Department of Planning and Development. The Director of the Department will, in turn, send correspondence summarizing the Board action to HSRA.

LINKS:

- Created: 86818 : 86818
- Created: 83845 : 83845

ATTACHMENTS:

- Attachment A - HSR Alignment Alternatives Constraints Analysis 2017 (PDF)
- Attachment B - August 2018 off agenda report high speed rail (PDF)
- Attachment C - Comparison of Alternative 4 with other three alternatives (PDF)
- Map of Project Footprint _Alternative 4 compared with other three alternatives (PDF)
- High Speed Rail San Jose to Merced Fact Sheet _Summer 2019 (PDF)
- High Speed Rail July 2019 Gilroy-Los Banos outreach powerpoint (PDF)
- California High Speed Rail Presentation (PDF)

HISTORY:

09/10/19 Board of Supervisors HELD

Next: 09/24/19

Response to Submission 1703 (Rob Eastwood, County of Santa Clara, June 23, 2020)

1703-621

The Authority appreciates your comments on the Draft EIR/EIS. In subsequent individual comments, the County of Santa Clara Departments of Planning and Development, Roads and Airports, and Parks and Recreation provided specific detailed comments. Each of these specific comments is addressed below.

1703-622

The comment requested design enhancements to minimize impacts on the rural community of San Martin. In addition, the comment requests that preservation of Important Farmland invest in preservation and actions implemented under Santa Clara County's Santa Clara Valley Agricultural Plan (County of Santa Clara 2018, as cited in Section 3.14, Agricultural Farmland, of the Draft EIR/EIS).

Please refer to Chapter 2, subsection 2.6.2.2, Alternatives, of the Draft EIR/EIS for a description of the project elements that would be constructed under each project alternative within San Martin. Section 3.12, Socioeconomics and Communities, of the Draft EIR/EIS concludes that there would be no significant impacts associated with the temporary or permanent disruptions or division of in San Martin; therefore, no community-specific mitigation or other enhancements are proposed within San Martin. All project alternatives would follow the existing transportation corridor through the community of San Martin, and there would be no physical division of an established community. Commercial uses in San Martin are primarily west of the alignment, with rural residential uses concentrated east of the alignment. While construction of the project would temporarily change existing circulation and access patterns to San Martin neighborhoods, businesses, and community and public facilities, continued access to these areas would be maintained during construction through application of the CTP. Existing circulation and access patterns to San Martin neighborhoods, businesses, and community and public facilities would be maintained by viaducts under Alternatives 1 and 3 or grade separations under Alternative 2.

The Authority has adopted mitigation measure AG-MM#1, under which the Authority has entered into an agreement with the Department of Conservation California Farmland Conservancy Program. The Authority would fund the California Farmland Conservancy Program's work to identify suitable agricultural land for mitigation of impacts and to fund the purchase of agricultural conservation easements from willing sellers in the same agricultural regions where the impacts would occur. The Authority would engage with willing sellers, including those who own lands protected by the Santa Clara Valley Agricultural Plan (County of Santa Clara 2018, as cited in Section 3.14 of the Draft EIR/EIS).

Response to Submission 1703 (Rob Eastwood, County of Santa Clara, June 23, 2020) - Continued

1703-6199

The comment concurs with the Authority's selection of Alternative 4 as the Preferred Alternative. Chapter 8, Preferred Alternative, of the Draft EIR/EIS identifies Alternative 4 as the Preferred Alternative based on a balanced consideration of the environmental information presented in the Draft EIR/EIS in the context of project purpose and need; project objectives; CEQA, NEPA, and Section 404(b)(1) of the Clean Water Act requirements; local and regional land use plans; community and stakeholder preferences; and costs. Section 8.4.1, Review of Alternative Key Differentiators by Subsection, of the Draft EIR/EIS describes the key community and environmental factors that differentiate the alternatives within each subsection of the project.

1703-6200

The CEQA conclusion for all four alternatives for Impact AVQ#9 is less than significant. As described in the analysis, visual quality would decrease from moderate to moderately low for Alternatives 1, 2, and 3 for different reasons. Under Alternative 4, which is the Preferred Alternative, modification of the UPRR/Caltrain right-of-way would conform to the existing character of the area and would result in no change to the existing visual quality for Impact AVQ#9. While no mitigation is necessary or proposed, AVQ-IAMF#1 states that the Authority seeks to balance providing a consistent, project-wide aesthetic with the local context for the numerous HSR non-station structures across the state. Examples of aesthetic options would be provided to local jurisdictions that could be applied to non-standard structures in the HSR system.

1703-6201

Refer to responses to submission SJM-1703, comment 622. The comment requests *that preservation of Important Farmland invest in preservation and actions implemented under Santa Clara County's Santa Clara Valley Agricultural Plan (County of Santa Clara 2018, as cited in Section 3.14, Agricultural Farmland, of the Draft EIR/EIS).*

The Authority has adopted mitigation measure AG-MM#1, under which the Authority has entered into an agreement with the Department of Conservation California Farmland Conservancy Program. The Authority would fund the California Farmland Conservancy Program's work to identify suitable agricultural land for mitigation of impacts and to fund the purchase of agricultural conservation easements from willing sellers in the same agricultural regions where the impacts would occur. The Authority would engage with willing sellers, including those who own lands protected by the Santa Clara Valley Agricultural Plan (County of Santa Clara 2018, as cited in Section 3.14 of the Draft EIR/EIS).

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1703-6203

Refer to Standard Response SJM-Response-GS-1: Requests for Grade Separations, SJM-Response-SS-1: At-Grade Crossing Safety.

Refer to Standard Response: SJM-Response-SS-1: At-Grade Crossing Safety. The HSR project would modify and improve all at-grade crossings within the corridor. Of the 30 existing at-grade crossings, there would be improvements at 29 crossings, and 1 at-grade crossing (7th Street in Gilroy) would be closed. These improvements would include the installation of four-quadrant gates at the 29 at-grade crossings, covering all lanes of travel with new train detection and control equipment and median separators to channelize and regulate paths of travel. Four-quadrant gates would entail gate mechanisms on both sides of the tracks for both directions of automotive traffic. The exit gates blocking the road leading away from the tracks in this application would be equipped with a delay, beginning the descent to their horizontal position several seconds after the entrance gates, to avoid trapping roadway vehicles on the crossing. Four-quadrant gates are safer than two-quadrant gates because they prevent drivers from illegally driving their vehicles around lowered gates to try to beat a train. The new at-grade crossing control and traffic preemption equipment would be designed to minimize the total period of gate-down time at crossings, while satisfying mandatory requirements and providing for safe warning and clearance intervals. The existing grade crossings with no barriers would need to be upgraded as the increase in line speed makes it mandatory for crossings to have barriers and warnings of approaching trains. The crossings with barriers must be modified as the existing positioning of the trackside equipment triggering the closure of the barriers would not account for the increased line speeds and longer train lengths of HSR trains. The addition of a four-quadrant gate system was indicated in one study as providing a reduction of the likelihood of a collision by 82 percent compared to at-grade crossings with only two-quadrant gates (Cooper and Ragland 2012).

Regarding potential division of communities, this potential impact is analyzed in Section 3.12, Socioeconomics and Communities, under Impact SOCIO#1, SOCIO#2, and SOCIO#3 with respect to both construction and operations, and for the reasons cited therein, no significant impacts are identified. Specifically, the addition of four quadrant gates at existing at-grade crossings as a safety measure does not divide the community, it protects individuals crossing the tracks by limiting crossing when trains are crossing.

1703-6203

After the train transits, the gates are open, and there are no limits between different parts of the tracks. There will be some temporary delay, but this is not a physical separation of one part of the community from another.

Based on the safety improvements included in the project (as discussed above, the project would meet all state and federal safety requirements concerning at-grade crossings, and the EIR/EIS concludes that safety impacts would be less than significant. As a result, additional measures suggested in the comment (such as grade-separated pedestrian crossings, investment in Safe Routes to Schools, and improved access to the San Martin Station) are not identified as required mitigation to address safety impacts of the project.

1703-6204

The County's perspective on quiet zones is noted. NV-MM#4 states that the Authority would assist with the preparation of technical analysis and provide input for the Quiet Zone application, which local communities could then use as part of their application to FRA to establish quiet zones. The Authority would work with interested communities on these applications.

Response to Submission 1703 (Rob Eastwood, County of Santa Clara, June 23, 2020) - Continued

1703-6205

Impact NV#5 discusses the impact of human annoyance from rapid onset noise from passing HSR trains. Figure 3.4-6 in Section 3.4, Noise and Vibration, of the Draft EIR/EIS shows how these impacts are calculated. The area where the startle effect could occur is within the HSR right-of-way for Alternatives 1, 2, and 3, which would be fenced off from public access; therefore, startle of adjacent sensitive receptors would not occur. Under Alternative 4, between Scott Boulevard and Gilroy where there is blended service, most areas (outside of stations and at-grade crossings) would be more than 23 feet from the outermost track. Table 3.4-33 in Section 3.4 of the Draft EIR/EIS identifies NV-MM#3 and NV-MM#7 to address the impact under Alternative 4. These mitigation measures are described in more detail in Section 3.4.7, Mitigation Measures, of the Draft EIR/EIS. At the referenced location, there is a proposed noise barrier in both the scenario with and without quiet zones per Mitigation Measure N&V MM#3. As discussed in Section 3.4.7, if the noise barrier must meet all the mitigation guidelines. If it does not, then installing building sound insulation per N&V MM#3 would be another option to reduce noise levels at this location, which could also address this impact.

1703-6206

Refer to Standard Response SJM-Response-GS-1: Requests for Grade Separations.

Refer to Standard Response: SJM-Response-GS-1: Requests for Grade Separations. The comment stated that the Authority should provide grade-separations as a part of the preferred project, Alternative 4, or include grade separations as mitigation in order to avoid or reduce project effects on at-grade crossing vehicle, bicycle, and pedestrian crossing safety; delays to emergency response times; traffic; and noise. Regarding at-grade crossings, the EIR/EIS does not identify a need for mitigation for at-grade crossing safety impacts, describes that emergency vehicle response time impacts can generally be mitigated without grade separations while noting that alternative funding arrangements can be made that might support other grade-separation projects, and does not include grade separations as a potential traffic or noise mitigation option.

1703-6207

Section 2.4.9, Signaling and Train-Control Elements, of the Draft EIR/EIS describes the proposed signaling and video camera (CCTV) facilities. A computer-based, enhanced ATC system would control the trains. The enhanced ATC system would comply with the FRA-mandated PTC requirements, including safe separation of trains, over-speed prevention, and work zone protection. This system would use a wireless-based communications network that would include a fiber optical backbone and communications towers at intervals of approximately 1.5 to 3 miles, depending on the terrain and selected radio frequency. Signaling and train control elements within the right-of-way would include 10- by 8-foot communications shelters or signal huts/bungalows that house signal relay components and microprocessor components, cabling to the field hardware and track, signals, and switch machines on the track. Communications radio towers in these facilities would use a 6- to 8-foot-diameter 100-foot-tall pole. The communications facilities would be sited in the vicinity of track switches and would be grouped with other traction power, maintenance, station, and similar HSR facilities where possible. Where communications towers cannot be co-located with TPSSs or other HSR facilities, the communications facilities would be sited near the HSR corridor in a fenced area approximately 20 by 15 feet. ATC and standalone radio sites would not be staffed. Lighting would incorporate motion sensors, height limits, shielding, and downward-facing orientation where feasible while still meeting safety, security, and operational criteria. Fencing around signaling and train control facilities may be screened. Lighting would be used with CCTVs. In spaces where lighting is inappropriate due to environmental impacts, infrared receptors with infrared cameras or other appropriate technologies may be used.

Response to Submission 1703 (Rob Eastwood, County of Santa Clara, June 23, 2020) - Continued

1703-6208

Impact SOCIO#2 assesses the project's impact on community cohesion. The Draft EIR/EIS finds that the impact would be less than significant under CEQA because HSR infrastructure would not physically divide established communities. Rail infrastructure would primarily occur within an existing transportation corridor. Access to neighborhoods and community and public facilities would be restored with road realignments and grade separations. Closed roads would require some changed travel patterns. The project would not result in the provision of new or physically altered government facilities. Therefore, CEQA does not require mitigation.

1703-6209

The comment noted that the Draft EIR/EIS should use the local Congestion Management Agency's guidelines to produce the necessary Traffic Impact Analysis. Please refer to Draft EIR/EIS Sections 3.2.4.4, Method for Evaluating Impacts under NEPA, and 3.2.4.5, Method for Determining Significance under CEQA, for a description of the methods and impact criteria incorporated within the transportation assessment. As Lead Agency, the Authority developed the methodology and significance criteria used within the assessment in accordance with CEQA and NEPA guidelines. The comment also noted that the Draft EIR/EIS should include analysis of lane geometry, turning pocket lengths, queuing, sight distance, truck turning templates, and level of service at proposed signalized intersections. Please refer to Section 3.2.6.2, Roadways, Freeways, and Intersections (Vehicle Circulation), of the Draft EIR/EIS for a detailed discussion of NEPA effects at all study intersections. Please refer to Appendix 3.2-A, Transportation Data on Roadways, Freeways, and Intersections (located in Volume 2, Technical Appendices, of the Draft EIR/EIS), Tables 8 through 16 for additional details regarding the analysis conducted at all study intersections. The Draft EIR/EIS evaluated levels of service, turning pockets, queues, and other aspects of design and performance at all proposed signalized intersections. Please refer to Volume 3, Preliminary Engineering for Project Design Record, for drawings of the roadways and intersections affected by project design. All project construction would be conducted in accordance with engineering design standards for sight distance and truck turning templates.

1703-6210

The comment is noted and does not raise any issue with any of the conclusions of the Draft EIR/EIS. The comment notes that the project would need to follow the County's permit and approval process when modifying or accessing County roadway facilities. When modifying or accessing County-owned or maintained roadways, the project would follow all appropriate and applicable approval processes.

1703-6211

The comment is noted and does not raise any issue with any of the conclusions of the Draft EIR/EIS. California MUTCD-compliant advance railroad preemption with gate-down detection circuit, supervised circuit, advance pedestrian clearance phase, and pre-signals would be provided as part of the project, with specific details developed as part of detailed design post-ROD. The intersection analysis presented in Draft EIR/EIS Appendix 3.2-A, Transportation Data on Roadways, Freeways, and Intersections (located in Volume 2, Technical Appendices, of the Draft EIR/EIS), Tables 8 through 16 includes the presence of advance railroad preemption as part of the at-grade crossing and intersection level of service analyses.

1703-6212

Please refer to Volume 3, Preliminary Engineering for Project Design Record, of the Draft EIR/EIS for design details of all proposed pedestrian undercrossings and overcrossings.

1703-6213

Please refer to Volume 3, Preliminary Engineering for Project Design Record, of the Draft EIR/EIS for design details, including plans and profiles at railroad at-grade crossings. Vertical crossing design would be done in a manner consistent with engineering design standards to ensure that large vehicles can cross.

Response to Submission 1703 (Rob Eastwood, County of Santa Clara, June 23, 2020) - Continued

1703-6214

The comment noted that the HSR alignment should be confirmed with the potential future realignment of SR 25 when that alignment is selected. Please refer to Volume 3, Preliminary Engineering for Project Design Record, of the Draft EIR/EIS for design details for the project alternatives. As detailed in Volume 3, the HSR alternative alignments do not conflict with the current alignment of SR 25. If an alternative future alignment of SR 25 is developed and selected, that alignment should be coordinated and cross-referenced with the HSR alternatives.

1703-6215

Specific comments in this summary statement are addressed in responses to submission SJM-1703, comments 6216--6233.

1703-6216

In the Final EIR/EIS, identification of Field Sports County Park, Tulare Hill County Park, and Coyote Creek Parkway County Park have been revised to include "county" in their name. This occurs in the Executive Summary, Section 3.14, Agricultural Farmland, Section 3.15, Parks, Recreation, and Open Space, and in Chapter 4, 4(f)/6(f) Evaluation.

1703-6217

The comment states that the analysis in the Draft EIR/EIS did not consider master plans or site plans. Analysts reviewed the Santa Clara County Countywide Trails Master Plan, as well as the Coyote Creek Parkway County Park Master Plan as part of their assessment of the existing environment and the project's environmental consequences. Chapter 4, 4(f)/6(f) Evaluation, of the Draft EIR/EIS discusses the Integrated Natural Resources Management Plan and Master Plan (Section 4.6.1.17, Coyote Creek Parkway County Park Use Assessment (Resource #29)). Please also refer to Appendix 2-J, Regional and Local Plans and Policies (located in Volume 2, Technical Appendices, of the Draft EIR/EIS), which indicates the plan was reviewed for this analysis.

1703-6218

The comment states that a single classification of type is inaccurate for the County's open space and park facilities. Revisions have been made in Table 3.15-2 in Section 3.15, Parks, Recreation, and Open Space, of the Final EIR/EIS to correct the type designations. The Draft EIR/EIS analyzed both open space and recreational opportunities for all classifications. The single classification in the Draft EIR/EIS does not affect the analysis or change the conclusions of the analysis. Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS discusses conservation areas. Potential impacts on these areas are described in Section 3.7.7.8, Conservation Areas, of the Draft EIR/EIS. Specifically, with regard to environmental resources within parks and recreational areas, impacts to Coyote Creek Parkway County Park are addressed in Impact BIO#42, Impact BIO#49, Impact BIO#51, Impact BIO#53, and Impact BIO#54.

1703-6219

The comment states that the Draft EIR/EIS incorrectly categorizes several County parks and asserts that, as a result, the analysis and the project's potential impacts are incomplete and inaccurate. Revisions have been made to Table 3.15-2 in Section 3.15, Parks, Recreation, and Open Space, in the Final EIR/EIS as requested in the comment. The single classification in the Draft EIR/EIS does not affect the analysis or change the conclusions of the analysis. See also response to comment 6218.

Response to Submission 1703 (Rob Eastwood, County of Santa Clara, June 23, 2020) - Continued

1703-6220

The comment states that the County does not concur with a de minimis determination for the Coyote Creek Parkway County Park and Coyote Creek Trail and that consultation meetings and public hearings must be held before a determination can be made. In addition, the comment states that Coyote Creek Parkway County Park is a significant riparian corridor.

Coyote Creek Parkway County Park

Section 4.6.1.17, Coyote Creek Parkway County Park Use Assessment (Resource #29) states that project alternatives would leave most of the park intact and contiguous for continued use of the park during construction and operation, because the areas of permanent incorporation would be around the edges and periphery of the parkway and would not affect any of the primary areas of the parkway that people use. Figures 4-34 through 4-39 show the affected areas for each alternative. The temporary and permanent uses of Coyote Creek Parkway County Park are alongside Monterey Highway, within utility easements, adjacent to interior roadways, and are for wildlife crossings. These uses are consistent with de minimis findings for use of a Section 4(f) property. In two areas, North of Metcalf Road and at Blanchard Road, Alternatives 1-3 would use a strip of land adjacent to Monterey Highway; Alternative 4 has no use north of Metcalf Road and at Blanchard. South of Metcalf Road, Alternatives 1-3 would use existing utility easements that occur across Monterey Highway into the Metcalf Energy Center temporarily; there is no use by Alternative 4. Alternative 2 would temporarily use the north touchdown of the Bailey Avenue overcrossing. In two areas, between Bailey Avenue and Tom's Trail and at Laguna Avenue, Alternatives 2 and 4 would use park property for wildlife crossings. These areas were identified in consultation with the California Department of Fish and Wildlife as the most viable areas for wildlife crossings.

Accordingly, this permanent use would not be of a severity that the protected activities, features, or attributes that qualify the park for protection under Section 4(f) would be substantially impaired.

Coyote Creek Trail

Section 4.6.1.18, Coyote Creek Trail Use Assessment (Resource #30) states that Coyote Creek Trail would be realigned under Alternatives 1 and 3 prior to construction along some sections between Forsum Road and Metcalf Road; the trail would be replaced

1703-6220

under Alternative 2 with a multiuse shared path between Forsum Road and Metcalf Road. This would allow the entire trail to remain usable during project construction and operations; and a de minimis for Alternatives 1-3 would apply. No use would occur from Alternative 4 as no land from Coyote Creek Trail would be permanently incorporated into the project under Alternative 4 and no land would be temporarily required during construction. Access to the area would not be affected by construction or operation of Alternative 4.

Consultation

Section 4(f) requires that "public notice and an opportunity for public review and comment concerning the effects on the protected activities, features, or attributes of the property must be provided. This requirement can be satisfied in conjunction with other public involvement procedures, such as a comment period provided on a NEPA document." Publication of the EIR/EIS and public review of the EIR/EIS from April through June 2020 satisfies this requirement for public review and comment. No further public review and comment is required. The Authority would continue to consult with local jurisdictions during the final design phase post-ROD.

Biological Resource Evaluation

With regard to Coyote Creek as a "significant riparian corridor with riparian and upland habitats, known breeding and rearing habitat for steelhead and chinook salmon, and an active, thriving wildlife corridor," Coyote Creek is discussed throughout the Biological and Aquatic Resources section of this EIR/EIS. Impacts to Coyote Creek are addressed in Impact BIO#42, Impact BIO#49, Impact BIO#51, Impact BIO#53, and Impact BIO#54. Mitigation measures have been identified to address the impacts on biological resources within Coyote Creek Parkway County /Park and Coyote Creek Trail.

Response to Submission 1703 (Rob Eastwood, County of Santa Clara, June 23, 2020) - Continued

1703-6221

Please see response to submission SJM-1703, comment 6220. All four project alternatives would require permanent use of land from the Coyote Creek Parkway County Park. In total, Alternatives 1 and 3 would result in the permanent use of 2.42 acres of the parkway (0.17 percent of the total area of the parkway). Alternative 2 would require the permanent use of 3.34 acres of the parkway (0.24 percent of the total area of the parkway). Alternative 4 would require the least amount of permanent use, 0.31 acre (0.02 percent of the total area of the parkway). The permanent use of 0.31 acre in Alternative 4 is for a wildlife crossing under Monterey Road. This location was developed after consultation with California Department of Fish and Wildlife, and it was decided that this narrow linear land would be the most appropriate location for the wildlife crossing as it is a part of the natural habitat and would be most likely to be used by wildlife. In addition, LU-IAMF#3 provides for the restoration of land used temporarily during construction. As identified above, Alternative 4 would require the least amount of temporary use during construction at 3.52 acres. Impacts on Coyote Creek Parkway are illustrated on Figure 4-33 through Figure 4-38 in Chapter 4, 4(f)/6(f) Evaluation, of the Final EIR/EIS. The Least Harm analysis is contained in Section 4.9.1 which concludes that Alternative 4 is the least harm alternative.

1703-6222

The comment states that at least one staging area would impact Coyote Creek Parkway County Park. Temporary and permanent impacts on parkland and recreation are described in Chapter 4, Section 4(f)/6(f) Evaluation, as well as in Table 3.15-2 of Section 3.15, Parks, Recreation, and Open Space, of the Draft EIR/EIS. Prior to any ground-disturbing activities at the park, the contractor would prepare a restoration plan addressing specific actions, sequence of implementation, parties responsible for implementation, and successful achievement of restoration for temporary impacts, such as replanting trees and vegetation that would be removed (LU-IAMF#3). Before beginning construction use of land, the contractor would submit the restoration plan to the Authority for review and obtain Authority approval. The exact location of the construction staging area has not yet been identified and would be determined during the final design phase post-ROD.

1703-6223

Refer to Standard Response SJM-Response-TR-2: Construction Traffic and Parking Management Details.

Refer to Standard Response: SJM-Response-TR-2: Construction Traffic and Parking Management Details for a discussion of staging areas and construction routes. Table 3.2-14 in Section 3.2, Transportation, of the Draft EIR/EIS provides a list of all roadway closures and modifications necessary to implement the project alternatives. Where roadway closures are necessary, alternative means of access would be provided. Implementation of the project alternatives would not eliminate access to any existing parkland within the project extent.

Response to Submission 1703 (Rob Eastwood, County of Santa Clara, June 23, 2020) - Continued

1703-6224

The comment states that the Draft EIR/EIS failed to consider impacts on future recreation because it does not provide any analysis on the planned trail routes in the Countywide Trails Master Plan. Section 3.15.1.1. defines parks, recreation and open space areas as those that are publicly owned and publicly accessible. Further section 3.15.5 of the EIR/EIS states that the analysis describes planned parks, recreational facilities, open space, and school district play areas that would be built by the time the project is under construction. On-street bicycle routes, unless identified as recreational facilities by the entity with jurisdiction, are not included in the analysis of parks, recreation, open space, and school district play areas because they are considered transportation facilities and are discussed in Section 3.2, Transportation, of the Draft EIR/EIS. Review the analysis in other EIR/EIS sections—specifically Sections 3.2, Transportation; 3.3, Air Quality and Greenhouse Gases; 3.4, Noise and Vibration; 3.7 Biological and Aquatic Resources; 3.11, Safety and Security; 3.12, Socioeconomics and Communities; and 3.16, Aesthetics and Visual Quality; and Chapter 4, Section 4(f)/6(f) Evaluation—to determine if there would be any indirect impacts on parks, recreational facilities, open space, or school district play areas as a result of project construction. Santa Clara County Parks and Recreation published an “Alignment Status” August 18, 2015 (County of Santa Clara 2015a); this Existing and Proposed Regional Trails and Connections provides an updated map to the 1995 Countywide Trails Master Plan Update. The proposed and planned trail routes in the Santa Clara County Countywide Trails Master Plan Update are noted as not necessarily specific alignments and “should be used as a planning tool”. The Master Plan trails map states: “Proposed trail routes indicated shall not be considered specific trail alignments; each alignment shall be obtained and developed pursuant to the trail implementation recommendations set forth in Santa Clara County Plan. Trail easements may only be requested along routes as are generally shown on the map ... This map is not a trail guide. This map is a planning tool. Many of the routes or staging areas identified on the Map are simply proposed and not open to the public for any purpose. This map does not convey any rights to the public to use any trail routes shown on this drawing; nor does this map exempt any person from trespassing charges.” The Santa Clara County Parks 2018 Strategic Plan only identifies one park, Coyote Creek Parkway County Park, that would be within the EIR/EIS study area and analysis (Santa Clara County Parks 2018). The Strategic Plan indicates that the planned improvements to Coyote Creek Parkway County Park are only funded at 15% for the Fiscal Year 2026-2027. Therefore, this small

1703-6224

amount of future funding does not guarantee that the project would proceed and it would be speculative to include these improvements in the EIR/EIS analysis. As noted in the Countywide Trails Prioritization and Gaps Analysis (County of Santa Clara 2015b), additional trails of countywide significance have been identified and planned since the CWTMP was last updated in 1995. These additions will be considered for incorporation into the CWTMP during the next update to the CWTMP, which is anticipated to occur as part of a future update to the Parks and Recreation Element of the County General Plan. Further, the majority of remaining miles of the countywide trails network are located within the unincorporated portions of the county, and County Parks is one of the primary agencies responsible for implementing these trails. Much of the off-street trail network in the unincorporated areas is located on private property, and trail development is a long-term process that hinges on property acquisition from willing landowners. Second, very few of the trails that are within the street right-of-way, including on-street bicycle routes and both on-street bicycle routes with parallel trail, have been implemented throughout the County. The regional trail routes identified in the comment have been addressed in the EIR/EIS as follows: Bay Area Ridge Trail near the project area is coterminous with Coyote Creek/Llagas Creek Trail along the Coyote Creek Parkway County Park and is identified as Coyote Creek Trail Monterey-Yosemite State Trail near the project area is coterminous with Los Gatos Creek Trail and is identified as Los Gatos Creek Trail.

Response to Submission 1703 (Rob Eastwood, County of Santa Clara, June 23, 2020) - Continued

1703-6225

Benito-Clara Trail is not within the RSA and therefore is not identified or evaluated in the EIR/EIS. The existing Juan Bautista de Anza National Historic Trail near the project area is mostly coterminous with Coyote Creek/Llagas Creek Trail along the Coyote Creek Parkway County Park and is identified as Coyote Creek Trail in the EIR/EIS. One portion of the NHT on Bailey Road has been added to Section 3.15 (on Figure 3.15-4, and in Table 3.15-2; Table 3.15-4; Table 3.15-5; and Table 3.15-6). This is an approximately 2.2 mile southwest-northeast section of the NHT that appears to be coterminous with Bailey Road from south of Monterey Road to the Bailey Avenue intersection with Coyote Creek Trail/NHT. The trail notes describe the trail in this area as a “narrow road, without sidewalk or separated bike path.” While the Coyote Creek Trail/NHT is evaluated in the EIR/EIS, this existing portion of the NHT was not identified within the Draft EIR/EIS. All of the alternatives are at-grade through this area, with Bailey Road on a grade separated four-lane overcrossing of Monterey Road. The section of the NHT is a connector route as it is on or alongside a four-lane overcrossing and crosses the railroad ROW as well as Monterey Road in this section. It is not noise sensitive or with high aesthetic value due to the roadway noise and roadway infrastructure. The alternatives do not require temporary or permanent occupancy of the NHT in this section. No effects to the use or access of the NHT would occur. Neither Juan Bautista de Anza National Historic Trail nor Benito-Clara Trail is specifically identified in the Countywide Trails Prioritization and Gaps Analysis (County of Santa Clara 2015b) as a Tier 1 trail, which is high priority. Similarly, improvements to these trails are not identified on the Department’s website as current projects. With regard to Silveira Park, the Countywide Trails Prioritization and Gaps Analysis (County of Santa Clara 2015b) indicates that County Parks is working with the Santa Clara Valley Water District to transfer ownership of the Silveira property to County Parks for use as a mitigation site and for provision of recreational trails. The project has not yet been approved. Therefore, the Silveira property is not evaluated within the EIR/EIS.

1703-6226

The comment requests edits to the jurisdictional agencies for the Los Gatos Creek Trail. Table 3.15-2 in Section 3.15, Parks, Recreation, and Open Space, has been revised in the Final EIR/EIS to reflect the additional agencies.

1703-6227

The comment states that all planned trails should be evaluated in the EIR/EIS. Refer to response to comment 6224.

1703-6228

The comment requests that Santa Clara County Department of Parks and Recreation be allowed to review technical memoranda to ensure concurrence with local, state, and federal guidelines. The IAMFs (TR-IAMF#2, TR-IAMF#4, TR-IAMF#5, and TR-IAMF#7) would be incorporated into the design specifications and would be a pre-condition requirement. The technical memoranda would be provided to the Official with Jurisdiction (OWJ) to demonstrate how access would be maintained. The Authority will continue to coordinate with the Department during the final design phase of the project post-ROD.

1703-6229

Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS includes extensive analysis of the impacts on habitat, wetlands and aquatic resources, and wildlife species. This section includes numerous mitigation measures to address impacts on these resources. Please refer to that section for the information of interest to the commenter. “Natural resources” can be defined in many ways; the EIR/EIS include numerous topics, such as biological and aquatic resources, hydrology, geology, and soils. Please refer to the Table of Contents for other areas of interest. Please refer to response to submission SJM-1703, comment 6221 regarding impacts on parkland access.

Response to Submission 1703 (Rob Eastwood, County of Santa Clara, June 23, 2020) - Continued

1703-6230

As described in Section 3.15, Parks and Recreation, construction would have temporary effects on Coyote Creek Parkway County Park, including temporary construction easements, noise, and temporary changes in access. As described on page 3.15-53 to 3.15-54, TCEs northeast of Monterey Road would diminish access at one access point under all project alternatives; however, access would be maintained at many other access points. As described in Section 3.15, a series of IAMFs would apply to construction relative to parks, including Coyote Creek Parkway County Park including: PK-IAMF#1: Parks, Recreation, and Open Space; TR-IAMF#2: Construction Transportation Plan; TR-IAMF#4: Maintenance of Pedestrian Access; and TR-IAMF#5: Maintenance of Bicycle Access among others. Per TR-IAMF#4 and TR-IAMF#5, the Contractor would prepare specific construction management plans to address maintenance of pedestrian and bicycle access during the construction period where feasible (i.e., meeting design, safety, and Americans with Disabilities Act (ADA) requirements).

In addition, the Draft EIR/EIS identified specific mitigation measures that would address temporary impacts to parks and trail access. PR-MM#1: Provide Access to Trails during Construction would require, prior to construction, the contractor will prepare a technical memorandum documenting how connections to the unaffected trail portions and nearby roadways will be maintained during construction and how the contractor will provide alternative access via a temporary detour or permanent realignment of the trail using existing roadways or other public rights-of-way and the contractor will provide detour signage and lighting and alternative routes that meet public safety requirements. PR-MM#2: Provide Temporary Park Access would require, prior to construction, the contractor to prepare a technical memorandum documenting how connections to the unaffected park portions or nearby roadways would be maintained during construction. The Draft EIR/EIS fully analyzed potential effects to parks and trails, including to Coyote Creek Parkway County Park and identified feasible avoidance, minimization, and mitigation measures to address temporary access impacts. Please refer to response to submission SJM-1703, comment 6223 concerning disruption and maintenance of access to existing parks and recreational facilities. With respect to the portion of the comment requesting discussion and review of any technical memoranda and coordination with the Department concerning efforts to minimize impacts on access, please refer to response to submission SJM-1703, comment 6228. In addition, as noted in response to comment 6228, the Authority would consult with the Department during

1703-6230

preparation of preconstruction plans to provide temporary access.

1703-6231

The comment states that Section 3.6, Public Utilities and Energy, of the Draft EIR/EIS needs to identify any County-owned parkland or trails that are impacted by utilities and easements or any relocation of transmission lines. The project as defined includes construction and operation of the rail alignment as well as public utilities improvements, changes in overhead utilities and easements, and relocation of transmission lines. The analysis in the Draft EIR/EIS included consideration of these improvements and relocations and their impacts on all land uses, including County parks. Figure 3.6-1 in Section 3.6 of the Draft EIR/EIS illustrates the locations of major utility electrical transmission and power lines (50 kV) within the public utilities RSA (identified by alternative and by subsection in Table 3.6-3). The HSR program website contains an interactive tool where SCCO can input specific parcel addresses and determine the exact improvements proposed on the site (<https://mapshsrnorcal.org/SanJose-Merced/>). Refinement of utilities improvements would occur during the final design phase post-ROD.

1703-6232

Section 2.4.8 in Chapter 2, Alternatives describes the network upgrades required to support this project. At Field Sports County Park, these upgrades would include the reconductoring of existing 115-kV power lines co-located on the same structures and collocation of new power lines on existing poles. This would be an upgrade to an existing system, and there would be no take of revenue associated with this project component. Section 3.15, Parks, Recreation, and Open Space, of the Draft EIR/EIS analyzed specific impacts of the project (which included EINU improvements) on all of the identified parks, including Field Sports County Park. Table 3.15-4 in Section 3.15 of the Draft EIR/EIS identified that Field Sports County Park is within or adjacent to the EINU. Impact PK#1 included a discussion of the 2.04 of a total 102 acres of Field Sports County Park that would be temporarily affected by this project component. The Final EIR/EIS includes clarifying language to address this comment in Section 3.15.

Response to Submission 1703 (Rob Eastwood, County of Santa Clara, June 23, 2020) - Continued

1703-6233

The Authority acknowledges that the RSA for indirect impacts extends beyond the project footprint. Impacts on parks and recreation are discussed in Section 3.15, Parks, Recreation, and Open Space, of the Draft EIR/EIS, and the footprint analyzed includes utility easements. For example, refer to Figure 4-43 in Chapter 4, Section 4f and Table 3.15-4 in Section 15, Parks Recreation and Open Space to see how PG&E network upgrades were included in the project footprint and analyzed as impacts for Field Sports County Park. While the EIR/EIS does not include a list of utility easements over County-owned parkland, the analysis does include these impacts where they occur.

Refinements to utility relocations would be made during the final design process post-ROD. Please also refer to response to submission SJM-1703, comment 6232.

Submission 1356 (Alvaro Meza, Gilroy Unified School District, June 8, 2020)

San Jose - Merced - RECORD #1356 DETAIL

Status : Unread
Record Date : 6/8/2020
Submission Date : 6/8/2020
Interest As : Local Agency
First Name : Alvaro
Last Name : Meza
Attachments : FormletteronEIR6.5.2020.pdf (168 kb)

Thank you for your time.

Stakeholder Comments/Issues :

Dear Board of Directors,

1356-177 | As you will may recall, the Gilroy Unified School District issued a conditional letter of support for the Alternative 4 alignment, conditioned upon the addition of a pedestrian bridge at IOOF and Monterey Avenue. It is more than disappointing to see the EIR conclude that the mitigation of quad gates (San Jose to Merced Section Draft EIR/EIS p. 3.11-1) would be sufficient to permanently alleviate the disproportionately dangerous hazards to pedestrian safety, in our most disadvantaged community in Gilroy. This letter is a strong objection to this mitigation, and offers a solution to keep our neediest, most economically disadvantaged students and community safe.

1356-178 | EIR/EIS CEQA conclusion (citation):
 Safety improvements, such as the installation of quad gates and median barriers, would be necessary at 22 at-grade crossings within the subsection under Alternative 4 (page 3.11-68). Furthermore, Table 3.11-15 Comparison of Project Alternatives impact on safety and security (page 3.11-84) offers At-grade crossings would be equipped with quad gates and barrier systems to prevent intrusion into the right-of-way.

Objection and Comment for Public Record:

The quad gate design is totally inadequate to ensure public safety! The High-Speed Rail permanently increases the exposure to traffic hazards (110 mph train) at far greater frequency and elevated risk than current conditions. The proposed mitigation of quad gates is not in the best interest of public safety. In this particular case, our concerns relate to the public safety of middle school children, ages 10-13 and their families in the heart of our most disadvantaged population in Gilroy. This increased permanent hazard should be mitigated with a proportional increase to enhanced pedestrian safety. The proposed quad gates are not acceptable. Our middle school students and their families will be permanently exposed to a train travelling up to 110 mph. The quad gates with sensors is a totally inadequate preventive measure. Many of the children and families using this crossing are economically disadvantaged and walk to school. Many of the children walk to school alone as their parents begin work in the early hours.

GUSD Proposed Mitigation:

Our strong recommendation is that HSR work with the City of Gilroy to acquire the real property necessary to design and build a pedestrian bridge to offer a safe crossing at the intersection of IOOF and Monterey Avenue. This pedestrian bridge will serve the neediest population in Gilroy, and offer our nearly 1,600 students (South Valley Middle and Navigator Charter School) and families a safe path to walk & bike to school. Our neediest population in Gilroy deserves to have a safe route to school. The residents of the City of Gilroy deserves more from the High Speed Rail Authority.

Submission 1356 (Alvaro Meza, Gilroy Unified School District, June 8, 2020) - Continued



GILROY UNIFIED SCHOOL DISTRICT
Business Services

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SUPERINTENDENT
Dr. Deborah A. Flores, Ph.D.

BOARD OF EDUCATION
Enrique Diaz ♦ B.C. Doyle ♦ Tuyen Fiack ♦ Mark Good
Anisha Munshi ♦ James E. Pace ♦ Linda Piceno



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Anisha Munshi ♦ James E. Pace ♦ Linda Piceno

Monday, June 8, 2020

Board of Directors
California High-Speed Rail Authority
770 L Street, Suite 620
Sacramento, CA 95814

Re: Comment on the EIR/EIS
San Jose to Merced Section, intersection of IOOF and Monterey Street, Gilroy
Inadequate proposed mitigation: Quad Gates

Transmitted electronically via link to:
https://www.hsr.ca.gov/programs/environmental/eis_cir/draft_san_jose_merced_comment.aspx

Dear Board of Directors,

As you will may recall, the Gilroy Unified School District issued a conditional letter of support for the Alternative 4 alignment, conditioned upon the addition of a pedestrian bridge at IOOF and Monterey Avenue. It is more than disappointing to see the EIR conclude that the mitigation of quad gates ([San Jose to Merced Section Draft EIR/EIS p. 3.11-1](#)) would be sufficient to permanently alleviate the disproportionately dangerous hazards to pedestrian safety, in our most disadvantaged community in Gilroy. This letter is a strong objection to this mitigation, and offers a solution to keep our neediest, most economically disadvantaged students and community safe.

EIR/EIS CEQA conclusion (citation):

Safety improvements, such as the installation of quad gates and median barriers, would be necessary at 22 at-grade crossings within the subsection under Alternative 4 (page 3.11-68). Furthermore, Table 3.11-15 [Comparison of Project Alternatives impact on safety and security](#) (page 3.11-84) offers At-grade crossings would be equipped with quad gates and barrier systems to prevent intrusion into the right-of-way.

Objection and Comment for Public Record:

The quad gate design is totally inadequate to ensure public safety! The High-Speed Rail permanently increases the exposure to traffic hazards (110 mph train) at far greater frequency and elevated risk than current conditions. The proposed mitigation of quad gates is not in the best interest of public safety. In this particular case, our concerns relate to the public safety of middle school children, ages 10-13 and their families in the heart of our most disadvantaged population in Gilroy. This increased permanent hazard should be mitigated with a proportional increase to enhanced pedestrian safety. The proposed quad gates are not acceptable. Our middle school students and their families will be permanently exposed to a train travelling up to 110 mph. The quad gates with sensors is a totally inadequate preventive measure. Many of the children and families using this crossing are

economically disadvantaged and walk to school. Many of the children walk to school alone as their parents begin work in the early hours.

GUSD Proposed Mitigation:

Our strong recommendation is that HSR work with the City of Gilroy to acquire the real property necessary to design and build a pedestrian bridge to offer a safe crossing at the intersection of IOOF and Monterey Avenue. This pedestrian bridge will serve the neediest population in Gilroy, and offer our nearly 1,600 students (South Valley Middle and Navigator Charter School) and families a safe path to walk & bike to school. Our neediest population in Gilroy deserves to have a safe route to school. The residents of the City of Gilroy deserves more from the High Speed Rail Authority.

Thank you for your time.

Sincerely,

Dr. Deborah A. Flores
Superintendent

cc:
GUSD Governing Board

Response to Submission 1356 (Alvaro Meza, Gilroy Unified School District, June 8, 2020)

1356-177

Refer to Standard Response SJM-Response-SS-1: At-Grade Crossing Safety.

1356-178

Refer to Standard Response SJM-Response-GS-1: Requests for Grade Separations, SJM-Response-SS-1: At-Grade Crossing Safety.

The project includes all of the FRA/CPUC required improvements for at-grade crossings, including fencing of the right-of-way, four-quadrant gates, intrusion detection, and obstacle detection that meet the federal and state standards for safety. Accordingly, the Draft EIR/EIS, Section 3.11.6, Environmental Consequences, does not identify a significant impact related to at-grade crossings for Alternative 4, and the EIR/EIS does not identify a need for mitigation for safety impacts and specifically does not include the requested pedestrian bridge as required mitigation. As discussed in Standard Response SJM-Response-SS-1: At Grade Crossing Safety, the installation of quad gates can notably reduce the risk of accidents compared to locations without them. The IOOF crossing is also not fenced today whereas it would be fenced with the HSR project, which would block direct pedestrian access to the railroad ROW outside of the location of the quad gates.

The analysis in Chapter 5, Environmental Justice, of the Draft EIR/EIS does not identify a disproportionately high and adverse safety effect related to use of the at-grade crossings by vehicles, pedestrians, or bicyclists.

Submission 1311 (Ellen Wehr, Grassland Water District, May 26, 2020)

San Jose - Merced - RECORD #1311 DETAIL

Status : Action Pending
Record Date : 5/27/2020
Submission Date : 5/27/2020
Interest As : Local Agency
First Name : Ellen
Last Name : Wehr

Stakeholder Comments/Issues :

Good afternoon,
Attached please find a request for extension from Grassland Water District and Grassland Resource Conservation District.

Thank you,

Ellen Wehr
Grassland Water District

200 W. Willmott Avenue
Los Banos, CA 93635-5501

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Ricardo Ortega
General Manager
Veronica A. Woodruff
Treasurer/Controller
Ellen Wehr
General Counsel

May 26, 2020

Via Email

Mark A. McLoughlin
California High-Speed Rail Authority
770 L Street, Suite 620 MS-1
Sacramento, CA 95814
Email: Mark.McLoughlin@hsr.ca.gov

Re: Request to Extend Public Review Period and to Provide Documents Referenced in the Draft Environmental Impact Report/Environmental Impact Statement – San Jose to Merced Project Section

Dear Mr. McLoughlin:

1311-118

We are writing on behalf of Grassland Water District and Grassland Resource Conservation District (“GWD”) to respectfully request that the California High-Speed Rail Authority (“HSRA”) extend the public review and comment period for the Draft Environmental Impact Report/Environmental Impact Statement (“DEIR/EIS”) prepared for the San Jose to Merced Project Section of the California High-Speed Rail Project (“Project”). Although we appreciated the 15-day extension of the comment period until June 23rd, which the HSRA announced last week, we request at least 30 additional days to effectively review and comment on the DEIR/EIS.

Submission 1311 (Ellen Wehr, Grassland Water District, May 26, 2020) - Continued

1311-118

This request is made pursuant to the California Environmental Quality Act,¹ Public Resources Code section 21092(b)(1), which requires that all documents referenced in an environmental review document be made available to the public for the entire comment period.² The HSRA notified the public that copies of the Technical Reports referenced or relied upon in the DEIR/EIS were available at public libraries and county offices. However, these institutions have been closed to the public during the comment period due to the coronavirus outbreak. Without ready access to documents underlying the DEIR/EIS's analysis, GWD and other members of the public are unable to fully evaluate and comment on the accuracy of the HSRA's analysis and conclusions regarding the Project's impacts. After leaving telephone messages with the HSRA requesting electronic access to the Technical Reports, we received access to those documents today. The reference documents are voluminous and will require adequate time to review and analyze.

1311-119

We are also submitting a separate letter requesting additional documents referenced in the DEIR/EIS.³ Public records related to the Project include all documents in actual or constructive possession of the HSRA, which includes the HSRA's consultants' files.⁴ The courts have held that the failure to provide even a few pages of a CEQA document for a portion of the CEQA review period invalidates the entire CEQA process, and that such a failure must be remedied by permitting additional public comment.⁵ It is also well settled that a CEQA document may not rely on hidden studies or documents that are not provided to the public.⁶ Failing to make documents referenced in the DEIR readily available during the current comment period would violate the procedural mandates of CEQA.

The COVID-19 coronavirus outbreak has adversely affected the availability of GWD and other members of the public to effectively review and comment on the DEIR/EIS. With the exception of essential personnel, many are working from home under less-than-ideal working conditions. It is very challenging to effectively review such a voluminous document as the DEIR/EIS and its appendices, particularly for those who are restricted to working on laptops and with limited printing abilities

¹ Pub. Resources Code §§ 21000 et seq.

² Pub. Resources Code § 21092(b)(1).

³ Letter from Janet Laurain, Adams Broadwell Joseph & Cardozo to Lisa Natusch, Randal Tsuda, and Diana Pancholi re: Request for Immediate Access to Documents Referenced in the Draft Environmental Impact Report – 777 West Middlefield Road, SCH #2018032072 (Nov. 16, 2018).

⁴ Consolidated Irrigation District v. Superior Court (2012) 205 Cal.App.4th 697, 710.

⁵ Ultramar v. South Coast Air Quality Man. Dist. (1993) 17 Cal.App.4th 689, 699.

⁶ Santiago County Water District v. County of Orange (1981) 118 Cal.App.3rd 818, 831 ("Whatever is required to be considered in an EIR must be in that formal report; what any official might have known from other writings or oral presentations cannot supply what is lacking in the report.")

1311-119

and/or inadequate internet service. More time is needed to address these impediments to public review.

Accordingly, we request that:

- 1) The HSRA immediately provide us with access to the reference documents requested in our enclosed letter.
- 2) The HSRA extend the public review and comment period on the DEIR/EIS for at least 30 days from the date on which the HSRA releases all of the referenced documents for public review.

Thank you for your prompt attention and response to this matter.

Sincerely,

Ricardo Ortega
General Manager
Grassland Water District

cc: HSRA Board of Directors (via email to boardmembers@hsr.ca.gov)

Response to Submission 1311 (Ellen Wehr, Grassland Water District, May 26, 2020)

1311-118

Refer to Standard Response SJM-Response-OUT-1: Public Outreach.

The Authority responded to requests for information as quickly as possible and provided the technical reports in electronic format to the commenter upon request.

1311-119

Refer to Standard Response SJM-Response-OUT-1: Public Outreach.

The Authority contacted this commenter and provided the commenter with the requested technical reports and reference documents. On April 28, 2020, Grasslands Water District contacted the Authority to confirm the location of the published Draft EIR/EIS on the website. The Authority confirmed the website location on the same day. On May 26, 2020, Grasslands Water District submitted a request via a phone call for all technical reports and reference documents. On May 27, 2020, the Authority provided all of the requested materials electronically.

Submission 1358 (Ellen Wehr, Grassland Water District, June 4, 2020)

San Jose - Merced - RECORD #1358 DETAIL

Status : Action Pending
Record Date : 6/9/2020
Submission Date : 6/4/2020
Interest As : Business and/or Organization
First Name : Ellen
Last Name : Wehr

Stakeholder Comments/Issues :

1358-111

Boris and Mark,

We were informed this week that the wife of one of our consultants, who is helping us review the EIR, tested positive for COVID-19, and his test is pending but is also expected be positive for COVID-19. We would like to reiterate our request for a comment extension.

Thank you for your consideration,

Ellen Wehr
Grassland Water District
(916) 873-2020
ewehr@gwdwater.org

Response to Submission 1358 (Ellen Wehr, Grassland Water District, June 4, 2020)

1358-111

Refer to Standard Response SJM-Response-OUT-1: Public Outreach.

Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020)

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Los Banos, CA 93635-5501



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General Counsel

June 23, 2020

VIA U.S. MAIL AND E-MAIL

California High-Speed Rail Authority
Attn: San Jose to Merced Project Section: Draft EIR/EIS
100 Paseo de San Antonio, Suite 300
San Jose, CA 95113
E-Mail: san_jose_merced@hsr.ca.gov

Re: Comments on Draft EIR/EIS for San Jose to Merced Project Section

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Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

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Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

I. INTRODUCTION

The Grassland Water District (GWD), Grassland Resource Conservation District (GRCD), and the Grassland Fund submit these comments regarding the Draft Environmental Impact Report/ Environmental Impact Statement (DEIR/EIS) for the San Jose to Merced Project Section of the California High-Speed Rail Project prepared by the California High-Speed Rail Authority (HSRA).

The DEIR/EIS is a project-level environmental document prepared pursuant to the California Environmental Quality Act (CEQA)¹ and the National Environmental Policy Act (NEPA)². It analyzes the impacts of constructing and operating a high-speed rail project (also referred to as the high-speed train or "HST") from the City of San Jose to Carlucci Road in Merced County (the "Project"). This 90-mile portion of the larger statewide high-speed rail project would pass through three counties (Santa Clara, San Benito, and Merced) and five cities (Santa Clara, San Jose, Morgan Hill, Gilroy, and Los Banos).

The DEIR/EIS frequently divides its analysis of impacts along this 90-mile Project route into five subsections: the San Jose Diridon Station Approach, Monterey Corridor, Morgan Hill and Gilroy, Pacheco Pass, and San Joaquin Valley. The GWD, GRCD, and Grassland Fund are located in the San Joaquin Valley and these comments are specific to that subsection. High-speed trains would be capable of travelling up to 220 miles per hour in this subsection.

Based upon our review of the DEIR/EIS and supporting documentation, we conclude that the DEIR/EIS fails to comply with CEQA and NEPA requirements. As explained more fully below, the DEIR/EIS does not comply with the requirements of CEQA and NEPA because it: (1) fails to set forth a stable and finite project description; (2) fails to consider less damaging Project alternatives; (3) fails to properly tier its analysis and proposed mitigation measures to the previously adopted programmatic EIR/EIS for the Project; (4) fails to set forth the environmental and regulatory baseline; (5) fails to identify, analyze and mitigate to the extent feasible the impacts of the Project; (6) proposes inadequate and unenforceable mitigation measures; and (7) defers formulation of mitigation measures to post-approval studies and plans.

¹ Pub. Resources Code § 21000 *et seq.*
² 42 U.S.C. § 4321 *et seq.*

1678-2172

1678-2173

These deficiencies in the DEIR/EIS are fatal errors. As a result, the DEIR/EIS fails to identify the Project's potentially significant environmental impacts and propose measures that can reduce those impacts to a less than significant level. Accordingly, the HSRA may not approve the Project until the DEIR/EIS is revised to comply with CEQA and NEPA requirements.

A revised DEIR/EIS must be recirculated for public review and comment. The purpose of recirculation is to give the public and other agencies an opportunity to evaluate new data and the validity of conclusions drawn from it. CEQA and NEPA require recirculation of a draft EIR/EIS when significant new information is added following public review. New information is significant if the DEIR/EIS is "changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the Project or a feasible way to mitigate or avoid such an effect."³

We have reviewed the DEIR/EIS and its technical appendices and reports with the assistance of technical consultant Renée Owens of Sage Wildlife Biology. Her expert comments, along with a statement of her professional background and curriculum vitae, are attached to this letter as **Attachment A**. The HSRA must respond to the attached technical comments separately and individually.

II. STATEMENT OF INTEREST

A. The Grassland Entities

The GWD is a public agency formed under the California Water District Law. The GRCD is a public agency formed under the California Resource Conservation District Law. Together the districts contain approximately 75,000 acres of private and public wetlands located north, east and south of the City of Los Banos in Merced County. The districts are charged under state law and federal contract with the responsibility to manage water resources and carry out conservation programs in order to preserve and protect this resource, primarily as habitat for waterfowl and other wildlife species.

Land stewardship in the districts mostly comprises privately owned and managed waterfowl hunting clubs that receive their water supply from GWD, and land within the Los Banos and Volta State Wildlife Areas. The districts, together with adjacent national wildlife refuges, state wildlife areas, and state park lands make up the Grassland Ecological Area (GEA). The GWD and GRCD are concerned

³ CEQA "Guidelines" (14 Cal. Code Regs. § 15000 *et seq.*) at § 15088.5; see also *Marsh v. Oregon Natural Resources Council* (1989) 490 U.S. 360, 371.

Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

about the Project because it would pass through and otherwise impact land, water, and wildlife within their jurisdictional boundaries and throughout the GEA.

The GWD and GRCD are members of the Grassland Resources Regional Working Group, comprised of representative from Ducks Unlimited, California Waterfowl Association, U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), GWD, and GRCD. The regional working group is recognized under the Merced County General Plan for its role in consulting with local planning agencies on matters related to land use and development planning in and around the GEA. The Grassland Resources Regional Working Group shares in the concerns raised herein.

The Grassland Fund (formerly the Grassland Conservation, Education and Legal Defense Fund) is a non-profit organization dedicated to the protection of the GEA through education, conservation and advocacy efforts. The Grassland Fund is the past recipient of the PG&E Community Service Award and the Association of California Water Agencies Theodore Roosevelt Environmental Award.

The Grassland Fund runs the Grassland Environmental Education Center, located at the Los Banos Wildlife Area's Interpretive Marsh at 18110 W. Henry Miller Road in Los Banos. The proposed alignment of the Project runs immediately adjacent to this location. The Grassland Environmental Education Center hosts thousands of school-age children and adults every year for outdoor-based learning experiences. The Grassland Fund is concerned about the Project because of its overall impacts on the GEA and its direct impacts on visitor and educational experiences at the Grassland Environmental Education Center.

B. Importance of the Grassland Ecological Area

The GEA is an irreplaceable, internationally significant ecological resource. The GEA is located west of the City of Merced and surrounds the City of Los Banos to the north, east and south. Originally, this area was part of a four million acre wetland system in the Central Valley of California. Of the 205,000 acres that remain, the GEA is the largest contiguous block of wetlands in the Central Valley, comprising one-third of the remaining wetland acreage in the Central Valley.⁴ The protection of this area has been the result of private and public investments and partnerships.

⁴ Western Hemisphere Shorebird Reserve Network, *The Grasslands: Overview* ("WHSRN website"), accessed June 21, 2020, available at: https://whsrn.org/whsrn_sites/grasslands/.

The GEA boundary is designated by the U.S. Fish and Wildlife Service in order to identify an area for priority purchase of public easements for wetland preservation and enhancement.⁵ The GEA includes federal wildlife refuges, a state park, state wildlife management areas and the largest block of privately managed wetlands in the state. The GEA also includes a large and growing portfolio of federal and state conservation easements. Through 1998, conservation easements had been acquired on over 64,000 acres at a total cost of over \$28 million.⁶ Acquisitions since 1998 have increased the number of acres protected by conservation easements to approximately 95,000 acres.⁷ Significant areas of the GEA, however, remain unprotected from future development.

The GEA is of considerable importance because it preserves a variety of habitats important to the maintenance of biodiversity on a local, regional, national and international scale. The GEA is a major wintering ground for migratory waterfowl and shorebirds of the Pacific Flyway. Approximately 60% of waterfowl that migrate along the Pacific Flyway (comprising 20% of all North American waterfowl) rely on wetlands in the Central Valley, and in addition, 50% of the shorebirds that migrate through the Central Valley are found in the Grasslands.⁸

Over a million waterfowl are regularly found in the GEA during the winter months.⁹ The GEA also provides habitat for more than 550 species of plants and animals, including 47 plant and animal species that are endangered, threatened or candidate species under state or federal law, including San Joaquin kit fox, Aleutian Canada [cackling] geese, sandhill cranes, California tiger salamander, vernal pool fairy shrimp, tadpole shrimp, California red-legged frog, the giant garter snake, Swainson's hawks and tri-colored blackbirds.¹⁰

The Western Hemisphere Shorebird Reserve Network has designated the GEA as one of only 15 international shorebird reserves in the world.¹¹ The GEA is

⁵ 2007 Comments Appendix 8, *Grassland Land Use and Economics Study*, p. 2.

⁶ *Id.* at pp. 11-12.

⁷ Personal communication with Bob Parris and Kim Forrest, USFWS Easement Program for the Grassland Wildlife Management Area (June 23, 2020).

⁸ Audubon California, *Working Lands*, accessed June 21, 2020, available at <https://ca.audubon.org/conservation/working-lands>; WHSRN website, accessed June 21, 2020, available at, https://whsrn.org/whsrn_sites/grasslands/.

⁹ *Id.*; 2007 Comments Appendix 8, *Grassland Land Use and Economics Study*, p. 2.

¹⁰ *Id.*

¹¹ *Id.*; 2007 Comments Appendix 11, Fredrickson, Leigh H. and Laubhan, Murray K, *Land Use Impacts and Habitat Preservation in the Grasslands of Western Merced County, CA* (February 1995), p. 3.

Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

also recognized as a Wetland of Worldwide Importance by the Ramsar Convention. The Ramsar Convention is an international agreement dedicated to the worldwide protection of particular ecosystems. Ramsar member nations work to coordinate wetland conservation efforts, particularly for species that rely on ecosystems that span member nation's borders. The designation of the GEA as a Wetland of Worldwide Importance illustrates the tremendous worldwide ecological value of the GEA ecosystem.

In addition to providing critical biological habitat, the Grasslands' wetlands also provide a wide range of other benefits to the area, including flood control and educational and recreational opportunities. This concentration of wetlands and wildlife is a unique feature of the area, attracting hunters and other recreational visitors who make significant contributions to the economy of the area. The GEA receives over 300,000 user visits per year for hunting, fishing and non-consumptive wildlife recreation.¹² Recreational and other activities related to habitat values within the GEA contribute \$41 million per year to the Merced County economy, and account for approximately 800 jobs.¹³

It is imperative that the DEIR/EIS thoroughly analyze, disclose, and mitigate impacts that the Project may have on the GEA to ensure it does not damage this irreplaceable ecological resource of international importance.

C. History of Participation in the CEQA/NEPA Process

The GWD, GRCD, and Grassland Fund previously submitted comments to the Authority on prior CEQA/NEPA documents related to the current Draft EIR/EIS, including: (1) the 2005 statewide Program EIR/EIS for the entire High-Speed Rail Project; (2) the 2008 more focused Program EIR/EIS for the Bay Area to Central Valley section of the Project; (3) the 2009 Notice of Preparation of this DEIR/EIS; (4) the 2019 Draft Supplemental EIR/EIS for the Central Valley Wye; and (5) the HSRA's September 2019 preliminary selection of a proposed Preferred Alternative for the Project.

In conjunction with submitting those comments, we met many times with HSRA staff and consultants to describe our concerns and discuss potential solutions. Early on, the HSRA agreed to prohibit the establishment of any high-speed rail stations between Gilroy and Merced and to prohibit any high-speed rail maintenance or storage facilities within the Los Banos area or near the GEA. The

¹² 2007 Comments Appendix 8, *Grassland Land Use and Economics Study*, p. 14.

¹³ *Id.* at p. 21.

1678-2175

July 2008 Bay Area to Central Valley EIR/EIS also committed the HSRA to execute six specific mitigation measures to address potential impacts on the GEA.¹⁴

At our February 26, 2009 meeting, HSRA staff suggested the formation of an advisory group of resource management agencies and interested stakeholders to review and to advise the HSRA on GEA related issues. We strongly concurred with this recommendation. From 2017 to 2019, the HSRA and the Grassland entities group, along with wildlife agencies and non-profit members of the Central Valley Joint Venture that comprised a GEA working group, held numerous work sessions regarding design and mitigation options to avoid and reduce impacts in the GEA, and mitigation compliance strategies for the commitments made in the 2008 Program EIR/EIS. During this period the GEA working group met with the HSRA 17 times, on the following dates:

April 4, 2017	May 11, 2017	June 14, 2017
June 21, 2017	August 30, 2017	September 28, 2017
December 13, 2017	February 6, 2018	February 21, 2018
March 23, 2018	August 15, 2018	September 19, 2018
October 17, 2018	December 3, 2018	February 13, 2019
July 15, 2019	September 30, 2019	

The DEIR/EIS fails to list many of these meetings, and either fails to include or inconsistently lists organizations who attended many of them, such as the California Waterfowl Association, Ducks Unlimited, and staff from the Central Valley Joint Venture.¹⁵ The DEIR/EIS also neglects to adequately describe or incorporate the substantial work that occurred during these many GEA working group meetings.

In September of 2019 the HSRA Board of Directors determined that Alternative 4 should be the CEQA Preferred Alternative/proposed Project in the DEIR/EIS. The Grassland Group along with other commenters objected that all

¹⁴ Final Bay Area to Central Valley High Speed Train (HSR) Program EIR/EIS, Volume 1: Report, May 2008, pp. 3.15-70 - 3.15-71.

¹⁵ DEIR/EIS p. 9-16, and *Biological and Aquatic Resources Technical Report (TR-04)*, Appendix C, *Wildlife Corridor Assessment Report*, pp. 1-3 to 1-6.

1678-2176

1678-2174

1678-2175

Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2176

four of the proposed Project Alternatives were identical in the San Joaquin Valley subsection. The commenters asked that the DEIR/EIS include consideration of a below-grade design through the GEA or an above-ground physical shield, options that had been explored in the GEA working group. At the very least, comments submitted by the Grassland Group asked that “the door be left open” for a “full and fair consideration and analysis of feasible Project design and environmental mitigation measures to avoid or minimize ecological impacts in the GEA.” As a result, the HSRA Board of Directors adopted a resolution directing staff to consider all “feasible mitigation through the Grasslands Ecological Area.”¹⁶

The DEIR/EIS does not discuss this long history. In fact, an overarching trend throughout the DEIR/EIS is the failure to build upon and acknowledge the years of prior analysis of the Project, contained in previously approved CEQA/NEPA documents and work products developed by the GEA working group. The legal effect of these oversights is further detailed in Sections IV and V below.

We incorporate by reference the extensive supporting documents previously provided to the HSRA, including but not limited to the exhibits and appendices to our October 25, 2007 Comments on the Draft Bay Area to Central Valley High-Speed Train Program EIR/EIS, and voluminous materials provided to the HSRA by the Grassland working group. These documents include maps, studies, scientific analyses, presentations, expert comments, and proposed mitigation measures that were intended to assist with preparation of the DEIR/EIS. They support the issues addressed herein and provide important relevant information, in addition to those described in this comment letter. Where we refer to a “2007 Comments Appendix” in the footnotes of this letter, we are referring to the appendices contained in our bound October 25, 2007 Comments on the Draft Bay Area to Central Valley Program EIR/EIS.

1678-2177

III. POTENTIAL NEED TO SUBMIT FURTHER COMMENTS

The HSRA issued the DEIR/EIS during the ongoing outbreak of the Coronavirus 2019 (COVID-19), which was declared a pandemic by the World Health Organization. The President and Governor have declared a national and state emergency, respectively. The Grassland Group, despite their best efforts,

¹⁶ Resolution #HSRA 19-05, available at: https://hsr.ca.gov/docs/brdmeetings/2019/brdmtg_091719_Item3_Final_JM_HSR_Board_Resolution_PA_CEQA_Exec_Rev.pdf, and Resolution # HSRA 19-06, available at: https://hsr.ca.gov/docs/brdmeetings/2019/brdmtg_091719_Item3_Final_JM_HSR_Board_Resolution_PA_NEPA_Exec_Rev.pdf

1678-2177

encountered certain unavoidable and unpredicted delays as a result of the pandemic. One of our key consultants was unable to review and comment on the DEIR/EIS due to the COVID-19 illness, and a replacement could not be found in time. Grassland Group staff were also required to work from home with laptop computers and personal printers, which made it very difficult to efficiently view, download, and analyze the large and voluminous documents that comprise the DEIR/EIS.

At the time of the DEIR/EIS’s release, the HSRA notified the public that copies of the Technical Reports that are referenced and relied upon in the DEIR/EIS were available at public libraries and county offices. However, these institutions were closed to the public during the entire comment period, due to the COVID-19 outbreak. Moreover, the “References” section of the DEIR/EIS included an extensive list of documents referenced in the DEIR/EIS, and for many of these documents no links, web addresses or other information was provided for where the materials could be obtained. The Grassland Group also realized that the underlying 2008 Program EIR/EIS that preceded this Project-level DEIR/EIS was no longer available on the HSRA website. The HSRA provided these documents electronically to the Grassland Group upon their request.

On May 22, 2020, the HSRA issued only a two-week extension of the public comment period. However, the Grassland Group and other stakeholders requested an extension of at least 30 days due to the COVID-19 pandemic and pursuant to the CEQA section 21092(b)(1), which requires that all documents referenced in an environmental review document be made available to the public *for the entire comment period*. In early June we were informed by telephone, without a supporting explanation, that the HSRA denied these requests for extension.

Given the unprecedented obstacles associated with the COVID-19 pandemic, and the voluminous materials that were provided in the middle of the public comment period, the Grassland Group was unable to fully review and comment on the DEIR/EIS and its many underlying reference documents and supporting materials, prior to the close of the comment period. This has compromised our ability to fully understand the Project and to develop meaningful comments. For these reasons, we reserve the right to supplement these comments before the Project reaches the HSRA Board of Directors for approval.

Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2178

IV. CEQA AND NEPA REQUIRE AGENCIES TO BE INFORMED ABOUT THE ENVIRONMENTAL CONSEQUENCES OF THEIR DECISIONS BEFORE THEY ARE MADE

CEQA has two basic purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project.¹⁷ “Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions *before* they are made. Thus, the EIR ‘protects not only the environment but also informed self-government.’”¹⁸

Second, CEQA directs public agencies to avoid or reduce environmental damage when possible by requiring alternatives or mitigation measures.¹⁹ If the project has a significant effect on the environment, the agency may approve the project only upon finding that it has “eliminated or substantially lessened all significant effects on the environment where feasible” and that any unavoidable significant effects on the environment are “acceptable due to overriding concerns” specified in CEQA section 21081.²⁰ NEPA has similar requirements.²¹

In order for the DEIR/EIS to satisfy these basic purposes, it must include: (1) a complete project description, including appurtenant Project facilities and lighting features; (2) identification of alternatives through or around the GEA supported by findings regarding significance of environmental impacts, feasibility of mitigation and feasibility of alternatives; (3) an accurate and complete description of the project setting, including an adequate description of the existence and importance of internationally significant wetlands habitat and wildlife within the GEA; (4) identification of all potential environmental impacts of the Project on the wetland habitat and wildlife within the GEA, including but not limited to construction, operational, and growth-inducing impacts; and (5) identification of feasible and enforceable measures to mitigate potential impacts on the GEA.

¹⁷ CEQA Guidelines § 15002(a)(1).

¹⁸ *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564.

¹⁹ CEQA Guidelines § 15002(a)(2)-(3); see also *Berkeley Keep Jets Over the Bay Committee v. Board of Port Commissioners* (2001) 91 Cal.App.4th 1344, 1354; *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564; *Laurel Heights Improvement Assn. v. Regents of the University of California* (1988) 47 Cal.3d 376, 400.

²⁰ CEQA Guidelines § 15092(b)(2)(A)-(B).

²¹ 42 U.S.C. § 4332.

1678-2179

V. THE DEIR/EIS FAILS TO ADEQUATELY DESCRIBE THE PROJECT

An accurate and stable project description is the *sine qua non* of an informative, legally adequate EIR/EIS.²² A legally sufficient project description must contain a “general description of the project’s technical, economic, and environmental characteristics, considering the principal engineering proposals if any and supporting public service facilities.”²³ A complete project description must include a description of significant construction, engineering and operational aspects of the Project.

The DEIR/EIS does not describe the location, height, or abundance of proposed Project nighttime lighting, either during Project construction or operations. The DEIR/EIS does not describe the types of light bulbs that would be used, or their luminosity/brightness, nor does the DEIR/EIS disclose the expected daytime glare or reflection from the Project’s high-speed trains. As explained further in Sections VII.E and IX.A.3 of these comments, this information is essential to evaluating Project impacts in the GEA, because effects on wildlife depend on the illumination (light incident per unit area), intensity (number of photons per unit area), and spectral content (expressed by wavelength) of the proposed Project lighting.

The GEA working group repeatedly requested that this information be included in the DEIR/EIS, and also requested that the HSRRA prepare a Project Lighting Plan setting forth its commitments to avoid or minimize Project lighting in and around the GEA. Several examples of successful lighting plans for other development projects near the GEA were provided to HSRRA staff and consultants. Yet the DEIR/EIS fails to disclose any of its lighting plans for this segment of the Project.

The DEIR/EIS also fails to clearly describe the location of appurtenant operations and maintenance facilities. These facilities are a major component of the Project and will, themselves, result in numerous significant impacts to birds and wildlife related to habitat fragmentation, wildlife crossings, visual disturbance, nighttime lighting, and potential noise impacts. Many of these facilities are shown on the Preliminary Engineering Plans as having two “alternate locations,” for example: (1) the proposed Traction Power Paralleling stations near Volta Road and Boxcar Road; (2) the proposed Radio Tower Site near Wilson Road;

²² *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 192.

²³ CEQA Guidelines § 15124(c).

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(3) the proposed “ATC” structures near Wilson Road and Boxcar Road; and (4) the proposed Switching Station near the Santa Fe Grade.²⁴

The GEA working group reviewed these Preliminary Engineering Plans with the HSRA and requested that such facilities be located in already-disturbed areas and as far from wetland habitat and state wildlife areas as possible. However, as with other areas of concern, the DEIR/EIS does not appear to reflect these discussions at all. For example, despite a direct request from the GEA working group to locate the proposed Switching Station away from the Los Banos Wildlife Area and Grassland Environmental Education Center, the Preliminary Engineering Plans still show that facility in one of two “alternate” locations adjacent to the Wildlife Area and Education Center.

The HSRA’s failure to disclose the actual planned locations for these facilities or describe the associated nighttime lighting, let alone any measures that the HSRA intends to take to reduce impacts to the GEA, leaves the DEIR/EIS Project description uninformative and legally inadequate.

1678-2181

VI. THE DEIR/EIS FAILS TO CONSIDER LESS DAMAGING PROJECT ALTERNATIVES

All four of the proposed Project Alternatives are identical in the San Joaquin Valley subsection of the Project, containing no differences in alignment, design, or other Project features.²⁵ East of the Interstate-5 overcrossing, the alignment would be predominantly on embankment along the south side of Henry Miller Road to Carlucci Road, travelling on viaduct over major watercourses within and adjacent to the GEA.

The Grassland Group has long advocated for an alternative alignment that would avoid bisecting the middle of the GEA,²⁶ but the HSRA repeatedly rejected that option. The Grassland Group also requested an analysis of design alternatives that would avoid or reduce impacts through the GEA, including a below-grade design or an above-grade enclosure. The DEIR/EIS, however, fails to include an

²⁴ DEIR/EIS, Volume III, Plans for Alternative 4, Book 4B, Sheets 49-52, 54-55.

²⁵ DEIR/EIS pp. 2-69 (Figure 2-46), 2-79 (alignment and guideway in the San Joaquin Subsection will be similar under all four alternatives).

²⁶ Expert biologist Renée Owens maintains that the DEIR/S presents inadequate rationale why an alternative that eliminates the train alignment through or adjacent to the GEA is not the preferred environmental alternative, and concludes that the HSRA lacks substantial evidence for why such an alternative is not the primary consideration as the Least Environmentally Damaging Alternative. Owens Comments, **Attachment A**, p. 26.

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analysis of these feasible alternatives or provide a reasoned explanation for why they are not feasible. The HSRA has also denied multiple requests by the California Department of Fish and Wildlife to conduct an analysis of impacts to state wildlife areas under Section 4(f) of the U.S. Department of Transportation Act. These omissions are fatal flaws in the DEIR/EIS.

1678-2182

A. CEQA and NEPA Require a Meaningful Analysis of a Below-Ground Alternative in the San Joaquin Subsection of the Project

CEQA requires that an EIR provide a discussion of project alternatives that allows for meaningful analysis.²⁷ CEQA directs public agencies to avoid or reduce environmental damage when possible by requiring the consideration of environmentally superior alternatives.²⁸ An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of its significant effects, and evaluate the comparative merits of the alternatives.²⁹ This analysis should focus on alternatives that would “avoid or substantially lessen any significant effects of the project, *even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.*”³⁰ “[P]ublic agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects.”³¹

Similarly, under NEPA, federal agencies must consider alternatives to their proposed actions as well as their environmental impacts.³² The purpose of the discussion of alternatives is both to support the decision makers and to inform public participation. Thus, “[a]n EIR’s discussion of alternatives must contain a quantitative analysis sufficient to allow informed decision making.”³³ The HSRA must “[r]igorously explore and objectively evaluate all reasonable

²⁷ *Laurel Heights Improvement Assn. v. Regents of the University of California* (1988) 47 Cal.3d 376, 403.

²⁸ CEQA Guidelines §§ 15002(a)(2), (3); *Berkeley Keep Jets Over the Bay Com. v. Board of Port Cmrs.* (2001) 91 Cal.App.4th 1344, 1354; *Laurel Heights Impvt. Ass’n v. Regents of the Univ. of Cal.* (1998) 47 Cal.3d 376, 400.

²⁹ CEQA Guidelines § 15125.6.

³⁰ CEQA Guidelines, § 15126.6(a), (b) (emphasis added); see *Citizens for Quality Growth v. City of Mount Shasta* (1988) 198 Cal.App.3d 433, 443-445.

³¹ Pub. Resources Code §§ 21002, 21002.1.

³² 40 C.F.R. § 1502.14.

³³ *Laurel Heights Improvement Assn. v. Regents of the Univ. of Cal.* (1988) 47 Cal.3d 376, 404; *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 733-735.

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alternatives...”³⁴It is “absolutely essential to the NEPA process that the decision-maker be provided with a detailed and careful analysis of the relative environmental merits and demerits of the proposed action and possible alternatives, a requirement that [courts] have characterized as ‘the linchpin of the entire impact statement.’”³⁵ This is particularly true in cases of “unresolved conflicts concerning alternative uses of available resources.”³⁶

The DEIR/EIS must also comply with the executive wetlands order issued by President Carter. Executive Order 11990 requires federal agencies to “avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds: (1) that there is no practicable alternative to such construction, and (2) that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use.”³⁷ This executive order has been held judicially enforceable.³⁸

All of the proposed Project alternatives include only aerial and at-grade embankments through the GEA, both of which would be detrimental to the surrounding environment. As disclosed in the DEIR/EIS, there are general and pervasive impacts of loud and frequent disturbances of birds, and transportation corridors can cause significant disturbance and mortality of birds and other wildlife.³⁹ This can affect species richness and abundance, cause behavioral changes, and result in frequent bird collisions. Noise, visual disturbance, the interruption of flight paths, and nighttime lighting can cause wildlife disorientation, attraction or repulsion (affecting movement), and can adversely affect bird reproduction, fitness, communication, community ecology, competition, predation, and behavior (foraging, social behavior).

The Grassland Group, landowners within their boundaries, and other organizations and individuals are very concerned that the Project will cause certain species to avoid or change their use of protected GEA wetland habitat, fragment their movement patterns between the north and south Grassland areas, and reduce species abundance, health, and reproduction. If the GEA cannot be

³⁴ 40 C.F.R § 1502.14(a).

³⁵ *Natural Res. Def Council v. Callaway*, 524 F.2d 79, 92 (2d Cir. 1975); *All Indian Pueblo Council v. United States*, 975 F.2d 1437, 1444 (10th Cir. 1992) (thorough discussion of alternatives is “imperative”).

³⁶ See 42 U.S.C. § 4332(E); *California v. Block*, 690 F.2d 753, 766-67 (9th Cir. 1982).

³⁷ Executive Order 11990, 42 Fed. Reg. 26,961 (1977).

³⁸ *City of Carmel-by-the-Sea v. United States Dep’t of Transp.*, 123 F.3d 1142 (9th Cir. 1997).

³⁹ DEIR/EIS, pp. 3.7-51, 3.7-110 to 3.7-115.

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avoided, the Grassland Group and others urged the HSRA to include in its design and cost estimates Project design alternatives that would substantially reduce wildlife disturbance by utilizing a below-grade design or an above-grade physical shield.

1678-2183

In February 2018, after meeting with the Grassland Group, HSRA Project engineers conducted an analysis and concluded that there are no physical or engineering barriers to constructing a below-grade alternative through the GEA. The engineers developed detailed cost estimates for several below-grade options, using various methods and distances.

BELOW-GRADE ALTERNATIVES ANALYZED	COST (\$ MIL)
Existing Design, Viaduct (1.5 miles)	\$390
Bored Tunnel (2.1 miles)	\$1,116
Cut/Cover Tunnel (50' depth, 2.1 miles)	\$1,114
Bored Tunnel (4.5 miles)	\$1,327

Cost estimates prepared by HSRA, dated 2/16/2018



Illustration of Below-Ground GEA Tunnel Design Prepared by HSRA, dated 2/16/2018

Thus, the HSRA has already analyzed these alternatives but improperly omitted them from the alternatives described in the DEIR/EIS. A below-grade design would alleviate significant environmental concerns and cost uncertainties and would provide additional cost savings from avoided mitigation requirements. According to the table above, in 2018 the HSRA estimated that a cut-and-cover tunnel design through the Mud Slough corridor would cost approximately \$724 million more than the proposed above-ground viaduct design. Additional

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information in the DEIR/EIS estimates that the cost of mitigation associated with biological disturbance from the viaduct design through the Mud Slough corridor would range from \$100 to \$130 million.⁴⁰ Presuming that a tunnel would eliminate disturbance and associated mitigation costs, the potential cost increase of a below-grade alternative in the Mud Slough corridor is approximately \$600 million.

This cost difference is less than the cost range for the four alternatives that the DEIR/EIS analyzed for the western portion of the Project, which ranged from a total of \$13.6 billion (Alternative 4) to \$20.8 billion (Alternative 3).⁴¹ It is arbitrary and unreasonable to exclude the previously explored below-grade alternatives while at the same time including higher-priced alternatives for other portions of the proposed Project alignment. The HSRA has not provided a reasoned explanation for why it considered but rejected this proposed design alternative.

1678-2184

B. The HSRA Must Consider Alternatives to Avoid Substantial Impairment of the Volta and Los Banos Wildlife Areas and Adjacent Conservation Easements under Section 4(f) of the Department of Transportation Act

Section 4(f) of the U.S. Department of Transportation (DOT) Act of 1966 prohibits the Federal Railroad Administration (FRA) or any State that has assumed delegated FRA responsibility from approving a transportation project “on publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state or local significance” unless “(1) *there is no prudent and feasible alternative to using that land*; and (2) such program includes *all possible planning to minimize harm* to such park, recreational area, wildlife and waterfowl refuge, or historic site resulting from the use.”⁴²

Section 4(f) requires the HSRA (which has delegated authority from the FRA) to consider alternatives, and it creates a presumption that public parks and natural resource areas may not be used for transportation projects unless truly compelling reasons indicate that no alternative route is possible.⁴³ Section 4(f) also applies to conservation easements held by a government agency for the purpose of

⁴⁰ DEIR/EIS, Appendix 3.7-C, p. 7, Table 1.

⁴¹ See HSRA, *San Jose to Merced Project Section State’s Preferred Alternative Fact Sheet*, p. 4 (Summer 2019), available at: https://www.morgan-hill.ca.gov/DocumentCenter/View/29213/SJ-to-M_PA-Fact-Sheet_Summer-2019

⁴² 49 U.S.C. § 303(c) (emphasis added).

⁴³ *Citizens to Preserve Overton Park, Inc. v. Volpe* (1971) 401 U.S. 402, 412.

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wildlife and waterfowl habitat protection.⁴⁴ Section 4(f) creates a “specific and explicit bar” to the sacrifice of these public resources for transportation projects. “Only the most unusual situations are exempted.”⁴⁵ Under section 4(f), the protection of state and natural resource areas and conservation easements take precedence over other Project considerations, including cost and directness of route.⁴⁶

The prohibitions under Section 4(f) apply even if land from a wildlife area or conservation easement is not directly taken for a project, but the project will nonetheless impact the wildlife area or easement.⁴⁷ A project can result in the “constructive use” of a wildlife or waterfowl refuge when its “proximity impacts are so severe that the protected activities, features, or attributes that qualify the property for protection under Section 4(f) are substantially impaired.”⁴⁸ Under the federal regulations that implement Section 4(f), interference with wildlife viewing or sleeping areas, or the substantial diminishment of wildlife habitat at a wildlife area, all constitute **constructive use**:

(1) *The projected noise level increase attributable to the project substantially interferes with the use and enjoyment of a noise-sensitive facility, such as sleeping in the sleeping area of a campground, or viewing wildlife in an area of a wildlife and waterfowl refuge intended for such viewing.*

(2) *The ecological intrusion of the project substantially diminishes the value of wildlife habitat in a wildlife and waterfowl refuge adjacent to the project, substantially interferes with the access to a wildlife and waterfowl refuge when such access is necessary for established wildlife migration or critical life cycle processes, or substantially reduces the wildlife use of a wildlife and waterfowl refuge.*⁴⁹

In the GEA, the proposed Project alignment runs immediately adjacent to two public wildlife/waterfowl refuges, the Los Banos State Wildlife Area and the Volta State Wildlife Area, managed by the CDFW. The Project also crosses through a permanently protected conservation easement held by CDFW for waterfowl habitat protection. The Grassland Group and CDFW have repeatedly asked the

⁴⁴ Mandelker, NEPA Law and Litigation (2nd Ed. 2001) § 2:19, p. 2-45.

⁴⁵ *Citizens to Preserve Overton Park* at 411.

⁴⁶ See *Id.* at 412-13.

⁴⁷ Mandelker, NEPA Law and Litigation (2nd Ed. 2001) § 2:19, fn. 1, p. 2-44.

⁴⁸ 23 C.F.R. 774.15(a).

⁴⁹ *Id.*

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HSRA to conduct a Section 4(f) analysis and take all feasible measures to avoid or minimize impacts to these lands. However, the cursory Section 4(f) analysis of the Volta and Los Banos Wildlife Areas in Chapter 4 of the DEIR/EIS does not adequately address the constructive use of these areas, fails to address the direct use of CDFW's easement land, and is inconsistent with other portions of the DEIR/EIS.

1678-2185

Chapter 4 does not analyze the “ecological intrusion” caused by the Project, or the Project’s interference with wildlife viewing or sleeping areas, despite those being express requirements for analyzing wildlife areas under 23 C.F.R. 774.15(a). The regulation requires a finding of constructive use if a transportation project would substantially interfere with the use and enjoyment of a “noise-sensitive facility” such as a camping area or wildlife viewing area, or if it would diminish the value of wildlife habitat or wildlife use.

Detailed noise modeling conducted by the HSRA in another portion of the DEIR/EIS analyzed impacts to wildlife habitat at the Los Banos Wildlife Area and the nearby CDFW habitat easement. Based on that modelling, the HSRA determined that the operation of Project trains would substantially and adversely affect wildlife habitat for a *minimum* of 450 feet from the trains as they pass by these public lands, even with the most protective sound-barrier mitigation in place.⁵⁰ With less protective measures, such as the 17.5-foot sound wall proposed for trains that pass by the Volta Wildlife Area, significant impacts are expected to occur more than 500 feet from the trains.⁵¹ It is worth noting that the alignment in this area is also very close to the Volta Elementary School.

Overall, the DEIR/EIS calculates that wildlife habitat on *more than 1,200 acres* will be significantly impaired, and much of this land is within the two state wildlife areas and CDFW conservation easement that require a Section 4(f) analysis.⁵² Chapter 4 of the DEIR/EIS ignores these findings of ecological intrusion.

⁵⁰ DEIR/EIS Appendix 3.7-C, *HSR Guideway Enclosure Grasslands Ecological Area*, Appendix 5, *Noise Analysis Memo*, pp. 4-14, Table 1 and Figures 2-11. (As described in Section X below, a stringent noise barrier is not guaranteed.)

⁵¹ *Id.*

⁵² DEIR/EIS p. 3.7-115, Table 3.7-21, *Extent of Noise Impacts by Mechanism* (as described in Sections VIII.B and IX.8.1 below, this is a gross underestimate of total affected acreage in the GEA).

1678-2186

The Grassland Environmental Education Center is located approximately 640 feet from the Project alignment. (An introductory video about the Education Center can be found at <https://gwdwater.org/geec/>.) The Van Atta Interpretive Marsh Trail and other publicly used trails with wildlife viewing areas are located adjacent to the Education Center. Grassland Fund staff use these areas for outdoor education programs. As a few examples, staff take students into the water to explore the wetlands while wearing waders, or they lead Boy Scouts on a required “Webelos Walkabout Adventure” using trails that pass very close to the Project alignment. The detailed noise modeling conducted by the HSRA to analyze impacts to wildlife habitat in this vicinity shows Project noise levels of 77 to 84 dBA Lmax, which will significantly impair those camping experiences and substantially reduce wildlife viewing opportunities.⁵³

There are also two public camping areas, one located in the main parking lot of the Los Banos Wildlife Area (less than 150 feet from the Project alignment) and the other located next to the hunting check station at the Volta Wildlife Area (less than 250 feet from the Project alignment). Again, the noise modeling shows Project noise levels of 77 to 84 dBA Lmax at these locations, which will significantly impair those camping experiences.



Students with Grassland Fund staff at the Grassland Environmental Education Center

1678-2187

The Section 4(f) analysis improperly relies on the *San Jose to Merced Project Section Noise and Vibration Technical Report* when analyzing noise impacts at the Volta and Los Banos Wildlife Areas, but that report has no bearing on impacts to wildlife and wildlife-based recreational uses. The *Noise and Vibration Technical Report* analyzes impacts to people and livestock, and specifically states that

⁵³ DEIR/EIS Appendix 3.7-C, *HSR Guideway Enclosure Grasslands Ecological Area*, Appendix 5, *Noise Analysis Memo*, pp. 4-14, Table 1 and Figures 2-11.

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“[n]oise effects on wildlife are evaluated separately in the *San Jose to Merced Project Section Biological and Aquatic Resources Technical Report*.”⁵⁴

Based on the inapplicable *Noise and Vibration Technical Report*, the Section 4(f) analysis improperly categorizes the state wildlife areas as a “Category 3” land use, which is the same category as industrial and office uses. The technical report and corresponding Section 4(f) analysis predict only “moderate” noise impacts for Category 3 land uses, but this is inconsistent with the habitat-specific noise study conducted for the GEA and described above. Under Section 4(f), wildlife viewing and sleeping areas are considered “noise-sensitive” facilities and should not be grouped together with industrial land uses for purposes of the Section 4(f) analysis.

1678-2188

The Section 4(f) analysis in Chapter 4 of the DEIR/EIS also greatly understates the visual effects of the Project trains on users of these public lands. It fails to acknowledge that a large aerial structure will begin at the Los Banos Wildlife Area, incorrectly suggesting that the only Project features visible from the wildlife area and Environmental Education Center would be on an embankment and would pose only “minor changes to the visual environment.”⁵⁵ For both the Los Banos and Volta Wildlife Areas, the Section 4(f) analysis concludes that the Project would “be visible from only a very small portion of the wildlife area” and therefore “visual impacts would be minor.”⁵⁶ This ignores the fact that the trains will be elevated on viaducts near both wildlife areas, and that especially at the Los Banos Wildlife Area, a significant amount of public use is concentrated within that “small portion” that is adjacent to the Project, including the Grassland Environmental Education Center and Van Atta Interpretive Marsh Trail.

1678-2189

Substantial conservation investments have been made to protect and enhance habitat at the Los Banos and Volta Wildlife Areas and CDFW easement lands, and to support the high-quality outdoor experiences that these areas provide. Section 4(f) requires the HSRA to take into account those public investments that have been made to protect this critically important ecological resource, by first exploring all reasonable and prudent alternatives to the constructive use of those lands, and if that is not feasible, by employing all possible planning efforts, including coordination with and concurrence from CDFW, to

⁵⁴ DEIR/EIS, TR-03, *Noise and Vibration Technical Report*, p. x.

⁵⁵ DEIR/EIS p. 4-92.

⁵⁶ *Id.* at pp. 4-91 and 4-92.

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minimize harm by including all reasonable measures to minimize harm or mitigate impacts.⁵⁷

The DEIR/EIS’s conclusion that there would be no permanent constructive use of CDFW lands in the GEA is incorrect. The failure to properly evaluate these areas, propose reasonable and prudent alternatives, and employ all possible planning efforts to minimize harm is not in compliance with the requirements of Section 4(f) of the DOT Act.

1678-2190

VII. THE DEIR/EIS FAILS TO PROPERLY TIER ITS ANALYSIS AND MITIGATION TO THE 2008 PROGRAM EIR/EIS

Under CEQA, tiering means “using the analysis of general matters contained in a broader EIR” with a later EIR that is prepared for a narrower project, “incorporating by reference the general discussions from the broader EIR.”⁵⁸ In order to tier a project-level EIR/EIS to an earlier program-level EIR/EIS, the project-level EIR/EIS must refer to the earlier one and must be “consistent with the program” for which the earlier EIR/EIS was approved.⁵⁹

The DEIR/EIS describes itself as a “second-tier EIR/EIS that tiers off of first-tier program EIR/EIS documents,” including the 2005 Program EIR/EIS for the statewide high-speed rail project and the 2008 Bay Area to Central Valley Program EIR/EIS for the Project, as partially revised in 2012.⁶⁰ These older Tier 1 EIR/EISs “established the broad framework” that “serves as the foundation for the Tier 2 environmental review” contained in the DEIR/EIS.⁶¹ The analysis in the DEIR/EIS purportedly “builds on the earlier decisions and program EIR/EISs and provides more site-specific and detailed analysis.”⁶²

However, the DEIR/EIS is not consistent with the July 2008 Bay Area to Central Valley Program EIR/EIS, does not use the framework of analysis that was previously adopted, and does not incorporate or comply with the relevant commitments contained in the program EIR/EIS. The 2008 Program EIR/EIS committed the HSRA to **specific measures that would be taken as part of the project-level DEIR/EIS to address potential impacts on the GEA:**

⁵⁷ 49 U.S.C. § 303(c)(2).

⁵⁸ CEQA Guidelines §§ 15152(a), 15385; *see also* Public Resources Code § 21068.5.

⁵⁹ Public Resources Code § 21094.

⁶⁰ DEIR/EIS p. S-4.

⁶¹ *Id.* at p. S-5.

⁶² *Id.*

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(A) An appropriate field survey of biological resources within areas of the GEA directly affected by proposed HST tracks or facilities, including San Joaquin kit fox, giant garter snake and important waterfowl nesting and breeding habitat to be **included in the project-level environmental analysis**.

(B) **Project-level evaluation** of the potential impacts to biological resources in the GEA from HST construction, operation and maintenance, including, but not limited to, ecosystem fragmentation impacts, impacts to wildlife movement corridors, impacts to waterfowl flight patterns, noise impacts, startle and vibration impacts, collision impacts, electrocution impacts, glare impacts, water quality and water flow impacts, impacts on waterfowl nesting and breeding, impacts on migratory habits, impacts from construction traffic, impacts of equipment storage and laydown areas, impacts from blasting and pile-driving, and impacts from temporary disruption of water supply deliveries.

(C) Minimize the footprint of necessary HST facilities to the extent feasible in the HST alignment crossing the GEA;

(D) In consultation with the California Department of Fish and Game, the United States Fish and Wildlife Service, and the Grassland Water District, an **evaluation in the project-level environmental analysis** of the timing of construction activities within the GEA and measures to minimize disturbance during nesting and flooding seasons.

(E) In consultation with the California Department of Fish and Game, the United States Fish and Wildlife Service, and the Grassland Water District, an **evaluation in the project level environmental analysis** of non-glare and directed lighting and appropriate measures to avoid disturbance impacts to sensitive species in areas of the GEA directly affected by proposed HST facilities.

(F) Acquisition from willing sellers by the Authority, or by other entities designated and supported by the Authority, of agricultural, conservation and/or open space easements encompassing at least 10,000 acres and generally located along or in the vicinity of the HST alignment and within or adjacent to the designated GEA. This measure would reduce impacts to and support conservation of wetlands and sensitive ecological areas, as well as limit urban encroachment in the vicinity of the HST through the GEA. The focus for these easements would be in areas undergoing development pressures, such as the areas around Los Banos and Volta,

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and/or areas that would be most appropriate for ecological conservation or restoration. The eventual locations and total acreage for these easements would be **determined in conjunction with the project-level environmental analysis** and decisions addressing the Gilroy to Merced portion of the HST system and in consultation with the California Department of Fish and Game, the United States Fish and Wildlife Service, and the Grassland Water District.⁶³

1678-2191

A. No Appropriate Field Survey of Biological Resources

The 2008 Program EIR/EIS committed the HSRA to conduct an “appropriate field survey” of biological resources within areas of the GEA directly affected by the proposed Project, and the results were to “be included in the project-level environmental analysis.”⁶⁴ As described in the attached comments from expert biologist Renée Owens, appropriate field surveys for biological resources were not completed, despite the fact that HSRA had plenty of time to do so between the 2008 Program EIR/EIS and this DEIR/EIS.⁶⁵ The DEIR/EIS provides misleading and incomplete information about the “reconnaissance” surveys that were conducted for the Project, and the rationale provided in the DEIR/EIS for not conducting any focused field biological surveys is flawed.⁶⁶

Beginning in 2017, the Grassland working group began inquiring about the HSRA’s plans to complete biological surveys. The GWD and GRCD offered to help facilitate access to private properties of affected landowners within their boundaries. The HSRA did not avail itself of this offer. Our records show that the HSRA asked CDFW for permission to conduct surveys on its state wildlife areas as late as April 2019, and CDFW promptly granted access. However, the HSRA has provided no evidence that it conduct any adequate field surveys for biological resources there or anywhere else in the GEA.

The reconnaissance-level surveys described in the DEIR/EIS’s *Biological and Aquatic Resources Technical Report* consisted of several days of wetland delineations (not the same as biological resource surveys) and a few days of roadside surveys that could not possibly have resulted in the collection of adequate

⁶³ Final Bay Area to Central Valley High Speed Train (HSR) Program EIR/EIS, Volume 1: Report, May 2008, pp. 3.15-70 - 3.15-71 (emphasis added).

⁶⁴ *Id.*

⁶⁵ Owens Comments, Attachment A, pp. 2-5.

⁶⁶ *Id.*

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data about on-the-ground conditions.⁶⁷ The DEIR/EIS acknowledges that the HSRA conducted no wildlife surveys, no rare plant surveys, and no focused special-status species surveys. Instead, the DEIR/EIS relies on predictive models to delineate the location and extent of sensitive species and habitats.

In Ms. Owen's longtime experience as a field biologist, it is rarely difficult to obtain access to a Project site for the purpose of conducting adequate field surveys, and the HSRA has not provided sufficient rationale for its failure to do so.⁶⁸ Sufficient time is required to complete proper biological surveys, including site visits in different seasons. Ms. Owens also provides her professional opinion that predictive models do not adequately capture the full scope of existing conditions and status of biological resources, or inform the reviewing public of essential information about environmental baseline. Ms. Owens concludes that for this Project, particularly because compensatory mitigation measures are tied to estimations of existing biological resources in and around the Project alignment, the lack of proper field surveys results in an underestimation of potential impacts and necessary mitigation.⁶⁹

Not only does the HSRA's failure to conduct field surveys in the GEA run afoul of the commitments made in the 2008 Program EIR/EIS, it also results in a failure to establish an adequate environmental baseline, failure to properly estimate the significant impacts to biological resources that the Project will cause, and failure to adequately mitigate those impacts to a less-than-significant level.

1678-2192

B. Multiple Impacts Not Addressed

In addition to conducting field surveys, the 2008 Program EIR/EIS committed the HSRA to undertake a Project-level evaluation of potential impacts to biological resources in the GEA including, but not limited to, "ecosystem fragmentation impacts, impacts to wildlife movement corridors, impacts to waterfowl flight patterns, noise impacts, startle and vibration impacts, collision impacts, electrocution impacts, glare impacts, water quality and water flow impacts, impacts on waterfowl nesting and breeding, impacts on migratory habits, impacts from construction traffic, impacts of equipment storage and laydown areas,

⁶⁷ *Id.* at p. 2-3; DEIR/EIS, *Biological Resources Technical Report*, Sections 4-4 and 4-5.

⁶⁸ Owens Comments, **Attachment A**, pp. 4-5.

⁶⁹ *Id.* at pp. 5-6.

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impacts from blasting and pile-driving, and impacts from temporary disruption of water supply deliveries."⁷⁰

Many of these impacts are not evaluated at all for the GEA, most notably ecosystem fragmentation, impacts to waterfowl flight patterns, collision and electrocution impacts, and glare impacts. Previous studies in the GEA show that ducks, for example, frequently fly after sunset from their daytime roost sites in one part of the GEA, over the Project alignment, to their nocturnal feeding sites.⁷¹ The DEIR does not analyze how the Project construction, operation, and maintenance will contribute to diverted flight paths, collisions and electrocutions of birds that regularly travel between the northern and southern portions of the GEA, or how waterfowl flight patterns may be permanently altered by the Project.

1678-2193

C. Project Footprint in the GEA Not Minimized

The 2008 Program EIR/EIS committed to "[m]inimize the footprint of necessary HST facilities to the extent feasible in the HST alignment crossing the GEA." However, the Draft EIR/EIS proposes to locate a large Maintenance of Way Siding Facility (MOWS) immediately adjacent to the GEA's eastern boundary on Henry Miller Avenue between Box Car and Turner Island Roads, plus the following facilities within the GEA boundary: two Traction Power Paralleling stations, two construction staging areas, two Radio Tower Sites, several "ATC" structures, and a Switching Station.⁷²

There is no substantial evidence that the HSRA made an effort to site these facilities away from the GEA, to minimize their footprint, or, if not feasible to site them elsewhere or reduce the footprint, to locate them strategically so as to minimize wildlife disturbance.

1678-2194

D. GEA Construction Timing Measures Not Developed

Project construction is expected to take a total of 1.5 years in the GEA.⁷³ The 2008 Program EIR/EIS committed the HSRA to consult with the CDFW, USFWS, and Grassland Water District to evaluate *in the project-level environmental analysis* the "timing of construction activities within the GEA and measures to

⁷⁰ Final Bay Area to Central Valley High Speed Train (HSR) Program EIR/EIS, Volume 1: Report, May 2008, pp. 3.15-70 - 3.15-71 (emphasis added).

⁷¹ Fleskes, Pintail North-South Flight Paths in the Grassland Ecological Area, *Transactions of the Western Section of the Wildlife Society* (2002/2003), 38/39:22-26, p. 3.

⁷² DEIR/EIS, Volume III, Plans for Alternative 4, Book 4B, Sheets 49-52, 54-55.

⁷³ DEIR/EIS p. 3.12-89.

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minimize disturbance during nesting and flooding seasons.”⁷⁴ The DEIR does not achieve compliance with this requirement.

The Grassland Group has repeatedly asked for a meaningful evaluation of the potential impacts of construction activities on the GEA. In their 2007 Comments, we urged that the duration of noisy and invasive construction activities through and adjacent to the GEA may severely disrupt biological species, habitat, water quality, air quality, and recreation. Those comments specifically requested that the DEIR/EIS include an analysis of the impacts of truck and other vehicular traffic, equipment storage and laydown areas, blasting and pile-driving, and temporary disruption of water supply deliveries.

Instead, the DEIR simply expects waterfowl and recreationalists to temporarily move somewhere else during construction, as summarized in the DEIR’s findings regarding the Socioeconomics and Community impacts:

Construction noise could affect nesting waterfowl in the GEA. However, while construction noise could result in birds nesting farther from the noise source, it would not likely drive them from the area altogether, given the overall size of the wetland ecosystem. Because the waterfowl hunting clubs are not adjacent to project construction, it is not anticipated that construction noise would affect waterfowl hunting at the various clubs in the area. Furthermore, the Authority would develop a CMP and include measures in the project to control noise levels (SOCIO-IAMF#1, NVIAMF#1). Installation of noise-reducing measures would minimize the impact on ducks and geese in the area. Because construction would occur over 1.5 years at any given location, waterfowl hunting occurs during winter, and the hunting clubs are outside the main construction area, it is expected that waterfowl would likely move to other areas within club boundaries that are not affected by increased noise.⁷⁵

These conclusions in the DEIR are inadequate. The DEIR acknowledges adverse impacts from construction, particularly during the winter, but argues that there are “other areas” where the species and recreationalists can go to avoid adverse impacts during construction. The referenced Impact Avoidance and Mitigation Measures are either inapplicable or extremely vague and they do not address GEA impacts: SOCIO-IAMF#1 requires a Construction Management Plan

⁷⁴ Final Bay Area to Central Valley High Speed Train (HSR) Program EIR/EIS, Volume 1: Report, May 2008, pp. 3.15-70 - 3.15-71.

⁷⁵ DEIR/EIS p. 3.12-89.

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to “minimize impacts on low-income households and minority populations,” while NV-IAMF#1 requires preparation of an internal “technical memorandum” documenting noise-reduction practices such as routing truck traffic away from residential streets or combining noisy operations “so that they occur in the same period.”⁷⁶

These measures were not developed in consultation with the affected GEA resource agencies, they do not attempt to address construction timing, and they are insufficient to minimize disturbance during construction. This constitutes a violation of the 2008 Program EIR/EIS.

E. No GEA Lighting and Glare Reduction Measures Proposed

In the 2008 Program EIR/EIS, the HSRA committed to work with GEA stakeholders on light and glare reduction measures, by conducting “an evaluation in the project level environmental analysis of non-glare and directed lighting and appropriate measures to avoid disturbance impacts to sensitive species in areas of the GEA directly affected by proposed HST facilities.” The HSRA agreed to evaluate such measures “in consultation with the California Department of Fish and Game, the United States Fish and Wildlife Service, and the Grassland Water District.”⁷⁷

In 2018, the HSRA and the GEA stakeholder working group held several meetings in which lighting and glare impacts and mitigation measures were evaluated and discussed. In November 2018, the GEA working group provided the HSRA with an extensive list of studies showing the adverse effects of nighttime lighting, glare, and other significant impacts such as noise and vibration.⁷⁸ The GEA working group also gave a presentation that reviewed existing scientific literature, analyzed potential lighting and glare impacts in the GEA, and proposed mitigation measures. The working group first requested more information in order to evaluate the Project’s impacts, including the location, height and abundance of proposed Project lighting (during construction and operation), the types of light

⁷⁶ DEIR/EIS, Appendix 2-E, *Project Impact Avoidance and Minimization Features Analysis*, pp. 2-E-28 and 2-E-31 to 2-E-32.

⁷⁷ Final Bay Area to Central Valley High Speed Train (HSR) Program EIR/EIS, Volume 1: Report, May 2008, pp. 3.15-70 - 3.15-71 (emphasis added).

⁷⁸ GEA Working Group, *List of Literature on Wildlife Disturbance, Behavioral Effects, and Mitigation* (November 26, 2018) (Attached hereto as **Attachment C**; the studies were provided to the HSRA and their relevant findings discussed herein are incorporated by reference into these comments).

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bulbs to be used (and their brightness), and the expected daytime glare or reflection from the Project's high-speed trains.⁷⁹

The working group then presented six proposed mitigation measures to address lighting and glare impacts in the GEA:

- (1) No nighttime lighting on the railway within visual distance of the GEA (both during construction and operation);
- (2) No non-essential lighting on Project buildings or structures within visual distance of the GEA;
- (3) For any essential lighting within visual distance of the GEA (for security or worker safety), a commitment to measures such as motion sensors, height limits, shielding, and bird-friendly light bulbs;
- (4) Train window design to reduce night lighting spill from passing trains;
- (5) Train headlight design using minimum required luminosity and bird-friendly light bulbs; and
- (6) Trains designed using materials or colors that reduce sunlight glare.⁸⁰

HSRA staff informed the GEA working group that nighttime lighting would not be used within the GEA, however that commitment is not reflected in the DEIR/EIS. All but ignoring the detailed consultation between the HSRA and the GEA working group, the DEIR/EIS fails to disclose any details about the project's nighttime lighting or daytime glare in the GEA, declines to make a finding of significant impacts from new light sources in the GEA, and requires only minimal and vague measures to reduce lighting impacts on a Project-wide scale. This directly contradicts the 2008 EIR/EIS and does not comply with CEQA and NEPA.

1678-2196

Although the DEIR/EIS fails to disclose the location, height, or intensity of lighting associated with the Project, it does provide some details about nighttime lighting features, structure locations, and activities that would adversely affect the GEA:

⁷⁹ GEA Working Group Presentation, *High Speed Rail and the GEA: Initial Responses to Preliminary Impacts Analysis* (2018), p. 3 (Attached hereto as **Attachment D**).

⁸⁰ *Id.* at p. 9.

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- A Maintenance of Way Siding Facility (MOWS) would be constructed immediately adjacent to the GEA's eastern boundary, on Henry Miller Avenue between Box Car and Turner Island Roads. The facility would be "more active at night, with about 30 to 40 staff," and would include nighttime "perimeter lighting as well as floodlights for buildings, pathways, and trackwork";⁸¹
- Other facilities (besides the MOWS, the immediate train and track facilities, and several new road overcrossings) include: (1) two "TPF Parallel Stations," one near Volta Road and the other near Boxcar Road; (2) two large construction staging areas, one near Los Banos Creek and the other near the Santa Fe Canal; (3) two Radio Sites, one near Wilson Road and the other located east of the Mud Slough viaduct, (4) several "ATC" structures near Wilson Road and Boxcar Road; and (5) a Switching Station near the Santa Fe Grade (adjacent to the Los Banos Wildlife Area and Grassland Environmental Education Center);⁸²
- The Overhead Catenary System (OCS) that powers the trains "would be inspected nightly" along the entire Project right-of-way;⁸³
- Security lighting would be installed on buildings, including unused buildings on "excess properties" acquired by the HSRA.⁸⁴

For construction-related lighting impacts, the DEIR/EIS acknowledges that "[n]ighttime construction or security lighting could cause animals to delay or alter movement patterns because they may avoid lit areas," and concludes that this would be a significant impact.⁸⁵

For permanent operations-related lighting impacts, the DEIR/EIS repeatedly acknowledges that "[t]rain lights and nighttime lighting on permanent facilities" could "result in permanent, intermittent disturbance of wildlife movement."⁸⁶ The DEIR/EIS explains that nighttime lighting can cause behavioral changes in wildlife, and that "nighttime lighting impacts are expected to be greatest in natural settings, where baseline light levels are low, and in locations

⁸¹ DEIR/EIS p. 2-65.

⁸² DEIR/EIS, Volume III, Plans for Alternative 4, Book 4B, Sheets 49-52, 54-55.

⁸³ DEIR/EIS p. 2-133.

⁸⁴ *Id.* p. 2-145.

⁸⁵ DEIR/EIS p. 3.7-111.

⁸⁶ *Id.*

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1678-2196

where wildlife is known to move.”⁸⁷ The DEIR/EIS goes on: “HSR facilities with security lighting and train headlights produce light that could result in altered movement or foraging patterns in aerial species, particularly in birds.”⁸⁸ The DEIR/EIS provides several citations to studies of bird disorientation that could be caused by train headlights.

Despite these findings, the DEIR/EIS concludes that the impact of nighttime lighting from Project operations “under CEQA would be less than significant,” because “[w]hile artificial light from passing trains and HSR track and systems may result in altered movement or foraging patterns of terrestrial and aerial wildlife species, particularly in non-urban areas, such effects would be localized.”⁸⁹ The DEIR/DEIS also notes that security lighting on Project facilities “would not [be] expected to result in a substantial impact on birds because the impacts would be localized and stationary and because most bird species are diurnal” (active only in the day).⁹⁰

1678-2197

Despite the significant number of new structures, the uncertain timeline for construction, and the overall acknowledgment of potential lighting impacts on birds, the DEIR/EIS proposes only vague measures to reduce lighting impacts generally. These measures involve no consultation, oversight, permitting or enforcement by third-party agencies or entities other than the HSRA itself:

- For lighting impacts during construction, the relevant language of mitigation measure BIO-MM#76 states that the HSRA “would shield nighttime lighting to avoid illuminating wildlife movement corridors in circumstances where feasible.”⁹¹
- For lighting impacts during operations, no mitigation measures are proposed, but under proposed Project Impact Avoidance and Minimization Feature BIO-IAMF#12, the HSRA makes a general and unspecified commitment to use bird friendly lighting. This lighting commitment is not discussed in the main body of the DEIR/EIS but is found in Technical Appendix 2-E: “Use of facility lighting that does not attract birds or their prey to project sites. These include using non-steady burning lights (red, dual red and white strobe, strobe-like flashing lights) to meet Federal Aviation Administration requirements, using motion or heat sensors and

⁸⁷ DEIR/EIS p. 3.7-118.

⁸⁸ *Id.*

⁸⁹ *Id.*

⁹⁰ *Id.*

⁹¹ DEIR/EIS p. 3.7-167.

1678-2197

switches to reduce the time when lights are illuminated, using appropriate shielding to reduce horizontal or skyward illumination, and avoiding the use of high-intensity lights (e.g., sodium vapor, quartz, and halogen). Lighting will not be installed under viaduct and bridge structures in riparian habitat areas.”⁹²

Not only are these measures unenforceable and uncertain, as discussed in Section VII.B of these comments, but they are not “appropriate measures to avoid disturbance impacts to sensitive species in areas of the GEA directly affected by proposed HST facilities,” as was promised in the 2008 Program EIR/EIS. The DEIR/EIS must be revised to incorporate specific, enforceable, and protective mitigation to avoid lighting and glare impacts in one of the most sensitive open spaces in the Central Valley.

1678-2198

F. Easement Locations and Acreages Not Determined

The 2008 Program EIR/EIS committed to acquire “agricultural, conservation and/or open space easements encompassing at least 10,000 acres” within or adjacent to the GEA, to reduce impacts to and support the conservation of wetlands and sensitive ecological areas, as well as to limit urban encroachment in the vicinity of the Project through the GEA.⁹³ The 2008 EIR/EIS stated that the “locations and total acreage for these easements would be determined *in conjunction with the project-level environmental analysis* and decisions addressing the Gilroy to Merced portion of the HST system and in consultation with the California Department of Fish and Game, the United States Fish and Wildlife Service, and the Grassland Water District.”⁹⁴

The GEA working group (including the Grassland entities and many non-profits and public agencies), along with CDFW, USFWS, and the HSRA spent close to two years developing a scientific model and a map of the highest-priority locations for easement acquisitions in and around the GEA. The model, developed by conservation mapping expert Patrick Huber, used Marxan software to analyze various conservation objectives, such as habitat connectivity, secure water rights, potential urban encroachment areas, cropping patterns, and other factors. The resulting map identifies high, medium, and low conservation-priority parcels that are most suitable for easements that would meet a variety of the HSRA’s

⁹² DEIR/EIS, Appendix 2-E, p. 2-E-9.

⁹³ Final Bay Area to Central Valley High Speed Train (HSR) Program EIR/EIS, Volume 1: Report, May 2008, pp. 3.15-70 - 3.15-71 (emphasis added).

⁹⁴ *Id.*

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1678-2198

mitigation requirements, and would particularly meet the 10,000-acre GEA-related requirement set forth in the 2008 Program EIR/EIS.

The DEIR/EIS, however, does not describe or incorporate the 10,000-acre commitment, nor does it commit to executing that commitment in the manner that the Grassland working group, CDFW, USFWS, and the HSRA developed.⁹⁵ The DEIR/EIS must be revised to clearly describe the 10,000-acre easement commitment, and adopt the Marxan methodology agreed to by these resource agencies. The 2008 EIR/EIS committed to doing this “in conjunction with” this project-level DEIR/EIS and “in consultation” with CDFW, USFWS, and GWD.

VIII. THE DEIR/EIS FAILS TO ADEQUATELY ESTABLISH THE EXISTING ENVIRONMENTAL SETTING AGAINST WHICH THE DEIR/EIS IS REQUIRED TO ANALYZE THE PROJECT’S POTENTIALLY SIGNIFICANT IMPACTS

An accurate description of the environmental setting is critical because it establishes the baseline physical conditions against which a lead agency can determine whether an impact is significant.⁹⁶ Under CEQA and NEPA, an EIR/EIS must include a description of the physical environmental conditions in the vicinity of the project from both a local and regional perspective.⁹⁷ The EIR/EIS must provide an accurate description of the environmental baseline, because “[t]he impacts of the project must be measured against the ‘real conditions on the ground.’”⁹⁸

1678-2199

A. The DEIR/EIS Improperly Defines the Grassland Ecological Area and Omits It from a List of Conservation Areas

A serious flaw in the DEIR/EIS is that it fails to correctly identify, describe, and classify the GEA. These mistakes result in an improperly narrow analysis and

⁹⁵ The only two DEIR/EIS references are found in a discussion of Project alternatives in Appendix 2-I at p. 43 (“As part of the Program EIR/EIS Tier 1 environmental process, the Authority committed to ... the purchase of 10,000 acres of conservation easements to avoid and reduce impacts to wildlife species”), and a general statement repeated throughout Chapter 3.7 (e.g. pp. 3.7-140, -166, 171, -172) that proposed compensatory mitigation for biological resources “would be consistent with and would help advance mitigation commitments at the program level, including mitigation intended to address impacts in the GEA.”

⁹⁶ CEQA Guidelines § 15125(a).

⁹⁷ *Id.*; 40 C.F.R. § 1502.15.

⁹⁸ *Save Our Peninsula Committee v. Monterey Board of Supervisors* (2001) 87 Cal.App.4th 99, 121.

1678-2199

a significant underestimation of environmental impacts. The flaws in the DEIR/EIS were made in spite of our Scoping Comments, which specifically asked that the DEIR/EIS include “a full description of the GEA, including its location in relation to the proposed project,” a description of the importance of the area, and maps “showing where potential alignments may cross the GEA and denoting, for example, wildlife habitat, wildlife corridors, flyways, state and federal easement lands, proposed GEA buffer zones, and other significant resource areas.”⁹⁹

The GEA is designated as a wetland of worldwide importance under the Ramsar Convention, an international treaty to which the United States is a signatory.¹⁰⁰ The boundary map of this internationally recognized wetland is readily available online and attached here as **Attachment B**.¹⁰¹ The boundary of the GEA generally aligns with the federally designated Grasslands Wildlife Management Area (GWMA) (see Figure 1, below). The GWMA was established in 1979, and expanded in 2005, under the Migratory Bird Conservation Act, 16 U.S.C. §715 *et seq.* This federal designation authorizes the USFWS to acquire and manage habitat, including conservation easements, on farmland and open space deemed necessary for the conservation of migratory birds. Approximately 131,000 acres within the GWMA are protected in federal or state ownership or conservation easements, and tens of thousands of acres remain eligible under federal law for future protection.

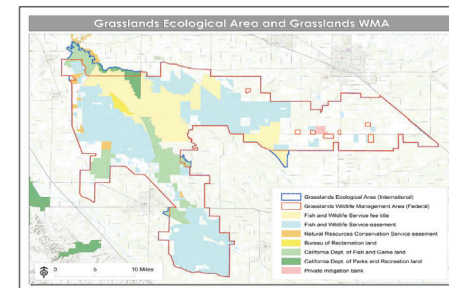


Figure 1 (Source: USFWS)

⁹⁹ GWD, GRCD, and Grassland Fund Scoping Comments on San Jose to Merced High Speed Train System through Pacheco Pass Project EIR/EIS, p. 9. (April 30, 2009).

¹⁰⁰ RAMSAR website describing the GEA, available at: <https://rsis.ramsar.org/rsi/1451>

¹⁰¹ See also RAMSAR map of the GEA, available at: <https://rsis.ramsar.org/RISApp/files/3268345/pictures/US1451map.pdf>

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1678-2199

Page 122 of the Biological and Aquatic Resources Technical Report that was prepared for the HSRA in conjunction with the DEIR/EIS acknowledges that the GEA is “the primary area of conservation significance in the Central Valley.” However, the DEIR/EIS defines “Conservation Areas” as “land parcels that are protected or managed specifically or that have been designated for the conservation of biological or aquatic resources.” The DEIR/EIS describes three types of conservation areas: conservation easements, public lands (refuges and ecological reserves), and conservation and mitigation banks.¹⁰² The DEIR/EIS then expressly excludes the GEA from its list of “conservation areas that could potentially be affected by the project.” This is likely due to the improper classification of the GEA as an Important Bird Area (discussed further below) rather than as an internationally-designated wetland of importance and a nationally established wildlife management area. The GEA should be added to the discussion of impacts to conservation areas in the DEIR/DEIS.

1678-2200

B. The DEIR/EIS Uses an Incorrect Boundary for the GEA

Instead of using the established GEA boundary, the DEIR/EIS uses the boundary of the National Audubon Society’s “Important Bird Area” (IBA), which occupies a smaller boundary within the larger GEA boundary.¹⁰³ As shown in Figure 2 below, the GEA boundary encompasses much more of the Project’s alignment than the IBA boundary. The train passes through two portions of the GEA but only one portion of the IBA. Entire miles of the proposed aerial and embankment segments of the train are within the GEA but not within the IBA:

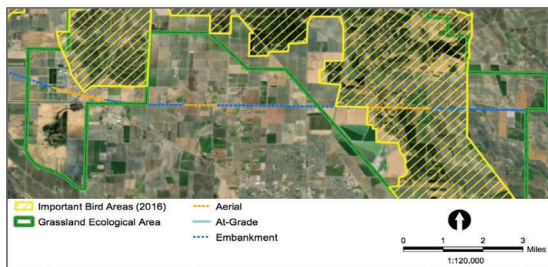


Figure 2 Source: High-Speed Rail Authority

¹⁰² DEIR/EIS pp. 3.7-6 to 3.7-7.

¹⁰³ DEIR/EIS pp. 3.7-42, 3.7-50 (Figure 3.7-4, showing the GEA as coextensive with the IBA).

1678-2200

The Authority’s decision to analyze impacts within the IBA boundary instead of the larger GEA boundary is unsupported and does not comply with CEQA or NEPA.¹⁰⁴

1678-2201

1. The IBA Boundary Is Inconsistent with Prior Analyses

The Authority previously referenced the larger GEA boundary in other review documents that preceded this DEIR/EIS. In 2007, the Authority published a “Summary of Key Issues” regarding the Program-level DEIR/EIS for this segment of the Project.¹⁰⁵ The Summary of Key Issues accurately described the GEA as a wetland of international importance under the Ramsar Treaty and also discussed the GWMA at length. It stated that the “Henry Miller Road alignment alternative would extend through two southern portions of the GEA boundary... The western portion crossed by the alignment alternative closest to Los Banos would extend adjacent to Henry Miller Avenue/Road and the San Luis Wasteway and cross Ingomar Road south of the Volta Wildlife Area.”

The Summary of Key Issues included a map showing the accurate GEA boundary and the high-speed rail alignment passing through two segments of the GEA. The 2008 Program EIR/EIS (at p. 3.15-19) and the 2012 Revised Program EIR/EIS provided a similar description of the GEA.¹⁰⁶ It is improper for the HSRA to now reduce the area that it considers to encompass the GEA, particularly when its prior commitments to analyze Project impacts within the GEA were based on representations that the correct boundary would be utilized.

1678-2202

2. The Audubon Society Disagrees that Its IBA Boundary Is the Proper Area of Analysis

The Audubon Society reviewed the DEIR/EIS and provided a write-up concluding that the GEA boundary is the more appropriate boundary for analysis.¹⁰⁷ Audubon explains that its Important Bird Areas (IBAs), while helpful for guiding bird conservation efforts, confer no regulatory authority and are most useful “when no other designations exist in a particular region.”

According to Audubon, there are 148 IBAs in California that were initially designated and then later mapped between 2006 and 2008, based on descriptions

¹⁰⁴ See Owens Comments, **Attachment A**, pp. 27-28.

¹⁰⁵ HSRA, *Bay Area to Central Valley High-Speed Train: Summary of Key Issues on the Draft EIR/EIS* (Dec. 19, 2007).

¹⁰⁶ See Owens Comments, **Attachment A**, pp. 26-27 (discussing the 2012 Revised Program EIR/EIS).

¹⁰⁷ Audubon California, *Grasslands IBA Background and Justification for Use of GEA Boundary in Environmental Impacts Analysis* (2020) (attached as **Attachment E**).

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1678-2202

in a 2004 book by Daniel Cooper.¹⁰⁸ These site descriptions “were often based on jurisdictional boundaries (i.e. state wildlife areas and national wildlife refuge boundaries)” and were not always comprehensive, thus additional research was often necessary in an attempt to make the maps as accurate as possible.¹⁰⁹

Audubon acknowledges that its IBA boundaries are only considered as “approximations of the best habitat,” and that new science has shed light on species range shifts, the importance of habitat connectivity and working lands, impacts of land-use change, and other pressures on habitat, as well as water availability. As a result, Audubon is in the process of updating its IBA boundaries. The Grassland IBA boundary has not yet been updated, but preliminary evaluations suggest that the boundary should be expanded.

Audubon notes that “in the Grasslands region other designations do exist and therefore must be evaluated to determine which is most representative of the full suite of taxa that may be impacted by a development project such as the construction and operation of the high speed rail.” It points out that the GEA boundary is recognized by the Western Hemisphere Shorebird Reserve Network and the Central Valley Joint Venture, and concludes that the GEA boundary “provides greater representation, than the current IBA boundary, of the area’s taxa, including birds, and should be used to evaluate any environmental impacts analysis.”¹¹⁰

1678-2203

3. *The Omitted GEA Areas Contain Important Habitat*

Not only is the land that falls outside of the IBA boundary but within the GEA boundary set aside for future protection by the U.S. Fish and Wildlife Service, it also contains significant habitat that supports waterfowl, shorebirds, Tri-Colored Blackbirds and other species of concern. Figure 3 is a recent photograph (taken in April 2020) of wetlands near Volta that are within the GEA boundary but not the IBA boundary, located along Henry Miller Road on the proposed high-speed rail alignment:

¹⁰⁸ *Id.*
¹⁰⁹ *Id.*
¹¹⁰ *Id.*

1678-2203



Figure 3 (Source: Grassland Water District)

The figure is a small example of the thousands of acres of habitat that lie within the GEA but outside of the IBA. Impacts to this habitat and the special-status species it supports cannot be omitted from the DEIR/EIS.¹¹¹ As described later in Section IX.A.1 of the Comments, using the wrong boundary significantly understates the Project’s environmental impacts.

1678-2204

C. **The DEIR/EIS Fails to Explain the Existing Regulatory Setting Regarding the Merced County General Plan**

The Merced County 2030 General Plan establishes land-use planning policies and procedures to ensure the protection of state and federal wildlife refuges and wetlands within the Grassland Ecological Area.¹¹² These policies and procedures require detailed evaluations of a proposed project’s impacts on biological resources, and sets forth guidelines for recommending sufficient measures to protect sensitive habitats in and around the GEA from further encroachment and adverse effects.¹¹³ The Merced County General Plan incorporates the GEA boundary as well as the larger “Grassland Focus Area” boundary, which establishes a buffer zone around the GEA where land uses must be sensitive to encroachment and fragmentation of GEA habitat. The General Plan

¹¹¹ Owens Comments, **Attachment A**, pp. 27-28.

¹¹² Merced County General Plan, pp. LU-11 and LU-15, Policies LU-1.13 and LU-4.7, available at <https://www.co.merced.ca.us/DocumentCenter/View/6766/2030-General-Plan?bidId=>; Merced County General Plan EIR, p. 4-25, Map of GEA and surrounding Grassland Focus Area, available at:

<https://www.co.merced.ca.us/DocumentCenter/View/6767/General-Plan-FEIR?bidId=>.

¹¹³ Merced County General Plan EIR, Mitigation Measure BIO-1k, p. 2-17, *id.*

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1678-2204

also establishes specific land-use planning and permitting procedures that require consultation with the Grassland Resources Regional Working Group.¹¹⁴

As a result of these General Plan policies and procedures, the Grassland Resources Regional Working Group has successfully worked with project applicants and with the Merced County Planning and Community Development Department to ensure that project siting, design, lighting, water quality, and other habitat protection measures are adopted. In particular, the Grassland Resources Regional Working Group has helped develop multiple Nighttime Lighting Plans and Avian Protection Plans to address construction and operational impacts from various projects. These plans were then accepted by the project applicant and adopted by the County as binding conditions of approval.

The DEIR/EIS fails to describe this regulatory setting, in which the County has developed specific protections and procedures to avoid fragmentation and adverse impacts to the GEA. The HSRA has also refused to consider using those procedures to address significant concerns held by the Grassland Resources Regional Working Group. Over the course of multiple meetings with the HSRA, the GEA working group offered to provide examples of Nighttime Lighting Plans and Avian Protection Plans, and requested the HSRA's cooperation to develop similar mitigation plans for this Project. The HSRA did not agree, and these protective measures are not set forth in the DEIR/EIS. The DEIR/EIS must be revised to describe the GEA-specific policies and procedures in the Merced County General Plan.

1678-2205

D. The DEIR/EIS Improperly Relies on Models to Describe Existing Biological Resources

The expert comments submitted by Ms. Owens explains in detail why the use of a predictive "model" in lieu of real-world surveys for existing biological resources is flawed. First, the model is incomplete and subjectively applied, and is not peer reviewed. In her view it is "highly experimental" and unsupported by any recent ground-truthing.¹¹⁵

Second, the accuracy of any computer-based spatial analysis (GIS) is influenced by the quality of the spatial data sets used and the techniques in which they are applied. The DEIR/EIS does not provide a clear description of these factors to allow for a determination of the validity of the GIS-based assessment. An

¹¹⁴ *Id.*

¹¹⁵ Owens Comments, **Attachment A**, p. 7.

1678-2205

expert reviewer cannot duplicate the model without this information. The model does not appear to use a consistent methodology to assess existing conditions, and for certain species it appears the model was not used at all "due to lack of understanding of habitat parameters." Models are only useful for a narrow purpose, are not meant to be strictly predictive of real-world conditions, and become less reliable when less relevant or site-specific data is used. This is true here, particularly where the model is used to develop specific estimates of affected acreage and inform specific mitigation.¹¹⁶

Third, despite the fact that Appendix F to the *Biological and Aquatic Resources Technical Report* is incomplete and contains only partial sentences reflecting CDFW's previous comments, it is clear that CDFW has expressed serious doubts regarding the ability of a model to accurately predict impacts to species and habitats. CDFW commented that habitat modeling is "one tool" for assessment, but should not be used "in lieu of sufficient on-the-ground survey and assessment verification," noting that in another area of the Project a rare plant was not identified by the model yet was found during construction.¹¹⁷

Fourth, the model relies too heavily on CDFW's California Natural Diversity Database (CNDDDB), which is not a detailed or comprehensive database. The CNDDDB reports species sightings and uses conservative reporting parameters that rely on voluntary reports. Areas that have not been surveyed very much are not often reflected in the CNDDDB, and thus a lack of CNDDDB records in an area does not indicate that a species is absent, only that the database provides no information. CDFW makes the disclaimer on its CNDDDB website that "field verification for the presence or absence of sensitive species will always be an important obligation." CDFW's shared this same concern in comments made to the HSRA.¹¹⁸

Fifth, the model places over-weighted reliance on habitat types, which greatly reduces the predictability of the presence of special-status species, and omits key data regarding species density or abundance. In particular, species that are generalists, over-wintering species, migrants, or species that use an area as a corridor can often be found using land outside of their primary habitat type. There may also be areas where a high density of a protected species can be found. Ms.

¹¹⁶ *Id.* pp. 7-8.

¹¹⁷ *Id.* pp. 8-9.

¹¹⁸ *Id.* pp. 9-11.

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Owens relates several examples of this from her own work, as well as relevant studies that reached the same conclusions.¹¹⁹

In another example, the CDFW disputed the HSRA’s use of the model to predict the habitat of the San Joaquin kit fox, noting that the model “was intended to be used to identify lands to target for protection,” and “[t]herefore, the model should not be used solely for the purpose of identifying habitat” for the kit fox, particularly in the vicinity of the GEA near Los Banos. The HSRA disagreed with CDFW. In another comment, CDFW emphasized the potential for rapid changes in cropping patterns and land cover classifications in the San Joaquin Valley, underscoring its concern about under-identification of the need for potential mitigation, “similar to what was experienced with another HSR segment.” These disagreements serve to emphasize our concerns that future mitigation for lost habitat that is initially based on a predictive model may not be conducted in a manner that is best informed by resource agencies with expertise.¹²⁰

Ms. Owens notes that even where the DEIR/EIS acknowledges species for which its model is incomplete, it inappropriately purports to rely on data sets “from aerial interpretation” or “windshield surveys” that are not appropriate to detect the species, and makes reference to “on-the-ground surveys” that were not conducted.¹²¹ She concludes: “There is an abundance of taxa- and species-specific incidences where the DEIR/S’s omission of floral and faunal surveys will result in errors in assumptions and protocols for avoidance and mitigation measures. This is especially significant considering the applicant has created very specific estimates (acreages) of impacts on special-status species, without clear explanation of how these acreages were derived from the inconstantly applied model. The DEIR/S needs to demonstrate specifically how acreages of impacts were derived for each habitat, especially with zero ground-truthing.”¹²²

1678-2206

IX. THE HSRA LACKS SUBSTANTIAL EVIDENCE TO SUPPORT ITS CONCLUSIONS IN THE DEIR/EIS REGARDING THE PROJECT’S SIGNIFICANT IMPACTS

A. Biological Resource Impacts Are Underestimated

Once an accurate depiction of the presence of biological resources in the GEA is identified and described, the DEIR/EIS must analyze how the direct and indirect

¹¹⁹ *Id.* pp. 11-13.
¹²⁰ *Id.* pp. 12-13.
¹²¹ *Id.* pp. 13-14.
¹²² *Id.* p. 14.

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impacts of the project would affect these resources *after feasible mitigation is imposed*.¹²³ Direct and indirect significant effects of the Project on the environment shall be clearly identified and described, giving due consideration to both short-term and long-term effects.¹²⁴

A complete analysis of the potential biological impacts of the Project on the GEA is essential due to the considerable importance of this area. The GEA constitutes one of the most important waterfowl and shorebird wintering areas on the Pacific Flyway, and international treaties have recognized the habitat as a resource of international significance. The complex of wetland habitats within the GEA is of special significance because the size, juxtaposition, and connectivity of the different wetland types provide a unique opportunity to sustain native migratory and resident wildlife populations.¹²⁵

The associated uplands surrounding the seasonal wetlands are also of special importance because they provide nesting areas for waterbirds, important food sources for grazers such as geese, and essential habitat for endangered species and numerous upland wildlife. Over one million waterfowl winter in the GEA each year and the GEA provides critical habitat for over 550 species of plants and animals, including 49 plant and animal species that are endangered, threatened or candidate species under state or federal law.¹²⁶

For the reasons set forth below, prior to approval of the Project, the DEIR/EIS must be revised to provide an adequate and complete assessment of the Project’s potential biological impacts on this important ecological resource.

1. Using the Wrong GEA Boundary Significantly Understates Biological Resource Impacts

The effect of using the IBA boundary rather than the GEA boundary is that the DEIR/EIS significantly underestimated the Project’s environmental impacts. By narrowing the area of analysis to exclude several large areas in both the western and eastern portions of the GEA, impacts are not accurately identified,

1678-2207

¹²³ CEQA Guidelines § 15126(a).

¹²⁴ *Id.*

¹²⁵ 2007 Comments, Appendix 11, Fredrickson, Leigh H. and Laubhan, Murray K., *Land Use Impacts and Habitat Preservation in the Grasslands of Western Merced County, CA* (February 1995).

¹²⁶ Owens Comments, Attachment A, pp. 25-26.

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disclosed, or mitigated. The following presents a few of the numerous examples of this problem:

- Impacts on habitat for waterfowl and shorebirds were only modelled within the IBA boundary, resulting in a determination of only 51.8 acres of permanent impacts and 30.5 acres of temporary impacts¹²⁷
- Noise impacts to waterbirds were only modelled within the IBA boundary, resulting in a determination of only 33 acres where birds would experience temporary hearing damage, 188 acres where bird communications would be masked by passing trains, and 984 acres where bird disturbance/arousal would occur.¹²⁸
- Visual disturbance impacts for wildlife were only modelled within the IBA boundary, resulting in a determination of only 524 acres where disturbance would occur.¹²⁹
- Mitigation Measures BIO-MM#58 (compensatory mitigation for impacts to waterfowl and shorebird habitat) and BIO-MM#80 (structures to minimize wildlife impacts) are designed to address the above-described impacts only within the IBA.¹³⁰ Accordingly, the DEIR/EIS proposes to provide compensatory mitigation only for the acres experiencing adverse impacts within the IBA, and to construct the most wildlife-protective structures only within the IBA boundaries and not, for example, near Volta.¹³¹

Ms. Owens concludes that the use of the IBA boundary instead of the GEA boundary “eliminates analysis of impacts to a host of special-status species and related habitat, including the tri-colored blackbird,” and reduces the estimated acres of affected habitat.¹³² The DEIR/EIS must be revised to disclose the impacts associated with the entire GEA and not just the Audubon IBA.

1678-2208

2. *Use of a Habitat Model and Failure to Complete Adequate Surveys Underestimates Biological Resource Impacts*

Ms. Owens concludes that it is “impossible to analyze direct, indirect, or cumulative impacts to species” without “current, ground-truthing data available.”¹³³ She criticizes the DEIR/EIS’s reliance on “deferred surveys post-

¹²⁷ DEIR/EIS pp. 3.7-99 to 3.7-100 (Table 3.7-16).
¹²⁸ *Id.* pp. 3.7-114 to 3.7-115 (Table 3.7-21).
¹²⁹ *Id.* p. 3.7-117.
¹³⁰ *Id.* pp. 3.7-162 and 3.7-170 to 3.7-171.
¹³¹ *Id.*
¹³² Owens Comments, **Attachment A**, pp. 25-28.
¹³³ *Id.* p. 5.

1678-2208

permitting,” where the HSRA promises to conduct “pre-construction surveys” for various species as part of its mitigation strategy. That strategy denies the reviewing public essential information about the Project’s baseline environmental conditions and potential impacts. It also lacks appropriate success and performance criteria that should be reviewed by the public before the Project is approved. Finally, short-term or one-time pre-construction surveys are vulnerable to seasonal and annual variabilities in climate, species presence, and human disturbance.¹³⁴

This is particularly true in the GEA where wetlands are seasonally flooded, many plant and animal species emerge only seasonally, migrations occur during certain times of year, and human disturbances such as hunting or construction affect species presence and abundance. The combined reliance on habitat models to predict biological resource impacts and pre-construction surveys to verify and mitigate those impacts is inadequate under CEQA and NEPA.

1678-2209

3. *Noise and Vibration Impacts on Biological Resources Are Underestimated*

Noise disturbances of wildlife in the GEA are of significant concern. Noise disturbance may displace waterfowl from feeding grounds, cause desertion of nests, increase energetic costs associated with flight, result in changed flight paths, and lower the productivity of nesting or brooding waterfowl, among other impacts.¹³⁵

Ms. Owens notes that the DEIR/EIS uses dismissive phrases regarding noise impacts, such as “[m]aintenance activities are expected to be dispersed over time and location and are not expected to be of an intensity or duration to result in considerable effects on wildlife movement,” or that noise impacts will be “intermittent”.¹³⁶ These phrases should be retracted from the DEIR/EIS because they mask the very real effects that maintenance activities (which can be significant) and frequent loud trains will have on biological resources.

1678-2210

Ms. Owens also criticizes the fact that the entire noise impact analysis is based on a single 2012 “interim criterion” from the Federal Railroad

¹³⁴ *Id.* p. 26.
¹³⁵ 2007 Comments Appendix 12, U.S. Fish & Wildlife Leaflet 13.2.15; 2007 Comments Appendix 4, *Dr. Weissman Comments* at pp. 3-4 (citing numerous reports); **Attachment C, List of Literature on Wildlife Disturbance, Behavioral Effects, and Mitigation** (Nov. 26, 2018).
¹³⁶ Owens Comments, **Attachment A**, p. 34.

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Administration (FRA) for the impact of train noise on animals. That criterion estimated that the sound exposure level (SEL) from a single train pass-by would be 100 A-weighted decibels (dBA), which represents the loudness of sounds in the air as perceived by the human ear.¹³⁷ The FRA was careful to note that the criterion was developed based on “preliminary indications” and “rough estimates of threshold levels for observed animal disturbance, and habituation characteristics for only a few species.”¹³⁸ In fact, the FRA research came from only four outdated studies, none peer reviewed, that were based on aircraft noise using a variety of research methodologies and focused primarily on domesticated livestock and turkeys.¹³⁹

1678-2211

Ms. Owens discusses the fact that scientific understanding of wildlife responses to noise has developed and evolved since those earlier studies, resulting in more protective noise criteria and thresholds for sensitive species. She concludes that the DEIR/EIS’s reliance on the FRA’s 100 dBA interim criterion is neither accurate nor protective, and that it is inapplicable and inappropriate to use that criterion as the starting point for analyzing the Project’s noise impacts on wildlife. Therefore, the conclusions made by the DEIR/S about noise impacts, including their degree, scope, and distance, are unsupported by substantial evidence and do not contribute to an informed impacts analysis. As a result, mitigation measures for noise impacts must be revisited using more conservative approaches.¹⁴⁰

1678-2212

The noise impacts analysis also erroneously categorizes the unique hearing abilities and behaviors of numerous species into a single set of noise thresholds. The DEIR/EIS does not clearly explain how the HSRA chose these specific and singular criteria, why they apply simultaneously to dozens of species with differentiated hearing abilities, or what scientific evidence supports the application of those thresholds to high-speed train operations, as opposed to roads or plane overflight.¹⁴¹

1678-2213

The DEIR/EIS further errs in its overreliance on a 2016 report by the California Department of Transportation (Caltrans), entitled “*Technical Guidance for Assessment and Mitigation of the Effects of Highway and Road Construction Noise on Birds*.” The DEIR/EIS refers to this report at least ten times in the

¹³⁷ *Id.* pp. 34-35.

¹³⁸ *Id.* p. 35.

¹³⁹ *Id.* pp. 35-37.

¹⁴⁰ *Id.*

¹⁴¹ *Id.* pp. 37-38.

1678-2213

DEIR/EIS, in support of its noise thresholds for wildlife.¹⁴² However, as Ms. Owens describes, the report contains a number of caveats and warnings that it should not be relied upon as an official standard or specification, that Caltrans has not verified its conclusions, that it is an interim document and should not be used for trains. Moreover, the studies cited in the Caltrans do not pertain to the special-status species analyzed in the DEIR/EIS, and only consider one waterbird, the mallard.¹⁴³

The Caltrans report does not meet standards of scientific veracity, and as such Ms. Owens concludes that the DEIR/EIS’s reliance on that report results in erroneous claims that birds habituate to train noise, vibration effects are less extensive than noise effects, the masking of bird vocalizations is limited, and noise impacts have a limited effect on reproduction (and other behaviors). For these reasons Ms. Owens concludes that the noise thresholds for wildlife “are not based upon the best available science, they are invalid and not appropriately applied.”¹⁴⁴ After discussing the need to apply the “precautionary principle” in this situation, and reviewing the various noise mitigation measures proposed and analyzed by the HSRA, Ms. Owens supports the application of a “strict noise reduction standard” that includes a full guideway enclosure to reduce both noise pollution and bird strikes.¹⁴⁵

1678-2214

4. *Lighting and Glare Impacts Are Underestimated*

Ms. Owens provides a supported critique of flawed impact avoidance and mitigation measures in the DEIR/EIS that should be revised or better explained, including AVQ-MM#4 (“Provide Vegetation Screening along At-Grade and Elevated Guideways Adjacent to Residential Areas”), AVQ-MM#7 (“Provide Noise Barrier Treatment”), and BIO-IAMF#12 (“Design the Project to be Bird Safe”).¹⁴⁶

She also concludes that the lighting and glare mitigation measures initially requested by the GEA working group are feasible and effective, and should be incorporated to reduce impacts in the GEA.¹⁴⁷

¹⁴² *Id.* p. 38.

¹⁴³ *Id.* pp. 38-39.

¹⁴⁴ *Id.* p. 39.

¹⁴⁵ *Id.* pp. 40-41.

¹⁴⁶ *Id.* pp. 29-32.

¹⁴⁷ *Id.* pp. 33-34.

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1678-2215

5. *Impacts to Rare Plants Are Unmitigated*

In the expert opinion of Ms. Owens, the presence and population status of special-status plant species cannot be determined from a theoretical model such as the one used in the DEIR/EIS, nor can a model accurately estimate the acreage of impacts to rare plants.¹⁴⁸ In order to accurately identify rare plants, a thorough plant survey must be conducted and proper reports and mitigation plans must be developed. The California Native Plant Society and CDFW both publish botanical survey guidelines and protocols that are intended to be consistent with environmental laws such as CEQA.¹⁴⁹ They require a comprehensive survey of the affected area and a sufficient number of visits spaced throughout the growing season, among other requirements.¹⁵⁰ If rare plants are found, specific protocols are used to develop a revegetation plan, weed control plan, or translocation plan.

Ms. Owen concludes that these protocols cannot be met with the one-time, abbreviated pre-construction survey that is proposed in the DEIR/EIS under Mitigation Measure BIO-MM#7, which simply states: “Prior to any ground-disturbing activity, the Project Biologist would conduct presence/absence botanical field surveys for special-status plant species and special-status plant communities within a work area.” This mitigation measure does not comply with state guidelines and survey protocols, does not require a comprehensive rare plant survey as described above, and disallows the public from reviewing any resultant analysis or mitigation plans.¹⁵¹

The HSRA could have conducted surveys for rare plants in the spring of 2019, which was a wet year that is most conducive to conducting such surveys.¹⁵² Leading up to 2019, the GEA working group made suggestions to the HSRA that such surveys be conducted. CDFW also commented that the list of presumed plant species should be expanded.¹⁵³ As discussed by Ms. Owens, the successful mitigation of rare plants “is important not only because these plants have been given a degree of protected status,” but also “because their population survival is biologically linked to successful mitigation of many of the special-status species that occur in this Project area, species that rely on healthy habitats devoid of

¹⁴⁸ Owens Comments, Attachment A, p. 21.

¹⁴⁹ *Id.*, pp. 22-24.

¹⁵⁰ *Id.*

¹⁵¹ *Id.* p. 24.

¹⁵² *Id.* p. 21.

¹⁵³ *Id.* pp. 24-25.

1678-2215

fragmentation and degradation.”¹⁵⁴ Significant impacts to rare plants are not adequately disclosed, analyzed, or mitigated in the DEIR/EIS.

1678-2216

6. *Impacts to Eagles Are Unmitigated*

The GEA hosts protected golden eagle populations, among many other species of raptors. Ms. Owens provides substantial evidence to support her conclusion that the DEIR/EIS’s analysis and proposed mitigation for impacts to golden eagles is inadequate. Because the golden eagle is a fully protected species, CDFW does not issue “take permits” for golden eagles. Ms. Owens concludes that the proposed mitigation for impacts to eagles must be revised to incorporate “thorough surveys with actual mitigation details specified,” prior to the permitting phase of the Project, and must how the HSRA proposes to monitor and avoid any and all take of this species.¹⁵⁵

1678-2217

B. Impacts to Recreational Hunting on Private and Public Lands Are Underestimated and Unmitigated

Waterfowl hunting occurs during several months every winter. Hunting is the primary activity on public wildlife refuges in the GEA, and the continued protection and management of privately owned wetlands within the GEA depends largely on the continued viability of these lands as private duck hunting clubs. Currently, 175 waterfowl hunting clubs exist within the GWD and the GRCD, and additional clubs are located outside of those boundaries but within the GEA.

The traditional conservation model exemplified by wetland preservation in the GEA depends on extensive public and private investment in water supply, habitat restoration, and operations and maintenance. The quality of the habitat dictates the value of hunting properties for private landowners and the public, and for the wildlife that depends on them. As described above in Section II.B of these comments, hunting is also a primary economic driver in Merced County, particularly in and around the community of Los Banos.

As the DEIR/EIS acknowledges in Section 3.7, the proposed bisection of the GEA by the Project poses significant threats to waterfowl habitat from noise, visual disturbance, and other impacts. The DEIR/EIS concludes that the Project result in bird avoidance, changed flight patterns and other behaviors, and bird strikes. However, in Section 3.12 of the DEIR/EIS the HSRA concludes that construction and operation of the Project would “not affect duck and geese hunting

¹⁵⁴ *Id.* p. 25.

¹⁵⁵ *Id.* pp. 41-43.

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conditions.”¹⁵⁶ This conclusion is clearly in error. The DEIR/EIS does not adequately disclose, analyze, or mitigate the impacts that the Project will have on recreational hunting activities, impacts that will in turn create reductions in habitat quality, connectivity, wetland preservation, and economic viability.

In addition to adverse changes in waterfowl presence on these public and private properties, their continued operation for waterfowl hunting will be threatened if errant gunshots pose the possibility of striking passing trains, which would be elevated through much of the GEA. The Project also has the potential to impede access to private hunting properties and public hunting units.

The DEIR/EIS states that the boundaries of hunting properties “range from about 0.7 mile to 1.5 miles from the project alignment,” and includes maps at Figures 3.12-7 and 3.12-18 that purport to show hunting properties near the Project alignment. The quoted statement and the depictions of hunted properties are incorrect and misleading. As shown on the map attached hereto as **Attachment F**, there are extensive public and private hunting areas located immediately adjacent to or nearby the Project alignment, including two public camping areas for waterfowl hunters located at the Volta and Los Banos Wildlife Areas, and public hunting units immediately adjacent to Henry Miller Road in the Los Banos Wildlife Area. The DEIR/EIS must be corrected to reflect the actual extent of hunting properties (both public and private) that occur near the Project alignment.

1678-2218

The DEIR/EIS acknowledges that waterfowl hunting “could be indirectly affected by project construction and operations, which could affect game bird populations and distributions.”¹⁵⁷ It goes on to explain these effects in detail:

HSR operations along Henry Miller Road through the GEA could affect the desirability of waterfowl hunting in this immediate area. Waterfowl hunting revenues could be affected; noise could affect the number of waterfowl in the immediate vicinity; bird strike could reduce the number of waterfowl available for hunting; and the ambience of waterfowl hunting clubs could be affected. Figure 3.12-8 illustrates noise contours relative to wildlife areas and private hunting clubs. Reduced waterfowl hunting in the area could affect future CDFW revenues if fewer permits are issued for waterfowl hunting in the GEA. Project operations would include 12 peak direction trains (combined for HSR and Caltrain) and eight off-peak

¹⁵⁶ DEIR/EIS pp. 3.12-99, 3.12-100.

¹⁵⁷ DEIR/EIS p. 3.12-35.

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*direction trains (all HSR) per hour. Noise from passing trains could disturb waterfowl nesting near the project. Noise from the trains might also alter the tranquil sense of place that defines the rural nature of the waterfowl hunting club property.*¹⁵⁸

However, for Project construction, despite these obvious impacts, the DEIR/EIS provides a convoluted explanation for why hunting would not be adversely affected:

*Because the waterfowl hunting clubs are not adjacent to the project construction, it is not anticipated that construction noise would affect waterfowl hunting ... Because construction would occur over 1.5 years at any given location, waterfowl hunting occurs during winter, and the hunting clubs are outside the main construction area, it is expected that waterfowl would likely move to other areas within club boundaries that are not affected by increased noise.*¹⁵⁹

For Project operations, Figure 3.12-18 shows a **significant** number of acres within public and private hunting areas that would be adversely affected by noise during Project operations, particularly when compared with the accurate depiction of hunting areas found in **Attachment F** to these comments. The DEIR/EIS provides a similarly baffling explanation for why hunting would not be adversely affected by Project operations:

[T]he waterfowl hunting clubs are not adjacent to the RSA, and only a small portion of the clubs intersect the 63–69 dBA noise contour. Because such small areas of the club grounds lie within the noise contour, it is expected that waterfowl would likely move to other areas within club boundaries that are not affected by increased noise. Moreover, because only a small portion of the clubs would be potentially affected, the project would not materially alter the rural sense of place that characterizes the club grounds. Train operations pose the risk of injury and mortality to aerial species by striking birds flying in the path of passing trains, as well as disturbance through noise and visual stimuli. However, ... with the exception of their relevance to hunting activities, they would not result in economic impacts.

In view of existing traffic and agricultural activities, it is not expected that waterfowl currently nest in the vicinity of Henry Miller Road. Because the

¹⁵⁸ *Id.* p. 3.12-91.

¹⁵⁹ *Id.* p. 3.12-89.

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waterfowl hunting clubs are not adjacent to Henry Miller Road, it is not anticipated that there would be effects on waterfowl hunting from HSR operations. The loss of revenue associated with diminished use of private recreational uses within IBAs is not known with certainty, but it is not anticipated to be substantial.

These conclusions in the DEIR/EIS are inadequate. The DEIR/EIS acknowledges a number of adverse impacts from construction and operations, particularly during the winter, but argues that there are “other areas” where wildlife species and recreationalists can go to avoid adverse impacts. These conclusions are partially based on the mistaken assertion that neither waterfowl hunting or nesting occurs near Henry Miller Road. The DEIR also fails to analyze the incompatibility between waterfowl hunting and elevated train operations, fails to consider impediments to property access, and generally ignores its own findings and conclusions regarding adverse effects on waterfowl. These significant impacts must be included in a revised and recirculated DEIR/EIS.

X. THE DEIR/EIS PROPOSES UNSPECIFIC AND UNENFORCEABLE MITIGATION MEASURES

CEQA and NEPA require public agencies to avoid or reduce environmental damage by requiring the adoption and implementation of all feasible mitigation measures.¹⁶⁰ Mitigation measures must be specifically set forth and must be fully enforceable through legally-binding instruments.¹⁶¹

1678-2219

A. Mitigation for Impacts to Birds and Habitat in the GEA Are Not Specific

The Grassland Group is unaware of a high-speed rail project that traverses such a large natural wetland habitat as the GEA. However, the GEA working group investigated examples from other countries where above-grade shielding was either constructed or under investigation to reduce impacts on birds and nearby

¹⁶⁰ CEQA Guidelines § 15002(a)(2) and (3); *see also Berkeley Keep Jets Over the Bay Committee v. Board of Port Commissioners* (2001) 91 Cal.App.4th 1344, 1354; *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564; 42 U.S.C. § 4332; *Robertson v. Methow Valley Citizens Council* (1989) 490 U.S. 332, 352.
¹⁶¹ CEQA Guidelines § 15126.4 (a)(2); Public Resources Code § 21081.6(b); *King and Gardiner Farms, LLC v. County of Kern* (2020) 45 Cal.App.5th 814, 832-833.

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wetlands. These were discussed in previous comment letters and presentations submitted to the HSRA by the GEA working group members.¹⁶²

The Shenzhen-Maoming Railway in China’s Guangdong Province was constructed with sensitivity to a nearby wetland habitat. To avoid disturbing the habitat, China constructed a vaulted tube/shield on a section of its high-speed rail line, using sound absorption and insulation materials. Tests showed that when a train passed by, the sound monitored at the core area of the nearby wetland habitat was very limited.

Spain has allowed on-board monitoring of bird presence and bird strikes to better understand the environmental costs of its rail projects. Believing that the potential for damage to wildlife in the GEA will be larger in magnitude than these existing rail projects in Europe and Asia, in December of 2018 the GEA working group made a presentation to the HSRA and formally requested that it consider a vaulted tube/shield through the entirety of the GEA for the above-ground alternative (including the Volta and Los Banos Wildlife Areas and Mud Slough), similar to the Shenzhen-Maoming Railway. Using modern sound and vibration absorption techniques, this mitigation measure would greatly reduce noise, vibration, and visual disturbances to wildlife, and avoid bird strikes.¹⁶³

The DEIR/EIS contains a partial commitment to undertake this mitigation, with a backstop of compensatory mitigation if appropriate noise reduction is not achieved. **Mitigation Measure BIO-MM#80**, entitled “Minimize Permanent Intermittent Noise, Visual, and Train Strike Impacts on Wildlife Movement,” reads:

To address the permanent intermittent impact of noise, visual disturbance, and train strike on wildlife movement in the UPR and GEA IBAs, the Authority would build additional structures in these areas to minimize or avoid such impacts. Structures would be designed with the goal of reducing or eliminating the visual presence of the moving train and exceedance of the

¹⁶² PowerPoint Presentation from GEA Working Group on December 3, 2018; Letter from GEA Working Group dated December 5, 2018 re: *Request for Wildlife Mitigation in the Grasslands Ecological Area*; Letter from Grassland Water District to HSRA dated August 29, 2019 re: *Proposed Preferred Alternative for the San Jose to Merced Section of the High-Speed Rail Project*.
¹⁶³ *Id.*; GEA Working Group, *List of Literature on Wildlife Disturbance, Behavioral Effects, and Mitigation* (November 26, 2018) (**Attachment C**).

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established quantitative noise thresholds (as measured at the outer edges of the HSR right-of-way), as described in the WCA:

- Permanent hearing damage: 140 dBA or greater
- Temporary hearing damage: 93 dBA or greater but less than 140 dBA
- Masking: 84 dBA or greater but less than 93 dBA
- Arousal: 77 dBA or greater but less than 84 dBA

The Authority would build opaque noise barriers to cover or obscure some or all of the train, including the OCS, if feasible, and the following locations:

- In the GEA IBA near Volta, between Stations B4550+00 and B4630+00 (all alternatives)

[References to UPR IBA Area Omitted]

The noise barriers would be a minimum height of 17 feet and would be designed to provide a minimum of 10 dBA attenuation of sound generated by HSR operations, as measured immediately outside the noise barrier. The noise barriers would be built in conjunction with the installation of track and OCS and would be completed before HSR train operations begin.

Under all alternatives, for approximately 3.4 miles in the GEA IBA, centered approximately at Mud Slough between Stations B4914+00 and B5095+00, the rail design would be modified to enclose the train's operating envelope and OCS. The enclosure would be constructed using opaque, nonglare materials that provide a minimum of 10 dBA attenuation of sound generated by HSR operations, as measured immediately outside the enclosure. The enclosure would also be designed to minimize sound generated by HSR train exit and entry. The Authority would design the guideway enclosure in compliance with all HSR design, operations, and maintenance requirements, including but not limited to:

- Train performance
- Passenger comfort
- Fire-life-safety readiness and response
- Loading to viaduct girder structure and embankment foundation
- 100-year service life under suitable, acceptable maintenance practices and costs

The guideway enclosure would be built in conjunction with the installation of track and OCS and would be completed before HSR train operations begin. A preliminary engineering feasibility analysis is provided in Appendix 3.7-C, HSR Guideway Enclosure for the Grasslands Ecological Area.

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If structure designs in the UPR and GEA IBAs can be demonstrated through quantitative modeling to reduce sound levels outside the HSR right-of-way to less than 77 dBA, no additional measures would be necessary. If residual noise of 77 dBA or more (as measured outside the HSR right-of-way) is still demonstrated, and therefore would exceed one or more of the quantitative noise thresholds, HSR would implement the compensatory mitigation approach described in BIO-MM#58, which requires compensatory mitigation for lost habitat for waterbirds. The amount of compensatory mitigation required under BIO-MM#58, if implemented in concert with this mitigation measure, would depend on the extent of noise reduction that can be demonstrated using noise barriers or enclosures. Mitigation implemented under this measure would be consistent with and would help advance mitigation commitments at the program level, including mitigation intended to address impacts in the GEA.

The Authority would consult with CDFW, USFWS, Grasslands Water District, the owner(s) of private properties affected by the 3.4-mile HSR project footprint, and other stakeholders as part of final design of the guideway enclosure.

This measure is connected with another proposed mitigation measure, **BIO-MM#58**, entitled "Provide Compensatory Mitigation for Impacts on Waterfowl, Shorebird, and Sandhill Crane Habitat," which reads:

The Authority would provide compensatory mitigation required to offset impacts on waterfowl and shorebirds in the UPR [Upper Pajaro River] and GEA IBAs. Compensatory mitigation would replace permanent loss of habitat with habitat that is commensurate with the type (nesting, roosting, or foraging) and amount of habitat lost as follows:

- Suitable waterfowl and shorebird nesting and foraging habitat would be permanently protected and enhanced at a suitable location at a ratio of 1:1 (protected:affected) for permanent habitat loss; 1:1 (protected:affected) for habitat where hearing damage could result during operations (residual noise of 93 dBA or greater, as measured outside the HSR right-of-way); and 0.5:1 for habitat where arousal, visual disturbance, or masking effects result from operations (residual noise of 77 dBA or greater, as measured outside of the HSR right-of-way).
- Protection and enhancement of habitat would be implemented within the GEA and UPR IBAs or a suitable alternative location.*

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Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2219

• *Enhancement activities could include improved water management (to increase food supplies); improvement or replacement of water management infrastructure; vegetation control and management; contouring to increase topographic heterogeneity (to increase habitat diversity); or levee repair, maintenance, and replacement.*

These two lengthy mitigation measures can be summarized as follows:

1. To reduce visual and noise disturbance in sensitive habitat within the GEA, the HSRA would build two structures: (1) a noise barrier at least 17 feet tall on an elevated portion of the track near Volta; and (2) a 3.4-mile full enclosure of the train as it passes over Mud Slough and surrounding wetlands.
2. The HSRA would conduct computer modelling exercises to determine if noise reductions from these structures meet the biological noise thresholds established for the GEA. If modelling shows the thresholds are not met, the HSRA would implement compensatory mitigation for lost waterbird habitat. Suitable waterfowl and shorebird nesting and foraging habitat would be permanently protected, either within the GEA or UPR IBA or a suitable alternative location.
3. Mitigation lands would also be enhanced, potentially through improved water management (to increase food supplies), improved water management infrastructure, vegetation management, topographic contouring; or levee improvements.

These measures are inadequate. First, as described in Section VIII.B above, the Volta portion of the Project traverses through the GEA boundary, adjacent to the Volta Wildlife Area and sensitive privately owned wetlands. This area should receive similar noise-reduction protections as the Los Banos Wildlife Area and Mud Slough area of the GEA. As shown in DEIR/EIS Appendix 3.7-C, a tubular tunnel enclosure design would provide significantly more noise reduction than other noise reduction options.¹⁶⁴ In addition to the most protective option of a tubular tunnel, two other noise reduction options provide more noise protection than the proposed 17-foot noise barrier in the Volta area, including a 17.5-foot cantilever barrier and

¹⁶⁴ DEIR/EIS, Appendix 3.7-C, *HSR Guideway Enclosure for the Grasslands Ecological Area Memorandum*, p. 5 (Table 1), and Appendix 5 thereto, *Noise Analysis Memo*.

1678-2219

a wall-panel tunnel enclosure.¹⁶⁵ There is no basis for applying a less protective noise reduction measure in the Volta area of the GEA, particularly when the Volta area is known to harbor the only viable reproducing population of the threatened giant garter snake within the GEA, and an established colony of tri-colored blackbirds.

1678-2220

Second, the required level of noise reduction is far too low. The HSRA's technical analysis has already concluded that it is feasible to construct a tubular enclosure that would reduce sound by at least 12 A-weighted decibels (dBA).¹⁶⁶ The requirement in Mitigation Measure BIO-MM#80, that the enclosure at Mud Slough need only achieve "a minimum of 10 dBA attenuation of sound," is not stringent enough to guarantee that this feasible and protective enclosure will be built.

1678-2221

Third, the efficacy of the proposed noise barriers should not be left to the internal analysis of the HSRA alone (see Section X.B of these comments below), and should not be based on computer modelling. There is no reason why noise impacts cannot be physically measured outside of the sound barriers once constructed, and then compensatory mitigation put in place as a result of those measurements. Relying on theoretical noise modelling to judge the effectiveness of physical noise barriers leaves too much room for underestimated impacts and mitigation needs.

1678-2222

Fourth, the proposed location for compensatory mitigation described in Mitigation Measure BIO-MM#58 is not specific enough to offset impacts to the GEA. That measure would "be implemented within the GEA and UPR IBAs or a suitable alternative location." Impacts to habitat in the GEA can only be offset by compensatory mitigation within or surrounding the GEA. Put another way, the loss of migratory bird habitat in the GEA cannot be offset by protecting land in other areas of the San Joaquin Valley or the state.

The HSRA and the GEA working group have already identified a suitable area for mitigation of GEA impacts, based on conservation priorities and focused on lands that are suitable for habitat enhancement, as required under Mitigation Measure BIO-MM#58 (see Section VII.F of these comments above). The quoted

¹⁶⁵ *Id.*, Appendix 5 to Appendix 3.7-C, *Noise Analysis Memo*, at p. 3 ("the noise reduction provided by the 17.5-ft barrier is greater than the 14-ft barrier; the noise reduction provided by the 17.5-ft cantilever barrier is greater than the 17.5-ft barrier; and the noise reduction provided by the tunnel barrier is greater than the 17.5-ft cantilever barrier").

¹⁶⁶ DEIR/EIS Appendix 3.7-C, *HSR Guideway Enclosure for the Grasslands Ecological Area Memorandum*, p. 5 (Table 1).

Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2222

language of this mitigation measure should be revised to read that it would “be implemented within the GEA priority mitigation area identified by the GEA working group for impacts to the GEA, and within the UPR IBA for impacts to the UPR IBA, respectively, or a suitable alternative location if the identified locations are found infeasible, after consultation with the GEA working group and UPR IBA stakeholders.”

1678-2223

Fifth, the DEIR/EIS contains only a general requirement that compensatory mitigation lands will be “protected and enhanced.” This is too vague to allow for meaningful analysis, implementation, or enforcement. There is no particular process, implementing entity, timeframe, or method for compensatory mitigation set forth in this measure. “Enhancement activities” are described as only a menu of potential options. Previous comments submitted by USFWS refuge manager Kim Forrest on August 12, 2019 capture these uncertainties:

“The HSRA may be committed to acquiring easements within the GEA to mitigate for environmental damage. However, what is the guarantee that the HSRA will be able to obtain an adequate acreage of easement lands, if HSRA does not condemn land for mitigation purposes; and that easements acquired will be in appropriate locations for wildlife? Who will be the easement holder? Who will manage the land appropriately for natural resource benefits and wildlife? If the HSRA plans to mitigate for the damage to wildlife by restoring land to viable wildlife habitat, will the HSRA fund the restoration? Who will be the restoration implementing/ oversight organization? If wetland habitat will be created to compensate for the reduction in the quality of the existing habitat, where will the water come from? The existing wetlands have had a long and difficult time garnering the water we currently have. How will additional water for wetlands be found, and will it compete with the existing wetlands for their water supply?”

The HSRA has long been aware of these deficiencies, and has repeatedly rejected requests by the GEA working group to work with the HSRA and identify a more detailed plan for compensatory mitigation in the GEA. That decision was in error, and is reflected in the DEIR/EIS as overly vague and inadequate mitigation measures.

1678-2224

Sixth, there are similar problems with vagueness and lack of specificity in other compensatory mitigation measures, including Mitigation Measures BIO-MM#12 (listed plant species), BIO-MM#55 (Swainson’s Hawk nesting trees and habitat), BIO-MM#72 (permanent impacts to riparian habitat).

1678-2225

B. The Proposed Mitigation Measures Lack Oversight and Legally Binding Enforcement Mechanisms

The same measures described above lack any oversight from a resource or other permitting agency or stakeholder working group, and their implementation will amount to the HSRA and its contractors serving as both the Project proponent and the overseer of compliance with its mitigation requirements. This “fox guarding the henhouse” arrangement is improper. Mitigation measures must be specifically set forth and “must be fully enforceable through permit conditions, agreements, or other legally-binding instruments.”¹⁶⁷

The following mitigation measures, along with others that are described in detail throughout comments, lack any process for review, approval, or oversight by another agency or working group, making enforcement of these measures nearly impossible:

- BIO-MM#5 (biological resources management plan)
- BIO-MM#12 (listed plants)
- BIO-MM#55 (Swainson’s Hawk)
- BIO-MM#58 (waterbird habitat)
- BIO-MM#72 (riparian habitat)
- BIO-MM#80 (biological noise barriers)

The lack of enforceability of these measures stands in stark contrast to other measures, particularly where the law requires the HSRA to secure a state or federal permit with a resources agency. For example, Mitigation Measures BIO-MM#10 and BIO-MM#74 set forth detailed compensatory mitigation programs for impacts to species that are listed under the state or federal Endangered Species Acts, and for jurisdictional waters protected under the state or federal Clean Water Acts, respectively.¹⁶⁸ Measure BIO-MM#10 requires that the overseeing resource agency receive a mitigation plan that specifically describes:

- The estimated direct permanent and temporary impacts;
- The process used to confirm impacts, with a detailed list of adjustments that will be made if actual impacts differ from estimates;
- The strategy for mitigating effects;

¹⁶⁷ CEQA Guidelines § 15126.4(a)(2); Public Res. Code § 21081.6(b); *King and Gardiner Farms, LLC v. County of Kern* (2020) 45 Cal.App.5th 814, 832-833.

¹⁶⁸ DEIR/EIS pp. 3.7-140 to 3.7-141, and 3.7-166.

Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2225

- Habitat restoration or enhancement projects, success criteria to evaluate their performance, and description of monitoring to verify that such criteria have been met;
- Management actions to maintain habitat on mitigation sites, and the funding mechanisms for long-term management;
- Adaptive management approaches that would be used in the management of species habitat;
- The financial assurances that would be provided to demonstrate that funding to implement the mitigation is assured.¹⁶⁹

Measure BIO-MM#74 similarly requires the submission of specific objectives, site selection factors, an adaptive management plan, and financial assurances to the permitting agency.¹⁷⁰

The unenforceable mitigation measures cited above, which lack any specific criteria or process for implementation and will not be enforceable through a legally binding agreement or permit, must be corrected. These revised measures should require the submission and approval by an oversight agency or stakeholder working group of specific mitigation evaluation processes, selected sites, restoration and enhancement plans, proposed management actions, success criteria, adaptive management approaches, and financial assurances.

1678-2226

XI. THE DEIR/EIS IMPERMISSIBLY DEFERS THE FORMULATION OF MITIGATION MEASURES TO POST-APPROVAL STUDIES AND PLANS

Many of the most important mitigation measures proposed in the DEIR/EIS to address impacts in the GEA also defer the formulation of mitigation plans to an uncertain future date. CEQA and NEPA prohibit a lead agency from deferring the formulation of mitigation measures to some future time.¹⁷¹ The DEIR/DEIS's approach to mitigation violates CEQA and NEPA for two reasons.

First, the mitigation measures provide a vague outline of tentative plans for the deferred formulation of mitigation measures. Numerous cases illustrate that "reliance on tentative plans for future mitigation" that will be developed after completion of the environmental review process significantly undermines the goals of full disclosure and informed decision-making, and "consequently, these

¹⁶⁹ *Id.* pp. 3.7-140 to 3.7-141.

¹⁷⁰ *Id.* p. 3.7-166.

¹⁷¹ CEQA Guidelines § 15126.4(a)(1)(B); *Oregon Natural Resources Council v. Marsh* (9th Cir. 1987) 832 F.2d 1489, 1493.

1678-2226

mitigation plans have been overturned on judicial review as constituting improper deferral of environmental assessment."¹⁷² In *Communities for a Better Environment v. City of Richmond*, the court invalidated an EIR that "merely propose[d] a generalized goal ... and then set[] out a handful of cursorily described mitigation measures for future consideration that might serve to mitigate ... [impacts] resulting from the Project."¹⁷³

A similar standard attaches under NEPA. An EIS must analyze mitigation measures in detail and explain their effectiveness. This cannot be done for mitigation measures "when they have yet to be developed" and when a detailed mitigation plan is lacking.¹⁷⁴ "Without a complete mitigation plan, the decision maker is unable to make an informed judgment as to the environmental impact of the project — one of the main purposes of an environmental impact statement."¹⁷⁵

Similarly, here, the DEIR/EIS sets forth generalized measures that will be developed at a later date. For example, rather than committing to the construction of a tubular enclosure to avoid adverse noise impacts throughout the GEA, which the HSRA has evaluated and determined would be both feasible and the most protective above-ground option, Mitigation Measure BIO-MM#80 commits to constructing one noise barrier that would "cover or obscure some or all of the train, ... if feasible," and another full enclosure that "provide a minimum of 10 dBA attenuation of sound."¹⁷⁶ If impacts are not avoided, under Mitigation Measure BIO-MM#58 a model would be developed by the HSRA to estimate remaining impacts, and a vague compensatory mitigation plan would be developed in an undisclosed location that may include certain restoration and enhancement actions.¹⁷⁷

Another example is Impact Avoidance and Minimization Feature BIO-IAMF#5, which states that "[t]he project biologist would prepare a biological resources management plan (BRMP) consolidating permit conditions and an array of other requirements relevant to protection of sensitive biological resources."¹⁷⁸ As described by Ms. Owens, this often-involved measure "provides no specifics on any habitats, special status species, hydrology, etc., zero information on timelines,

¹⁷² *Communities for a Better Env't* (2010) 184 Cal.App.4th 70, 93.

¹⁷³ *Id.*

¹⁷⁴ *Oregon Natural Resources Council v. Marsh* (9th Cir. 1987) 832 F.2d 1489, 1493-1494.

¹⁷⁵ *Id.*

¹⁷⁶ DEIR/EIS p. 3.7-170.

¹⁷⁷ *Id.* pp. 3.7-162, 3.7-170.

¹⁷⁸ *Id.*, Appendix 2-E, pp. 2-E-6 to 2-E-7.

Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2226

success criteria, goals, performance criteria, cost or guarantee of funding relevant to the specific costs, details about any compensatory mitigation lands and what they are comprised of regarding occupancy of habitats and special-status species. It states that buffers, exclusion zones, measures, locations, and some sort of monitoring will be scripted by 'the project biologist.'¹⁷⁹

These types of mitigation plans are analogous to the mitigation proposed in the EIR that was rejected by the court in *Communities for a Better Environment v. City of Richmond* (CEQA) and in the EIS that was rejected in *Oregon Natural Resources Council v. Marsh* (NEPA). Ms. Owens provides a detailed expert opinion, based on her professional experience, of why such measures regularly fail to protect biological resources.¹⁸⁰

1678-2227

Second, the approach taken in the DEIR/EIS precludes meaningful public participation since the absence of definitive mitigation measures prevents the public and decision-makers from evaluating the effectiveness of the proposed mitigation plan. This has been explained in a number of CEQA and NEPA cases requiring mitigation measures to be developed during the public environmental review process, not after project approval:

*The development of mitigation measures, as envisioned by CEQA, is not meant to be a bilateral negotiation between a project proponent and the lead agency after project approval, but rather, an open process that also involves other interested agencies and the public.*¹⁸¹

*A study conducted after approval of a project will inevitably have a diminished influence on decision making. Even if the study is subjected to administrative approval, it is analogous to the sort of post hoc rationalization of agency action that has been repeatedly condemned in decisions constructing CEQA.*¹⁸²

¹⁷⁹ Owens Comments, **Attachment A**, pp. 14-18.

¹⁸⁰ *Id.* at pp. 14-21, 43-44.

¹⁸¹ *Communities for a Better Env't* (2010) 184 Cal.App.4th 70, 93.

¹⁸² *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 307.

1678-2227

*This plan lists general measures to mitigate the impact of the project on wildlife. The plan refers to "habitat manipulative techniques," but fails to specify which techniques will be used. ... More important, there is no analysis of the mitigation measures listed, or any estimation of how effective the measures will be. The importance of the mitigation plan cannot be overestimated. It is a determinate factor in evaluating the adequacy of an environmental impact statement. Without a complete mitigation plan, the decision maker is unable to make an informed judgment as to the environmental impact of the project — one of the main purposes of an environmental impact statement.*¹⁸³

Because the DEIR/EIS defers all details regarding the design of its mitigation measures and compensatory mitigation plans, and leaves the selection of specific mitigation measures to the HSRA, the DEIR/EIS violates CEQA and NEPA. The HSRA must remedy this inadequacy in an updated and recirculated EIR.

XII. CONCLUSION

The Grassland Ecological Area is an irreplaceable, internationally significant, ecological resource. Further loss or degradation of this largest remnant wetland habitat in the Central Valley will have a negative impact on migratory species that move across the North American continent and among continents during their annual cycle. For these reasons, protection of this unique ecosystem is essential to the preservation and maintenance of the productivity of this important natural heritage.

We appreciate the Authority's recognition of the unique risks that the HST may pose to the GEA and its commitment to meaningfully evaluate and mitigate these risks. Representatives from the GWD, GRCD and Grassland Fund would be happy to consult with Authority staff regarding the issues raised in this letter if additional information is needed. Thank you for considering these comments.

¹⁸³ *Oregon Natural Resources Council v. Marsh*, 832 F.2d at 1493.

Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

Sincerely,



Ellen Wehr
General Counsel

San Jose - Merced - RECORD #1676 DETAIL

Status : Unread
Record Date : 6/24/2020
Submission Date : 6/23/2020
Interest As : Local Agency
First Name : Ellen
Last Name : Wehr
Attachments : Attachment A.pdf (487 kb)
Attachment B.pdf (2 mb)
Attachment C.pdf (159 kb)

Stakeholder Comments/Issues :

Good afternoon,
Please find attached Attachments A, B, and C to the comments of Grassland Water District, Grassland Resource Conservation District, and the Grassland Fund. Further attachments will follow by separate email.

Ellen Wehr
Grassland Water District
(916) 873-2020
ewehr@gwdwater.org<mailto:ewehr@gwdwater.org>

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From: Ellen Wehr
Sent: Tuesday, June 23, 2020 4:54 PM
To: 'san.jose_merced@hsr.ca.gov' <san.jose_merced@hsr.ca.gov>
Cc: Ric Ortega (rortega@gwdwater.org) <rortega@gwdwater.org>; Jessica Wright <jwright@gwdwater.org>; 'Emma Hansen' <hansenemma23@gmail.com>
Subject: Comments on Draft EIR/EIS for San Jose to Merced Project Section (Message 1)

Good afternoon,
Please find attached comments from Grassland Water District, Grassland Resource Conservation District, and the Grassland Fund. Attachments will follow by separate email.

Thank you,

Ellen Wehr
Grassland Water District
(916) 873-2020
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Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

Renee Owens, M.S. - Biologist and Independent Environmental Consultant

ATTACHMENT A

(Comments of Grassland Water District, Grassland Resource Conservation District, and Grassland Fund)

June 23, 2020

Ellen Wehr
Grassland Water District
(916) 873-2020
ewehr@gwdwater.org

Subject: Comments on Biological Resource Impact analysis of the Draft Environmental Impact Report / Environmental Impact Statement High-Speed Rail San Jose to Merced Project Section

Dear Ms. Wehr,

This letter contains my comments on the biological resource analysis of the San Jose to Merced Project Section ("Project") Draft Environmental Impact Report and Draft Environmental Impact Statement ("DEIR/S") that was prepared for the California High-Speed Rail Authority ("HSRA").

The HSRA proposes to develop an electrical high-speed rail with trains capable of operating up to 220 miles per hour (mph) over a dedicated track alignment. The Project Section consists of three separate portions: San Jose to Central Valley Wye, Central Valley Wye, and Ranch Road to Merced. The portion of the Project Section analyzed in this Draft EIR/EIS is from Scott Boulevard, just north of San Jose Diridon Station, to Carlucci Road. This is referred to as the San Jose to Central Valley Wye Project Extent. It would extend approximately 90 miles, passing through Santa Clara, San Benito, and Merced Counties and the cities of Santa Clara, San Jose, Morgan Hill, Gilroy, and Los Banos.

I. THE DEIR/S FAILS TO ADEQUATELY DISCLOSE AND DISCUSS THE PROJECT'S BIOLOGICAL BASELINE

1

Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

Renee Owens, M.S. - Biologist and Independent Environmental Consultant

Renee Owens, M.S. - Biologist and Independent Environmental Consultant

1678-2228

A. The DEIR/S Presents Misleading and Incomplete Information on Field Surveys

The Project proposes to directly, indirectly and cumulatively impact a stretch of roughly 90 miles (varies by a few miles depending upon the Alternative)¹ and a resultant thousands of acres of a multitude of habitats, as well as a minimum of 98 special-status plant species and 75 special-status animal species (includes species with high potential to occur onsite that were omitted by the DEIR/S, see below). According to the DEIR/S's definition of the extent of the habitat study area (1,000 feet on either side of the alignment beyond the project footprint) combined with a conservative estimate of the width of the Project footprint,² this segment of the Project would comprise at least 24,000 acres (9,712.46 Hectares) of impacted habitat. It should be pointed out that a conservative estimate was used because the DEIR/S fails to present any estimate of the width of the Project footprint. At most it describes the width of the Project footprint as "varies". One cannot estimate the width from the graphic provided, since it is not to scale, i.e. 250 feet is shown to be a wider stretch than 750 feet in the footprint of figure 4-1 of the Biological Resources Technical Report. This is a major oversight, the DEIR/S should have a description and associated map of all the impacted areas, with associated habitat - from ground-truthed habitat surveys representative of a current baseline - and special-status species mapped. This is a standard protocol provided in any comprehensive EIR and provides the reviewing public both a clear visual and written description of the actual scope of the Project in respect to biological resources.

1678-2229

The DEIR/S states that "reconnaissance" surveys were conducted, resulting in "qualitative information on vegetation and wildlife habitat quality" and claim that 75% of the Project for all four alternatives was investigated. This claim is deliberately misleading as well as inaccurate. Table 3.7-2 indicates that a sum total of 16 days was spent doing "reconnaissance", although

¹ DEIR/S p. S-1

² DEIR/S Biological and Aquatic Resources Technical Report ("BTR") Fig 4-1

1678-2229

hours spent in the field per day are not provided and should be.³ However, the descriptions of these surveys indicate they often were not spent doing what environmental biologists define as actual biological reconnaissance surveys, specifically, "Biological resource reconnaissance surveys are conducted in order to identify the habitat types present on and adjacent to a site, delineate wildlife movement corridors within and across the subject property, and determine what additional protocol-level wildlife and botanical surveys, if any, are needed to determine the presence of special-status animals and plants and the effects of a proposed project on biological resources."⁴

To the contrary, the DEIR/S states that 8 days of "reconnaissance" were spent conducting wetland delineation, a specific and time-intensive, data collection-intensive task that maps and characterizes wetlands, and thus does not include data collection for non-wetland habitats.⁵ The table indicates 5 days were spent investigating areas for geotechnical / boring sites, and one is described as a "tour" looking at facility overlap. This leaves only a few days to actually conduct detailed reconnaissance (a.k.a. habitat assessments), that, according to the DEIR/S, were to "verify" data from 2010.⁶ Given how much vegetation communities change over the years, there is no reason why old data would be verified in lieu of new and more accurate data collection, including delineations of habitat scope, borders, type, ecotones; especially important where habitats may be markedly different from a decade ago due to type conversion, alteration of weed regime, results of other anthropogenic disturbances, fire, etc. As importantly, to truly cover 75% of the Project would require biologists to review the better part of 18,000 acres in the few days where they were "verifying" land cover mapping. Obviously, this is impossible without a very large team of biologists. Therefore one can conclude that field

³ DEIR/S BTR Table 4-2

⁴ <https://www.countyofnapa.org/DocumentCenter/View/8498/Attachment-B---Biological-Resources-Survey-Guidelines-8-2016-PDF>

⁵ DEIR/S BTR section 4.5.

⁶ DEIR/S BTR Table 4-2

Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

Renee Owens, M.S. - Biologist and Independent Environmental Consultant

Renee Owens, M.S. - Biologist and Independent Environmental Consultant

1678-2229

surveys akin to actual habitat assessments were not made in any comprehensive or biological sense, which should be the bare minimum surveys that are conducted to inform the reviewer about the true, current baseline of the Project.

1678-2230

B. The DEIR/S's Rationale for Omission of Focused Surveys is Flawed

The HSRA acknowledges it conducted absolutely no rare plant surveys, no wildlife surveys, no focused special-status surveys, and no protocol surveys of threatened or endangered species. The DEIR/S's rationale for their lack of such surveys is weak and not supported by evidence or the accounts of other stakeholders. The HSRA claims that they were unable to conduct these necessary surveys due to limited access to most of the Project. They claim that they requested access to areas to "identified parcels" (undefined) in 2016, 2017, and 2019 and access to most properties had not been granted. The DEIR/S states these letters were saved but provided no evidence of them. However, stakeholders who have been directly involved in this Project's permitting process since 2007 and prior - including biologists and other staff at the Grasslands Water District - said they did not receive any such requests. The California Department of Fish and Wildlife (CDFW) received a request on April 2, 2019 and granted access to Los Banos, Volta, and Cottonwood Creek. Why did HSRA wait until 2019 to make such a request, especially when the NOP was published a decade prior? This is particularly unusual when comprehensive surveys for plants and invertebrates in particular necessitate more than one year of data collection to provide accurate detection of species that can emerge or remain dormant depending on seasonal rainfall and other variables. Additionally, there are various other public lands bordering, and in proximity to, the Project, as the DEIR/S's own map illustrates.⁷ The DEIR/S makes no mention of why they considered access to these public lands too difficult to achieve to conduct any sort of focused surveys.

⁷ DEIR/S Fig. 3.7-4

1678-2230

Finally, as an environmental consultant for over 25 years conducting rare plant, focused, and protocol faunal surveys on hundreds of private development project sites throughout California and elsewhere, I have never encountered a project where access prohibited me, my staff, or my colleagues from conducting the surveys necessary for impact analysis or regulatory compliance. Simply put, where there is a will there is a way. I have found the vast majority of private landowners are very cooperative when given sufficient notice requesting access, and even when short notice was given.

1678-2231

C. The DEIR/S's Impact Analysis Is Inadequate and Lacks Substantial Evidence

For the DEIR/S to ignore the need for focused / protocol surveys for at least some of the dozens of protected species, as well as avoiding rare plant surveys, bat surveys, general avian, mammal, reptile, and herpetological surveys, demonstrates a fatal flaw in the analyses. It is impossible to analyze direct, indirect, or cumulative impacts to species without such current, ground-truthing data available. The CEQA Guidelines Section 15125 makes clear that ordinarily the appropriate baseline will be the actual environmental conditions existing at the time of CEQA analysis. Establishing an appropriate baseline is essential; an inappropriately defined baseline can cause the impacts of the Project to be under-reported and thus unmitigated.

1678-2232

Instead of conducting project-wide focused surveys for any wildlife or rare plant species on and near the Project, the DEIR/S relies on databases and an incomplete, subjective "model" (see below) to predict only presence/absence of species. Such predictions are not supported by actual, ground-truthed observations made by biologists who specialize in the species and the taxa to be surveyed. Focused and protocol surveys are conducted in order to not only determine if a species is present, but to collect data on other essential information regarding subpopulation assessments including species richness, density, abundance, foraging use, prey status, behavioral factors, breeding status, corridor use, migrants, and other pivotal ecological

Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

Renee Owens, M.S. - Biologist and Independent Environmental Consultant

Renee Owens, M.S. - Biologist and Independent Environmental Consultant

1678-2232 | variables that reflect the real world status of the site, information that cannot be derived from any given database, model, or combination thereof.

1678-2233 | Additionally, a plethora of research on many of the special-status species listed in the DEIR/S has determined that not only presence but abundance and density of species can be highly variable from year to year based upon factors such as drought, seasonal rainfall, anthropogenic and natural disturbances, and related ecosystem functions including prey-predator cycles, gene flow, and responses to herbivory, to name a few.^{8,9,10} This variability is completely ignored by the DEIR/S's reliance on deferred surveys post-permitting, where the applicant claims they will conduct pre-construction surveys for various species as part of mitigation. First, this strategy denies the reviewing public essential information about the Project baseline. Second, it is impossible to analyze, not to mention construct, comprehensive mitigation strategies with appropriate success and performance criteria, to be reviewed by the public, when such a baseline is not provided.

1678-2234 | Third, one time pre-construction surveys will not reflect the variability mentioned above, especially for rare plants whose emergence may change drastically over the course of several years, and for species that rely on such emergence of their host plants, including butterflies like the Bay checkerspot (a protected species known to occur on the project site),¹¹ vernal pools species that also rely on non-descript ephemeral waters for breeding and dispersal,¹² and other species (i.e. breeding and migratory birds) whose presence, breeding status, and abundance is

⁸ Reynolds, J. F., Kemp, P. R., Ogle, K., & Fernández, R. J. 2004. Modifying the "pulse-reserve" paradigm for deserts of North America: precipitation pulses, soil water, and plant responses. *Oecologia*, 141(2), 194–210.
⁹ Charles C. Peterson. 1996. Ecological Energetics of the Desert Tortoise (*Gopherus agassizii*): Effects of Rainfall and Drought. *Ecology*, (6), 1831. <https://doi.org/10.2307/2265787>
¹⁰ Bare, L., Bernhardt, T., Chu, T., Noddings, C., Gomez, M., Viljoen, M. 2009. Cumulative Impacts of Large-scale Renewable Energy Development in the West Mojave: effects on habitat quality, physical movement of species, and gene flow. *Group Project Brief*, Donald Bren School of Environmental Science and Management. UCSB.
¹¹ Bonebrake, T. C., Navratil, R. T., Boggs, C. L., Fendorf, S., Field, C. B., & Ehrlich, P. R. (2011). Native and Non-Native Community Assembly through Edaphic Manipulation: Implications for Habitat Creation and Restoration. *Restoration Ecology*, 19(6), 709–716.
¹² Deiner, K., Hull, J. M., & May, B. (2017). Range-wide phylogeographic structure of the vernal pool fairy shrimp (*Branchinecta lynchi*). *PLoS ONE*, 12(5), 1–20.

1678-2234 | also linked to rainfall, flooding, irrigation, drought, fire, and other abiotic factors that influence food availability.¹³

D. The DEIR/S's Reliance on a Flawed Model in Lieu of Surveys Results in an Incomplete Baseline Analysis

In lieu of any current, real world surveys of the Project, the DEIR/S relies on a model to inform their impact analysis as if it can completely replace floral and faunal surveys. This strategy fails for CEQA and NEPA analysis for several reasons:

1678-2235 | 1. The model is a subjectively applied, incomplete composite, with no rubric for success or performance or tested for real world applicability, not verified by ground-truthing, and as a semi-haphazard work in progress it has not been peer reviewed. Therefore, it remains theoretical and highly experimental; without supporting current ground-truthing over a minimum of the last three years it is not adequate for presentation of a current baseline that is reliably and comprehensively representative of current conditions.

1678-2236 | 2. A model's power to predict the real world is only as good as the precise application of the data used to inform it, including accuracy of its assumptions, sampling variability, statistical relevance, experimental design, and consistency.¹⁴ The lack of careful application of spatial data and GIS directly affects consistency and validity of results, especially regarding issues affecting spatial dataset management and use, including format, scale, completeness, timeliness, and appropriate collection and application of metadata. The effective implementation of spatial analysis (GIS) requires a thorough understanding – and for a DEIR/S, a clear description - of the

¹³ White, P. J., & White, C. A. V. (1996). Functional and numerical responses of kit foxes to a short-term decline in mammalian prey. *Journal of Mammalogy*, 77(2), 370.
¹⁴ Lele, S. R. (2006). Sampling Variability and Estimates of Density Dependence: A Composite-Likelihood Approach. *Ecology*, 87(1), 189–202.

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factors that determine the validity of spatial datasets and the applicability of GIS techniques in order to ensure accountability of GIS-based assessment conclusions.¹⁵

This DEIR/S’s model has many such issues where a lack of sound, scientific, and precise methodology is either not presented or not described adequately enough for the reviewer duplicate the model, rendering the results unreliable and questionable in its applicability. It is subjective, inconsistent, incomplete per ongoing changing parameters and other interpretations (the latter acknowledged by the DEIR/S¹⁶), does not follow any one consistent method (uses various databases and possible metadata without describing them adequately or at all, with low consistency of time when data was collected, scope, data manipulation and categorizing, methodology, etc. across or between databases), and at times it appears the model was not even applied to the DEIR/S’s estimate of potential for species to occur. For example, Appendix B of the Biological Technical Report (BTR) where “modeling approach and source” is left blank, or states, “None due to lack of understanding of habitat parameters.”¹⁷ Models serve a narrow utility as guidelines, and are not meant to be used as strictly predictive. Also, they lose power the less they are informed by real world, site-specific, and species-specific data. This is especially relevant to this DEIR/S where specific acreage impacts are created and used to inform specific mitigation, compensatory and otherwise, for special-status species and their habitats, based purely on the model.

1678-2237

3. According to Appendix F of the BTR (“Appendix F”), in the comments CDFW states that, in regard to the DEIR/S’s species habitat modeling, “total impact to species might not be accurately assessed if assessment is based on model alone.”¹⁸ CDFW also questions the accuracy of the model, stating that it is not clear how the species habitat occurrence modeling

¹⁵ González, Ainhoa. (2012). GIS in Environmental Assessment: A Review of Current Issues and Future Needs. Journal of Environmental Assessment Policy and Management. 14. 10.1142/S146433321250007X.

¹⁶ DEIR/S Appendix D2T Species Habitat Modeling Methods Memorandum; see also Appendix F Agency Working Group Comments and Responses

¹⁷ DEIR/S, BTR Appendix B (Special Status Species Considered)

¹⁸ DEIR/S, BTR Appendix F p. 5

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will be used to determine, prioritize, and track mitigation. CDFW also provides an example of how reliance on a model resulted in lack of mitigation of a species, stating that “habitat modeling is appropriate to use as one tool for habitat assessment but not in lieu of sufficient on-the-ground survey and assessment verification, i.e. region 4 experienced an issue with Hairy Orcutt grass not being detected identified within the project footprint and yet was found during construction.”¹⁹

1678-2238

3. The comments from agencies are duplicated with many omissions: Appendix F has various remarks that remain incomplete, where paragraphs are unfinished and thus the complete discussion from agencies is lacking. In respect to the “covered plant species” rationale, CDFW is reported as stating that “Nine of the species from the list appeared to be potentially present due to habitat suitability. Unless (*comment is incomplete*).”²⁰ There are numerous incidences of this throughout the Appendix. This is a serious flaw in the report, considering that (1) CDFW and USFWS made extensive comments over time regarding content and analysis, and (2) the DEIR/S repeatedly infers they will rely on CDFW expertise to develop and/or review mitigation measures and other plans; and yet the public cannot even review existing comments by these agencies. The DEIR/S needs to replace this Appendix with one that is complete. Also, it would be more informative if the entire email or other communication were repeated as part of the Appendix, and not summarized. Also, there are several instances where CDFW requests species to be included in analysis that were not.

1678-2239

4. The DEIR/S’s model, and other assumptions about the baseline that inform the scripted mitigation measures, rely heavily, and sometimes seemingly solely, on the CNDDDB. Using databases is an important part of gathering site-specific data, but they cannot *replace* timely, focused, or protocol surveys in terms of specificity or accuracy. For example, the DEIR/S relies upon the CNDDDB to make impact determinations at the population level. However, the CNDDDB

¹⁹ DEIR/S, BTR Appendix F p. 5

²⁰ *Ibid.*

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is limited in its ability to predict species currently present at any given locale; instead, it presents at best a conservative description of what may or may not be present onsite, and thus reveals little about details related to populations as a whole. The CNDDDB is not comprehensive and cannot replace focused or protocol surveys in its specificity or accuracy. The CNDDDB's focus is species mapping, it does not present details about characteristics of habitats. Additionally, many species sightings are not actually reported to the CNDDDB. For instance, according to the California Department of Fish and Wildlife CNDDDB coordinator, for most birds the CNDDDB maps only those occurrences that can be associated with "clear evidence of nesting". Observations of flyovers or foraging are generally not mapped into CNDDDB as an 'Element Occurrence', the standard mapping unit, based on NatureServe natural heritage program methodology.²¹ The CNDDDB biologists state that the database represents summaries of species occurrences; not individual detections. "Given limited resources to map submissions, the CNDDDB tries at best to map occurrences that relate to an important aspect of life history." (personal communication P. McIntyre, June 6, 2015). As importantly, CNDDDB records are voluntarily reported and only exist for locations that have been surveyed to greater extent than others. As a result, the lack of CNDDDB records, or records from any other database, do not indicate a species is absent and obviously provides no information on population status. To reinforce this fact the California Department of Fish and Wildlife posts a disclaimer on its CNDDDB website: "We work very hard to keep the CNDDDB as current and up-to-date as possible given our capabilities and resources. However, we cannot and do not portray the CNDDDB as an exhaustive and comprehensive inventory of all rare species and natural communities statewide. Field verification for the presence or absence of sensitive species will always be an important obligation of our customers."²²

In comments provided in Appendix F, the CDFW echoes this reality, stating "the CNDDDB is not a comprehensive database of species occurrences; occurrences don't always get reported, lag

²¹ See: <http://www.natureserve.org/conservation-tools/standards-methods>. Retrieved June 18, 2015

²² See: <https://www.wildlife.ca.gov/Data/CNDDDB/About>

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time in updating database, doesn't inform of areas where surveys haven't been done,"²³ and "CNDDDB is a voluntary notification system in a database. As such it cannot be used to make determinations as to whether a species is "possibly extirpated" / "extirpated" in areas where potentially suitable habitat is present period it also cannot be used to determine present slash absence because the lack of a detection of a species in an area where it would be reasonably expected to occur as a probable function that the area has not been surveyed for the...(comment is incomplete)."

1678-2240

5. The DEIR/S's model's over-weighted reliance on habitat type greatly reduces the predictability of the presence of special-status species – as well as the extent of habitat onsite that they may use, and in what abundance, and may thus be impacted by the project - that may be observed outside of preferred or primary breeding habitat(s), or characteristic vegetation communities, including use of non-native habitat species and disturbed habitat. This applies to behavioral generalists as well as over-wintering species, migrants, and species using the area as a corridor. For instance, golden eagles are known to forage over ten miles from a nest in many different habitats; certain areas may be important prey bases that are an unknown without conducting raptor surveys.²⁴

When I was conducting mortality monitoring at industrial solar facilities in the Imperial county desert I observed a blue-footed booby, a long distance migrant whose primary habitat is tropical ocean waters and nearby coastal cliff sites for nesting, killed by striking wires, as were other rare species observed. I was a researcher for the U.S. Fish and Wildlife Service (USFWS) for the ESA endangered least Bell's vireo recovery program for several years, and noted several of them nesting in atypical species and unexpected habitat, i.e. invasive species Castor bean (*Ricinus communis*). Three pairs were observed nesting in a homogenous stand of non-native Tamarisk in a dry wash in the desert, habitat that would not be used to describe a standard for

²³ DEIR/S BTR Appendix F p. 5

²⁴ Tracey, J.A., Madden, M.C., Sebes, J.B., Bloom, P.H., Katzner, T.E., and Fisher, R.N. 2017. Biotelemetry data for golden eagles (*Aquila chrysaetos*) captured in coastal southern California, February 2016–February 2017: U.S. Geological Survey Data Series 1051, 35 p., <https://doi.org/10.3133/ds1051>.

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species typically found in willow riparian woodland. Mountain lions rely on many habitats, including suburban and disturbed areas to serve as corridors, especially given their average territories are between 100 and 200 square kilometers depending on prey and male to female ratios.²⁵ San Joaquin kit foxes are known to rely on urban and suburban corridors, as well as habitats atypical for breeding and foraging.²⁶ These nuances and variations in habitat use cannot be anticipated or analyzed with the DEIR/S's model.

1678-2241

In Appendix F CDFW points out the flaws of another part of the HSRA model, stating that, "The model developed by Brian Cypher was intended to be used to identify lands to target for protection. Therefore, the model should not be used solely for the purpose of identifying habitat where impacts to the San Joaquin kit fox (SJKF) may occur. Additional information must be built into the model to identify marginal... (*comment is incomplete*)."

The HSRA responded, "It is our opinion that the model is comprehensive and conservative and is suitable for use in identifying areas of potential effect... We will be discussing modifying this model to remove urban habitats from the model as we do not expect to have to... (*comment is incomplete*)."

CDFW responded, "Our original comments stand as this should not be your only model/analysis used for this species and that it is a possibility that SJKF could potentially move through some urban areas or fringes in this vicinity as the towns such as Santa Nella and Los Banos are rural enough that the movement corridor for SJKF in this vicinity is permeable to SJKF. In fact, there are CNDDDB observations... (*comment is incomplete*)."

This argument by HSRA is significant: the DEIR/S's mitigation measures at times rely heavily on language that state how various mitigation plans that are yet unscripted will be created by HSRA and will be submitted to CDFW for review. If the HSRA does not respect the expert opinion of CDFW as appears to be the case here, how can the reviewing public be confident HSRA will respect the agency's opinion post-

²⁵ Dickson, Brett & Beier, Paul. (2002). Home-Range and Habitat Selection by Adult Cougars in Southern California. *The Journal of Wildlife Management*. 66. 1235. 10.2307/3802956.

²⁶ Cypher, B. L., & Frost, N. (1999). Condition of San Joaquin Kit Foxes in Urban and Exurban Habitats. *Journal of Wildlife Management*, 63(3), 930. <https://doi-org.jerome.stjohns.edu/10.2307/3802807>

1678-2241

permitting, when financial considerations, time, and lack of enforcement are realities that may additionally influence HSRA's willingness to make changes based on CDFW requests?

In respect to species habitat modeling, CDFW also states that, "**This species modeling and use of land cover should be cautiously used and very carefully analyzed. The San Joaquin Valley can have rapid land cover changes in regards to rotating ag crops as well as land cover classifications / schemes that have caused major... (*comment is incomplete*)**" and "**My concern with some of the modeling is that it will be do [sic] discrete and therefore under identifying the need for potential mitigation similar to what was experienced with another HSR segment (emphasis added).**"²⁷

1678-2242

Also, this over-reliance of habitat based on subjective and unscientific determinations (windshield surveys, aerial photos to make final determinations on habitat type, databases with data that are old and thus less predictive) omits key data regarding density or abundance.

While studying birds in the Sonoran Desert, I observed a dirt road that bordered an agricultural field and supported a high density of 11 nesting burrowing owl pairs, with associated burrows, along a stretch of only 1.1 miles of the road. In 2020 while surveying the ESA endangered Quino checkerspot butterfly I detected 43 individuals within less than two acres of a site where they had not been observed for a decade of drought years. These types of key observations regarding habitat use by rare and endangered species cannot be made by the model as applied by HSRA, and such omissions may thus be reflected as underestimates of habitat impacted by the Project.

1678-2243

The DEIR/S acknowledges where their model inhibits complete analysis of special-status species and yet do not rectify that by conducting the appropriate field surveys. For example, CDFW asks how HSRA will analyze potential impacts to rare plants, noting that "appropriately timed floristic based rare plant surveys should be conducted using industry standards to optimize

²⁷ DEIR/S, BTR Appendix F p.14

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detections or conclusions of absence.”²⁸ The DEIR/S states that “floristic based surveys for these plants will be required to determine absence where there is potential for occurrence. It is in outlining the necessary criteria for such potential for occurrence that will pose some challenge given the habitat requirements for these species are not well understood...” And yet the DEIR/S describes no actual floristic based surveys conducted for the Project site. The DEIR/S also claims that their vegetation datasets will be prioritized using data collected from aerial interpretation, windshield surveys, and on-the-ground surveys.²⁹ Once again, no comprehensive ground surveys were conducted (see above regarding reconnaissance surveys), “windshield surveys” are restricted to vehicle access on public roads and not methodical, and aerial surveys are an unscientific method to determine details of habitats and, as importantly, the rare plants that may be present.

1678-2244

There is an abundance of taxa- and species-specific incidences where the DEIR/S’s omission of floral and faunal surveys will result in errors in assumptions and protocols for avoidance and mitigation measures. This is especially significant considering the applicant has created very specific estimates (acreages) of impacts on special-status species, without clear explanation of how these acreages were derived from the inconstantly applied model. The DEIR/S needs to demonstrate specifically how acreages of impacts were derived for each habitat,³⁰ especially with zero ground-truthing.

1678-2245

II. MITIGATION MEASURES DEFERRED TO THE FUTURE FAIL TO MEET THE REQUIREMENTS NECESSARY FOR REVIEW

In comments to biological impact analysis, the CDFW refers to the memo quoting the HSRA comment that “required compensatory mitigation will be based on the revised habitat models

²⁸ DEIR/S, BTR Appendix F p. 4
²⁹ DEIR/S, BTR Appendix F p. 5
³⁰ DEIR/S Tables 3.7-12, 3.7-13

1678-2245

and the results of presence/absence surveys.”³¹ CDFW responded by saying, “This is determined at the permitting stage, not at pre-construction stage.” This comment by CDFW alludes to one of the largest flaws of the DEIR/S’s biological impact analysis; specifically that (1) the DEIR/S inappropriately defers crucial details of many mitigation measures to the future post-permitting, prohibiting adequate public review and comment, and (2) the DEIR/S’s deferral of on-the-ground field surveys post-permitting results in an incomplete baseline as described above, subsequently limiting the analysis of mitigation measure efficacy, which relies frequently on the promise of ground-truthed data conducted pre-construction (post-permitting). This also precludes adequate public review and comment regarding efficacy, success, and overall appropriateness of the yet-to-be scripted mitigation measures.

1678-2246

The DEIR/S’s mitigation analysis proposes the possible creation of a multitude of plans and strategies to minimize significant impacts to different resources. Although the DEIR/S offers some generalized guidelines that allude to the types of methods that may be in these measures, most of the description of what these plans and strategies may entail is deferred to the future, and thus cannot be reviewed at present for efficacy, accuracy, or ability to actually mitigate impacts to below significant, not to mention be enforced *and by whom*. Brief summaries fall short of what is necessary for satisfactory review or analysis of the efficacy of unscripted plans presented as “evidence” to mitigate significant impacts to species and are not adequately expository. For mitigation actions to be successful the devil is in the details, and without such there can be no thorough review of their potential for success.

1678-2247

One of many representative examples that reinforces the statements above is BIO-IAMF#5 “**Prepare and Implement a Biological Resources Management Plan.**” The DEIR/S claims this mitigation measure will reduce impacts of **many** different special-status species listed, describing it as follows: “The project biologist would prepare a biological resources management plan (BRMP) consolidating permit conditions and an array of other requirements

³¹ DEIR/S, BTR Appendix F p.8

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relevant to protection of sensitive biological resources.” What are the permit conditions, specifically? The DEIR/S’s complete description of this pivotal measure - that so many other mitigation claims of reducing significance rely on – is comprised of descriptions that provide little informative data, detail, or assurance of success, comprehensiveness, etc. This measure that is so oft referred to throughout other mitigation measures involves scripting a “plan” that is at the heart of reducing the massive amount of impacts of this project to less than significant. And yet it provides no specifics on any habitats, special-status species, hydrology; no information on timelines, success criteria, goals, performance criteria, cost or guarantee of funding relevant to the specific costs, details about any compensatory mitigation lands and what they are comprised of regarding occupancy of habitats for *each* special-status species to be effected. It states that buffers, exclusion zones, measures, locations, and some sort of monitoring will be scripted by “the project biologist” and leaves it at that.

1678-2248

This Project area has approximately 100 plant and 75 animal special-status species, all with different associated regulatory requirements, natural history, behavior, subpopulation viability determinations, niches, biotic and abiotic limiting factors, breeding requirements, survey protocols, not to mention risks imposed by cumulative impacts other than this project, including development, climate change, pollutants, fragmentation, drought, increased fire risk, ongoing competitions from invasive species, to name a few. Who will oversee the project biologist(s) to ensure they have the experience to make expert, informed decisions regarding all of the above, responsible for writing the plan for such a vast document? And based on exactly what ground-truthed data, with the assistance of whom, funded by whom, overseen by what independent third party? The DEIR/S attempts to side-step this challenge with BIO-IAMF#1 “Project Biologist” definition. However BIO-IAMF#1 does not provide any assurances about using biologists that are independent and thus not beholden to the employment and associated contractual responsibilities imposed by the HSRA (including the obligatory and purposefully restrictive non-disclosure agreements that every biologist is required to sign regardless of contractual status). Biologists hired by project applicants (such as the HSRA) are rarely free to

1678-2248

make ecologically based decisions that would result in altering construction timelines, operations, and other deadlines that managers are loathe to alter based upon their contractual obligations and responsibilities, including supporting actions to protect species that will run contrary to meeting conservative completion timelines or financial budgets. This is not a minor issue, many aspects of mitigation success as posed by the DEIR/S rely on a broad array of responsibilities, expertise, and the assumption that biologists hired by the HSRA will have the ability to make any and all decisions necessary for wildlife protection independently of HSRA construction and operation performance goals. This is unrealistic; mitigation measures must describe how independent third parties will be utilized to oversee construction and operational aspects of mitigation.

1678-2249

The DEIR/S attempts to sidestep providing mitigation measure detail by stating, “The BRMP will be submitted to the Authority for review and approval prior to any ground disturbing activity.” The Authority is the client and permit recipient, for them to be responsible for oversight, enforcement, and all other related factors is inappropriate for reasons iterated above. Additionally, it is important to note that some mitigation “plans” that the HSRA creates will be reviewed by the wildlife agency(ies), in essence imposing the responsibility of mitigation adequacy and success on agency personnel – post-permitting - and using this promise of oversight as a replacement for providing mitigation measure details necessary for CEQA and NEPA review. This is inadequate. The HSRA instead must provide measures with the necessary details for the reviewing public to actually ascertain the likelihood of success of mitigation to reduce impacts to less than significant.

1678-2250

As an environmental consultant I have observed many times the failure of post-permitting mitigation actions, due to the lack of appropriate and informed performance and success criteria, which for various reasons are not implemented, defined, or otherwise analyzed prior to project approval, followed by failures of mitigation success and enforcement. When details are almost entirely deferred to the future, as they are here, mitigation actions become highly

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indeterminate and unspecified. Again, this is inadequate for the reviewing public to determine efficacy of the mitigation, thus denying one of the primary purposes of CEQA and NEPA review. Further, stating that a plan intends to follow guidelines or agency recommendations does not reveal or address the specific and sometimes unprecedented requirements for mitigation for a specific location, including the unique characteristics of a specific project and its impact on a specific sensitive, rare, or otherwise at-risk population, including the long term, indirect, and cumulative impacts unique to every development. Deferral also precludes analysis of how measures will be financed, including if and when success criteria are not met and the fact that remediation for success may take years, or require additional compensatory mitigation not anticipated or discussed pre-permitting.

1678-2251

While the need for flexible adaptive management, and the use of best available science is important for mitigation plans, such can be adopted over time while providing informative mitigation details for mitigation analysis in the DEIR/S. Such details are essential to understand and address the characteristics of a site and its unique species cohort and their relevant ecological status. They should include necessary specifics in descriptions of compensatory mitigation, i.e. will it be revegetation or restoration, under what timeline, etc., as well as other relevant ecological variables if actions include adoption of mitigation easements or banks, including site information on species herereogeneity, diversity, abundance, richness, presence of target species located on and near the site, and by what performance standards and metrics the compensatory land parcel will reduce direct, indirect, and cumulative impacts to the Project.^{32, 33}

1678-2252

Data collection in the form of monitoring is important to inform adaptive management but it is not mitigation and cannot replace dead animals or unmitigated loss of rare plants. When

³² Keeley, J., Baer-Keeley, M. C.J. Fotheringham (eds). (2000). 2nd Interface Between Ecology and Lard Development in California U.S. Geological Survey Open_file Report00-62. <https://pubs.usgs.gov/of/2000/of00-062/>
³³ Newton, G. and Claassen, V. (2003). Rehabilitation of Disturbed Lands in California: A Manual for Decision-Making. *California Geological Survey*.
<https://www.conservation.ca.gov/dmr/SMARA%20Mines/Documents/sp123.pdf>

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sensitive species are killed or injured by the facility during operation, what measures will HSRA commit to for remediation? And will such unanticipated actions be adequate, especially considering mitigation comes with economic and other perceived burdens that most developers seek to minimize at any given moment, particularly when enforcement is minimal and oversight at remote locations lacking?

1678-2253

Deferring mitigation plans to a future date is also inadequate because the unscripted details are based largely upon anticipation of a future direction by various unnamed and presumed experts – or administrators – yet to be determined. This has two inherent problems: (a) It disallows reviewers to adequately analyze efficacy of mitigation measures as required by CEQA, and (b) It leaves the process vulnerable to real world bias, political digressions, employee changes, financial shortfalls, and conflicts between the wildlife agencies and the HSRA, as well as to litigation and other interruptions that are known to lead to mitigation failure and overall disruptions post-project approval and permitting.

Resource experts on measuring effectiveness of mitigation measures, especially ones regarding compensatory tradeoffs as pivotal to mitigation success, state that, **“Public choice theory profoundly suggests officials and traders have more incentive to facilitate barter than to ensure biodiversity protection.** Thus, given the option of saying to developers “yes, with conditions” or “no,” officials will prefer “yes, with conditions”— **particularly when compliance with conditions cannot be credibly measured and officials can avoid accountability for outcomes.** Legitimized bartering can thus create a policy situation “obscure enough to please all parties and so ill-defined that failures will be difficult to detect not to mention rarely measured (emphasis added).”³⁴ When asked about the success of compensatory mitigation for wetland restoration, Dr. Joy Zedler, chair of the 2001 NRC Compensatory Mitigation Study

³⁴ Walker, S.; Brower, A.; Stephens, R, T; and Lee, W. 2009. Why Bartering Biodiversity Fails. *Conservation Letters* 2:149–157. http://www.azoresbioportal.angra.uac.pt/files/publicacoes_Walker%20et%20al%202009.pdf

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Committee, said, "It could be the best of all worlds...or it could be the same old same old . . . It's all in the implementation."³⁵

These realities are underscored by the HSRA's own description of financial challenges incurred thus far where they state that,

"At the outset, the Authority lacked the resources to meet the land-acquisition schedule of a magnitude that was greater than had ever been experienced in the state....The early start of construction in the Central Valley resulted in unforeseen or underestimated costs"³⁶ and "Moving fast to meet the ARRA deadline with concurrent final design, right-of-way acquisition; environmental clearances for changed design and early construction work created extra costs and risks," and **"The design-build environmental compliance contract language created an economic incentive for the contractor to argue, avoid and/or minimally comply with environmental conditions set forth by regulatory agencies. This issue increased costs related to oversight and mitigation for the Authority** (emphasis added),"³⁷ and "The availability of sufficient funds presents one of the largest challenges to the delivery of the high-speed rail program. Access to an ongoing, stable funding stream affects our ability to complete the Silicon Valley to Central Valley Line and, ultimately, the remaining San Francisco to Los Angeles/Anaheim system. This fact will continue to affect the cost of the program as inflationary escalation is periodically added to remaining segment costs until funding has been identified for construction. Although funding to complete the Phase 1 system has yet to be identified, there are sufficient funds to complete an initial operable

³⁵ Alice Kenny, April 27, 2008. *Environmentalists Sound Off on EPA Wetland Regs*, Ecosystem Marketplace. <http://staging.ecosystemmarketplace.com/articles/environmentalists-sound-off-on-epa-wetland-regs/>.

³⁶ HSRA 2018 Business Plan p. 54 https://www.hsr.ca.gov/about/high-speed_rail_authority/

³⁷ *Ibid.*, pp. 54-55

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segment in the Central Valley... It is important to note, that these resources only support roughly a third of the Phase 1 program financial requirements."³⁸

The DEIR/S's deferral of mitigation plans devoid of details provides no assurances that necessary oversight or compliance will be written into Plans written by, and for, the HSRA. These statements reinforce real world risks that are partly responsible for why so many mitigation plans, like those summarized in this DEIR/S, fail to reduce impacts to below significant for projects over the years. This is a serious challenge; a high rate of failed mitigation due to heavy reliance on post-permitting due diligence is something I have observed repeatedly as an environmental consultant working in the public and private energy, residential, and transportation development sectors. Finally, the courts have determined that deferring mitigation to the future is an inadequate action under CEQA, as they did so in *Preserve Wild Santee V. City Of Santee*, when mitigation for an endangered species and wetland habitats was deferred to a future plan instead of addressed appropriately in the EIR.³⁹

As such, the DEIR/S should revisit its mitigation measures and provide definitive, detailed descriptions that include success criteria, performance standards and timelines that follow the best available science, and specifics on enforcement, cost, and related funding source for each plan.

III. THE DEIR/S'S INCOMPLETE BASELINE RESULTS IN UNMITIGATED IMPACTS TO RARE PLANTS

Rare plant emergence and population status cannot be determined from presence/absence models, as such neither can acreages of impact, direct, indirect, and cumulative. For rare plant surveys to be complete - especially for a Project with the potential for over 100 special-status plant species to occur - the time period for surveys by necessity should be broader than a pre-

³⁸ HSRA 2020 Business Plan p. 128 https://www.hsr.ca.gov/docs/about/business_plans/2020_Business_Plan.pdf

³⁹ <https://caselaw.findlaw.com/ca-court-of-appeal/1614349.html>

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construction survey, i.e., every month between March and June for the entire project, including during a wet year when possible. To do so was feasible, as 2019 was a particularly wet year following many years of severe drought. Given the 2020 timing of the release of this DEIR/S, conducting spring and summer surveys in 2019 was not only feasible, but important to ensure coverage of rare plants that may have been difficult to detect, or non-emergent, in especially dry years which the model may accidentally prioritize.

1678-2255

The California Native Plant Society Botanical Survey Guidelines lists certain requirements for thorough botanical surveys to be “consistent with the California Native Plant Society’s goal of preserving plant biodiversity on a regional and local scale, and with California Environmental Quality Act environmental impact assessment criteria,⁴⁰” including the following,

“...A sufficient number of visits spaced throughout the growing season is necessary to prepare an accurate inventory of all plants that exist on the site.

... All habitats within the project site must be surveyed thoroughly in order to properly inventory and document the plants present.

... Population boundaries should be mapped as accurately as possible. The number of individuals in each population should be counted or estimated, as appropriate.

Complete reports of botanical surveys shall be included with all environmental assessment documents, including Negative Declarations and Mitigated Negative Declarations, Timber Harvesting Plans, Environmental Impact Reports, and Environmental Impact Statements. Survey reports shall contain the following information:

b. Methods, including:

⁴⁰ California Environmental Quality Act Guidelines, §15065 and §15380.

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- 1) Survey methods for each of the habitats present, and rationale for the methods used.
- 2) Description of reference site(s) visited and phenological development of the target special-status plants, with an assessment of any conditions differing from the project site that may affect their identification.
- 3) Dates of surveys and rationale for timing and intervals; names of personnel conducting the surveys; and total hours spent in the field for each surveyor on each date (emphasis added)

d. Discussion, including:

- 1) Any factors that may have affected the results of the surveys (e.g., drought, human disturbance, recent fire).
- 2) Discussion of any special local or range-wide significance of any plant population or community on the site.
- 3) An assessment of potential impacts. This shall include a map showing the distribution of special-status and locally significant plants and communities on the site in relation to the proposed activities. Direct, indirect, and cumulative impacts to the plants and communities shall be discussed.
- 4) Recommended measures to avoid and/or minimize direct, indirect, and cumulative impacts.”⁴¹

The CDFW Protocols for Surveying and Evaluating Impacts to Special-status Native Plant Populations and Sensitive Natural Communities states that the extent of botanical field surveys should include, “traversing the entire project area to ensure thorough coverage, documenting all plant taxa observed. Parallel survey transects may be necessary to ensure thorough survey coverage in some habitats. The level of effort should be sufficient to provide comprehensive reporting. Additional time should be allocated for plant identification in the field.” And surveyors should “space botanical field survey visits throughout the growing season to

⁴¹ CNPS Botanical Survey Guidelines. (2001). https://cnps.org/wp-content/uploads/2018/03/cnps_survey_guidelines.pdf

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accurately determine what plants exist in the project area. This usually involves multiple visits to the project area (e.g. in early, mid, and late-season) to capture the floristic diversity at a level necessary to determine if special-status plants are present.”^{42, 43}

CDFW also states that, “When special-status plants are known to occur in the type(s) of habitat present in a project area, observe reference sites (nearby accessible occurrences of the plants) to determine whether those special-status plants are identifiable at the times of year the botanical field surveys take place and to obtain a visual image of the special-status plants, associated habitat, and associated natural communities,” and “To further substantiate negative findings for a known occurrence, a visit to a nearby reference site may help ensure that the timing of botanical field surveys was appropriate.”⁴⁴

Upon review of the DEIR/S it is clear that HSRA did not meet these requirements that would ensure adequate presentation of the baseline and resultant analysis of impacts to rare plants for the Project area. As importantly, specific protocols for developing a revegetation plan, a weed control plan, or a translocation plan cannot be analyzed or met with a one time, abbreviated pre-construction survey as proposed by the DEIR/S in MM#7, where it simply states, “Prior to any ground-disturbing activity, the Project Biologist would conduct presence/absence botanical field surveys for special-status plant species and special-status plant communities within a work area.” Clearly this type of survey does not comply with the guidelines iterated above. The DEIR/S fails to describe how they will conduct comprehensive rare plant surveys, as described above, while concurrently disallowing the public from reviewing any resultant analysis or mitigation measures of such surveys.

⁴² U.S. Fish and Wildlife Service Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants available at: <https://www.fws.gov/sacramento/es/Survey-Protocols-Guidelines/>

⁴³ CDFW. (2018). Protocols for Surveying and Evaluating Impacts to Special-status Native Plant Populations and Sensitive Natural Communities. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline>

⁴⁴ *Ibid.*

1678-2256

CDFW comments underscore the inadequacies of the DEIR/S’s baseline’s analysis of special-status species. CDFW biologists requested that Contra Costa goldfields (*Lasthenia conjugens*), Marin dwarf-flax (*Hesperolinon congestum*), San Mateo woolly sunflower (*Eriophyllum latilobum*), Santa Cruz tarplant (*Holocarpa macradenia*), San Mateo thornmint (*Acanthomintha duttonii*), Fountain Thistle (*Cirsium fontinale var. fontinale*), and Menzie’s wallflower (*Erysimum menziesii*) all be considered as potentially occurring onsite. CDFW also requests Monterey spineflower (*Charizanthus pungens var. pungens*) be included in analysis, and yet these apparently were excluded, with no expository rationale provided.⁴⁵ To exclude these, the HSRA must present data reflecting information from on-the-ground surveys.

1678-2257

Successful mitigation of rare plants is important not only because these plants have been given a degree of protected status, they are key because their population survival is biologically linked to successful mitigation of many of the special-status species that occur in this Project area, species that rely on healthy habitats devoid of fragmentation and degradation.

IV. THE DEIR/S FAILS TO MITIGATES IMPACTS TO HABITATS AND SPECIAL-STATUS SPECIES TO LESS THAN SIGNIFICANT

A. The Grassland Ecological Area (GEA)

The Grassland Water District (GWD) is a public agency that oversees the Grassland Fund (GF), a nonprofit devoted to the “protection, conservation, and legal defense of the Grasslands, your water supplies, habitat, and sporting traditions.” The GWD coordinates with the Grassland Resource Conservation District (GRCD), which contains approximately 75,000 acres and encompasses several state wildlife areas including the Volta Wildlife Area, Los Banos Wildlife Area, and Mud Slough, Gadwall, and Salt Slough Units of the North Grasslands Wildlife Management Area. 90% of the GRCD is preserved under permanent wetland conservation

⁴⁵ DEIR/S Appendix F

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easements; federal wildlife refuges in the GRCD include portions of the San Luis National Wildlife Refuge. The area is part of the largest contiguous range of wetlands remaining in California's Central Valley, and as such is a key wintering ground for millions of migratory birds along the Pacific Flyway. The GRCD wetland habitats are a component of the Western Hemisphere Shorebird Reserve Network and are recognized for their global importance to shorebirds and other waterbirds. The GWD, GRCD, and GF's mission of conservation is essential in such a large state that, despite its size, has lost over 90 percent of its wetlands to human development. The GWD and GRCD's lands, in combination with adjacent state parks and wildlife preserves, conservation easements, and national wildlife refuges, comprise one of the largest wetland vegetation associations in the state, referred to as the Grassland Ecological Area (GEA). The GEA is comprised of diverse habitats including seasonally flooded wetlands, semi-permanent marsh, woody riparian habitats, wet meadows, vernal pools, native uplands, grasslands and native brush land. The GEA is a vital biological conservation hotspot for over 550 floral and faunal species, and a biodiversity gold mine of 49 CESA/ESA threatened, endangered, and candidate species, including the sandhill crane, California red-legged frog, California tiger salamander, Swainson's hawk, San Joaquin kit fox, tri-colored blackbird, among others. Clearly the GEA and its inhabitants are a vital part of the bioregion and as such play an integral role for conservation purposes. In comments to the Program EIR/EIS (PEIR/S), the USFWS (among others) requested that the HSRA eliminate any high-speed train alignments that crossed through or adjacent to the GEA. The DEIR/S presents inadequate rationale as to why this is not part of their preferred environmental alternative, and must revisit this question, with substantial evidence of why such an alternative is not the primary consideration for this Project's alignment, and how an Alternative that bisects or borders the GEA is the Least Environmentally Damaging Alternative, as claimed by the HSRA previously.

1678-2258

1678-2259

In previous impact analyses, including the 2012 Bay Area to Central Valley High-Speed Train Program Environmental Impact Report / Statement, the HSRA referenced the GEA well over 200 times in regard to it being a primary conservation unit of consideration. In the HSRA's response

1678-2259

to comments to that PEIR/S it acknowledged that, "concern regarding potential impacts on the GEA and/or the uninhabited portions of the Pacheco Pass...include the USFWS, CDFG, California Department of Parks and Recreation, Grassland Water District, Grassland Resources Conservation District, Grassland Conservation, Education & Legal Defense Fund, Ducks Unlimited, California Outdoor Heritage Alliance, California Waterfowl Association, Sacramento Area Council of Governments, Citizens' Committee to Complete the Refuge, Bay Rail Alliance, California Rail Foundation (CRF), California State Parks Foundation (CSPF), Defenders of Wildlife, Planning and Conservation League (PCL), Regional Alliance for Transit (RAFT), Sierra Club, Train Riders Association of California (TRAC), and Transportation Solutions Defense and Education Fund (TRANSDEF)." ⁴⁶ In the 2008 PEIR/S, the HSRA presented a map of the GEA boundary, including where the Project alignment would pass through two sections of the GEA.

Despite this, the 2020 DEIR/S presents misleading information that attempts to minimize the importance of the GEA for impact mitigation. In its analysis and mitigation in respect to the GEA, the DEIR/S's table 3.7-11 summarizes conservation areas, but fails to include the GEA in the table with no explanation. The HSRA does state that the GEA "has been identified as Important Bird Area," ⁴⁷ which should more accurately be stated as "much of the GEA includes a designated IBA". In its analysis the DEIR/S then reduces and confounds discussion and mitigation of impacts by referencing both in terms of the IBA boundary, not the GEA boundary, thus eliminating key areas of the GEA outside of the IBA, including areas overlapping with the Project alignment that are at risk of significant impacts, direct and indirect. The DEIR/S states that, "The real extent of direct permanent and temporary impacts (conversion and disturbance of habitat, disturbance of individuals) on habitat for waterfowl and shorebirds is shown in Table 3.7-16. Impacts in the GEA would be the same under all four alternatives because they would follow the same alignment in that area. Impacts in the UPR IBA would be slightly greater under Alternative 3 than under Alternatives 1, 2, and 4 because its alignment traverses more of the

⁴⁶ HSR PEIR/S 2008 p. S-13

⁴⁷ DEIR/S p. 3.7-42

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UPR IBA than the other alternatives. The magnitude of permanent impacts, in descending order, would be 369.3 acres under Alternative 3; 365.7 acres under Alternatives 1 and 2; and 323.4 acres under Alternative 4. The extent of temporary impacts would be, in descending order, 107.9 acres under Alternatives 1 and 2, 84.8 acres under Alternative 4, and 76.1 acres under Alternative 3. The magnitude of indirect impacts (introduction of invasive nonnative plant species), while not quantified through mapping efforts, would be generally proportional to the quantity of direct impacts.”

1678-2260

The DEIR/S has not provided any clear explanation for why they have reduced the impact boundary from the GEA to the IBA, nor specific explanation of how they estimated the acreage of impacts to these areas, especially when the DEIR/S also states that the footprint of the impact zone alignment “varies” and is not clearly defined for these segments that intersect and border key wildlife habitat.⁴⁸ As importantly, eliminating sections of the GEA from analysis eliminates analysis of impacts to a host of special-status species and related habitat, including the tri-colored blackbird. Not only is the scope of the alignment footprint ill-defined, the DEIR/S also fails to clearly define operational details, including frequency of train passages during high and low peak hours, and the location and scope of all operational facilities. Without these details it is impossible to adequately assess direct, indirect, and cumulative impacts to dozens of special-status species that use the GEA for breeding, foraging, over-wintering, as a corridor, and a migratory stop-over. As iterated above, assumptions of presence/absence, by way of an untested model, do not come close to adequately informing the basic requirements for successful mitigation. This is a major flaw in the DEIR/S that prohibits comprehensive analysis of the impacts to the baseline (as of yet also incomplete), and how successful proposed mitigation measures may be.

1678-2261

The DEIR/S’s biological resource impact analysis does not discuss derailment potential in regard to risk to habitats and waterways in the GEA, including what measures will be taken to reduce

⁴⁸ DEIR/S Fig 4-1

1678-2261

this risk of impact on native wildlife and habitats. The operation plan should include a response plan specific to the GEA and refuge habitat in the event of a derailment.

1678-2262

B. Deferred Pre-Construction Surveys in Lieu of Pre-permit Focused Surveys are Inadequate for Comprehensive Impact Analysis and Successful Mitigation

Comprehensive surveys for special-status species - plants and invertebrates in particular - necessitate more than one year of data collection to provide accurate detection of species that can emerge or remain dormant depending on seasonal rainfall and other ecological variables. For several mitigation measures, the DEIR/S defers any on-the-ground surveys to be conducted post-permitting and refers to them when proposed as pre-construction surveys. In all my experience as an environmental consultant, pre-construction surveys are limited in scope and time to serve the basic function of identifying nesting birds, rare plants, protected species burrows, etc. within a construction footprint right before construction commences. Typically, the time provided to do these surveys is very short, i.e. days or weeks, not years as is required for adequate baseline surveys as discussed above. Also, pre-construction, post-permitting surveys do not allow for public review or comment, and therefore are inadequate substitute in regard to CEQA and NEPA analysis.

1678-2263

C. The DEIR/S’s Analysis and Mitigation for Impacts from Project Strikes, Lighting, and Noise are Flawed and Inadequate

The mitigation measures posed to reduce biological impacts present no analysis of the scope or numbers of individuals of threatened and endangered species that will potentially be injured or killed due to Project operation, and thus present no analysis of what the impact will be at the subpopulation and population level throughout the life of this Project. Such estimates are, of course, impossible due to the DEIR/S’s lack of on-the-ground field surveys. And yet they are especially important for threatened and endangered species that have garnered such

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protections specifically because their population viability has become at high risk from a host of impacts, and thus such populations are highly unstable and susceptible to impacts by way of mortality of just a few breeding individuals.⁴⁹ DEIR/S presents no such estimates and yet jumps to the conclusion that – despite the mitigation being mostly deferred, unspecified, and as importantly untested – all such impacts will be satisfactorily mitigated with various measures of unscripted plans. The DEIR/S acknowledges that, “impact mechanisms that may result from project operations include disturbances from the operating rail line, maintenance activities (including occasional cleaning, inspection, and removal of vegetation and litter from wildlife crossing structures), noise from passing trains, lighting, vibration, and electrocution.”⁵⁰ This is followed by the statement that such impacts would be intermittent, occurring only periodically. This is a misleading statement, especially for a train that will pass through a given area several times an hour on average, every day.

The following are some examples of omissions, flaws, and inadequacies in mitigation analysis and related measures, and pose questions to be addressed by the HSRA:

1678-2264

1. The DEIR/S’s Mitigation measure **AVQ-MM#4 Provide Vegetation Screening along At-Grade and Elevated Guideways Adjacent to Residential Areas** states that “prior to operations and maintenance of the HSR system, the contractor would plant trees or other vegetation along the edges of the HSR rights-of-way in locations adjacent to residential areas to screen the elevated guideway from the residential area.” This action will serve as a major attractant and will undeniably create new roosts, breeding sites, and hibernacula for birds and bats that could then be indirectly and directly be impacted by numerous impacts of noise, attractive lighting, glare, and strikes; especially in such close proximity to the HSR. How does the HSRA intend to successfully mitigate these additional impact risks to these taxa, not to mention special-status species?

⁴⁹McDonald, M. E., Baxter, P. W. J., and Possingham, H. P. (2008). Subpopulation Triage: How to Allocate Conservation Effort among Populations. *Conservation Biology*, 22(3), 656–665
⁵⁰ DEIR/S 3.7-113

1678-2265

2. **AVQ-MM#7: Provide Noise Barrier Treatment** states that “Noise barriers along elevated guideways that may incorporate transparent materials where sensitive views would be adversely affected by opaque noise barriers.”⁵¹ Creating transparent or translucent barriers is akin to constructing windows. According to extensive research of various studies by the American Bird Conservancy, bird collisions to windows and associated infrastructure accounts for between 365 million and 1 billion birds annually in the United States.⁵² This measure would be adding to that mortality, and should be eliminated from consideration.

1678-2266

3. The DEIR/S proposes **BIO-IAMF#12: Design the Project to be Bird Safe**. It is a scientifically impossible task to make 90 plus miles of a novel anthropogenic construct that is a high-speed train moving at over 200 miles an hour every day, throughout the day, “safe” for birds, or any other animals for that matter. This heading is intentionally misleading to the public and should be altered to correctly reflect the reality that impacts may be mitigated but not eliminated, with evidence including methods that have been proven successful. The DEIR/S states it will apply APLIC guidelines, which are appropriate, but these recommendations are relevant to power lines, not the actual trains or associated facilities, therefore are limited in their utility as mitigation. The DEIR/S says facility lighting will be used that “does not attract birds or their prey.” What type of lighting will be used? How does HSRA know which lighting regimes will not be attractants, and concurrently, will not be disruptive to species?

1678-2267

The DEIR/S must provide clear detailed descriptions of what lighting scheme(s), and anti-strike structures will be applied to operational impact mitigation including substantial evidence in support of how these schemes will significantly reduce impacts to special-status species known to be in the Project area, as well as other key migratory, breeding, and over-wintering birds that use the area and are protected under the Migratory Bird Treaty Act, CESA, ESA, and other

⁵¹ DEIR/S 3.6-158
⁵² <https://abcbirds.org/blog/truth-about-birds-and-glass-collisions>

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statutes. Meanwhile, BIO_IAMF#12 says they will “avoid to the extent feasible”⁵³ constructing transmission lines across canyons or on ridgelines to prevent collisions. What does “feasible” here mean? Here and in other biological mitigation measures it is not defined and is therefore left to subjective interpretation. And, if this measure is not “feasible”, how will HSRA mitigate strikes to the plethora of birds that may be injured or killed over the life of this Project, including raptor species for which any take is prohibited for Fully Protected species, including the American peregrine Falcon, golden eagle, bald eagle, California condor, and white-tailed kite? It is well documented that raptor species are especially prone to electrocution, however the DEIR/S fails to present analysis or specific mitigation for take of these species due to strikes. How will HSRA guarantee there will be not take of all of the California Fully Protected species that have been observed within the project area?

1678-2268

The DEIR/S acknowledges that, “Artificial lighting of nighttime construction activities near active nests could also potentially cause nest abandonment and otherwise disturb some species including plovers, burrowing owls, golden and bald eagle, California condor, American peregrine falcon, northern harrier, white-tailed kite, Swainson’s hawk, purple martin, olive-sided flycatcher, loggerhead shrike, least bell’s vireo, yellow warbler, yellow-breasted chat, sandhill crane; and will interfere with wildlife movement along corridors.” They state that “operations and facilities maintenance have the potential to result in permanent intermittent disturbance of wildlife movement to the following mechanisms: noise disturbance, visual disturbance, train lights, nighttime lighting, train strike, electric line strike...”⁵⁴ and yet the measures offered to mitigate such impacts are unscripted, deferred, and/ or limited primarily to discussion of construction while mostly omitting detailed descriptions of how direct, indirect, and cumulative operational impacts will be reduced to below significant for each of the local populations involved. This must be rectified with detail and substantial evidence not yet provided in the DEIR/S. Additionally, the use of the term “intermittent” is once again

⁵³ DEIR/S 2-E-9

⁵⁴ DEIR/S p. 3.7-111

1678-2268

deliberately misleading, undefined, and therefore meaningless in this context and must be removed from the DEIR/S language. What will the frequency of a train passing a given area (i.e. the GEA), day and night, be? Without such information the operational impact analysis remains incomplete.

1678-2269

4. Lighting

There exists a plethora of evidence that different forms, and degrees, of lighting are disruptive in various ways to many species. As such, the DEIR/S’s claim that “Effects of light from passing trains and HSR facilities could alter wildlife behavior patterns, but such effects would be localized” and thus less than significant has not been demonstrated by the analysis provided. The phrase “would be localized” is undefined and scientifically meaningless here. Clear, scientific descriptions and little evidence have been provided to demonstrate how exactly the HSRA will achieve successful mitigation to a completely undescribed number of special-status species *individuals* due to lighting impacts that will be incurred during construction and operation for the life of the Project. As iterated herein, the loss of just a few breeding individuals of populations of endangered species could markedly reduce their viability, however the DEIR/S presents minimal analysis of how exactly they will mitigate for such a loss incurred by operational impacts. The HSRA must also describe how this lighting will not be an attractant, or disruptive for bats in the area that will also be prone to direct and indirect impacts. As such they should at a minimum commit to several measures that will reduce such impacts including:

- No nighttime lighting along the railway within visual distance of the GEA, and other key biodiversity sections of the Project alignment,
- Specific guidelines for siting, approved by wildlife agency species-specific experts, to reduce impact risk for any lighting deemed essential for security or worker safety on railway-associated buildings or structures,
- Maximize use of motion sensor activated lighting in lieu of fixed night lighting,

1678-2270

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- Maximum height limits for night lighting and shielding requirements,
- Lighting (i.e. bulbs, limited heights) demonstrated to have a reduced impact on birds and bats,
- Train window design demonstrated to reduce interior night lighting pollution,
- Train headlights with a minimum required luminosity,
- Add train design to reduce solar glare.

Refusal to commit to these measures must be accompanied by a rationale of alternatives that have been proven to be more effective.

5. Noise

The DEIR/S alludes to the fact that noise pollution will be a significant impact from construction and operational activities of the Project, and yet it incorrectly analyzes the reality and degree of these impacts:

1678-2271

A. the DEIR/S attempts to downplay noise impacts with misleading and unsupported claims, such as "Maintenance activities are expected to be dispersed over time and location and are not expected to be of an intensity or duration to result in considerable effects on wildlife movement." This is unsupported. Maintenance can be in many forms, including major construction for associated facilities, maintenance of bordering road and electrical constructs, involve noisy heavy machinery, etc. This statement must be retracted. Similarly, the DEIR/S repeatedly refers to noise impacts as being "intermittent". This term is meaningless without definition of exactly how noise pollution generated will be intermittent (i.e. what the frequency of trains passing per day will be regarding operational impacts, what the maximum hourly average decibel (dB) level of construction machinery throughout construction will be both during the day and night, etc.) and the significance of such in respect to the degree of impacts to every special-status species to be effected.

1678-2272

B. The DEIR/S's primary argument and modeling for acoustic impacts to wildlife is based on a single criterium that is scientifically unsound. The acoustic analysis references the Department of Transportation's (DOT) "interim criterion" mentioned in the Federal Railroad Administration's (FRA) 2012 High Speed Rail Noise and Impact Assessment that was created primarily to analyze noise impacts to humans.⁵⁵ Specifically, the DEIR/S uses "a sound exposure level (SEL) of 100 dBA from a single train pass-by (FRA 2012). SEL refers to noise exposure from a single noise event and is the primary descriptor of HSR vehicle noise emissions."⁵⁶ It is important to note that the DEIR/S acknowledges the minimal applicability of this criterium where they quote the FRA, stating "**Conclusions from research conducted to date provide only preliminary indications of the appropriate descriptor, rough estimates of threshold levels for observed animal disturbance, and habituation characteristics for only a few species. Long-term effects continue to be a matter of speculation.** Moreover, most of the noise events used in prior studies are related to aircraft overflights. Consequently, any criteria adopted for effects of HSR noise on animals must be considered interim until further specific research results are known (FRA 2012) (emphasis added)."⁵⁷

Indeed, the FRA's *entire* research foundation for their criterium for impacts to animals are from four reports, none peer reviewed, of studies that are outdated and not expository or revelatory for the conclusions the FRA – or DEIR/S - make, specifically, basing a SEL of 100 dB as an applicable criterium for operational impacts of the HSR. The studies are from aircraft noise and overflights of varying distances and durations using various types of acoustic measurements, equipment, and dissimilar methodologies; the species discussed are primarily domesticated livestock and turkey poults; the reports do not verify the use of a 100 dB SEL as an appropriate criterium for impact analysis or as an appropriate

⁵⁵ Federal Railroad Administration (FRA). 2012. *High-Speed Ground Transportation Noise and Vibration Impact Assessment*. Final. DOT/FRA/ORD-12/15. Prepared by C.E. Hanson, J.C. Ross, and D.A. Towers. September 2012. Washington, DC. www.fra.dot.gov/eLib/Details/L04090

⁵⁶ DEIR/S p. 6-32

⁵⁷ DEIR/S Wildlife Corridor Assessment Report p. 6-32

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threshold criterium to apply broadly; do not discuss SEL as the best type of acoustic threshold criterium; and report findings are from 1971, 1988, and 1993 and are outdated. Much of our scientific understanding of the complex world of acoustic research has changed since 1993.^{58,59,60} For instance, based upon USFW's compliance standards, sound barriers are required to be constructed to buffer noise pollution when project construction and related noise level reaches an average of 60 dB (measured in hourly increments) when in proximity to breeding federally endangered least Bell's vireo and federally threatened California gnatcatcher.⁶¹ These four reports from data analyses from decades ago, not applicable to the species impacted by this Project, in acoustic scenarios that do not marginally replicate the scenarios of noise pollution that will be incurred by this project, do not incorporate any audiograms or other related data regarding the hearing physiology and related behavior of any the special-status specie on the Project site, are not a scientifically sound basis for such an important criterium used as an impact threshold.⁶²

1678-2273

In their report the FRA provides no data or research supporting their claim that SEL is the most useful generic predictor of responses for impacts to a broad array of wildlife species; this is important because the methodologies, and sensitivity of equipment for measuring SEL, are highly variable and have changed significantly since 1993. The FRA also underscores the limited applicability of their criterium, stating, "There are no established

⁵⁸ Campos, I. B., Landers, T. J., Lee, K. D., Lee, W. G., Friesen, M. R., Gaskett, A. C., & Ranjard, L. (2019). Assemblage of Focal Species Recognizers—AFSR: A technique for decreasing false indications of presence from acoustic automatic identification in a multiple species context. *PLoS ONE*, *14*(12), 1–14.

⁵⁹ Brown, C. H., & Riede, T. (2017). *Comparative Bioacoustics: An Overview*. Bentham Science Publishers Ltd.

⁶⁰ Sugai, L. S. M., Silva, T. S. F., Ribeiro, J. W., & Llusia, D. (2019). Terrestrial Passive Acoustic Monitoring: Review and Perspectives. *BioScience*, *69*(1), 15–25. <https://doi-org.jerome.stjohns.edu/10.1093/biosci/biy147>

⁶¹ See: <https://www.sandiego.gov/sites/default/files/legacy/park-and-recreation/pdf/fsdrip-09-developmentandmitigationguidelines.pdf>; and

https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=26460

⁶² Federal Railroad Administration (FRA). 2012. *High-Speed Ground Transportation Noise and Vibration Impact Assessment*. Final. DOT/FRA/ORD-12/15. Prepared by C.E. Hanson, J.C. Ross, and D.A. Towers. September 2012. Washington, DC. www.fra.dot.gov/eLib/Details/L04090 p. A-20

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criteria relating high-speed train noise and animal behavior."⁶³ The FRA is misleading, however, where they state that "A summary of recent literature related to noise effects on livestock and wildlife is included in Appendix A."⁶⁴ The sum total of the "recent literature" for animal/ wildlife impacts are the four reports described above, dating from 1971 to 1993. This is not recent literature, and not an appropriate basis for any impact analysis conducted in 2019 or later. A model is only as good as the applicability and accuracy of its assumptions, criteria, statistical and experimental design, consistency, and relevancy of applied data. The DEIR/S's model for measuring acoustic impacts, including a 100 dB threshold, is inappropriate for the Project scenarios or similar, and fatally flawed as an appropriate basis for any impact conclusions. As such, the conclusions and assumptions made by the DEIR/S about noise impacts, degree, scope, and distance are unsupported and do not contribute to an informed impact analysis. Therefore, mitigation measures for noise impacts must be revisited using the most conservative approaches possible.

1678-2274

C. The DEIR/S also makes an assortment of other assumptions unsupported by clear scientific rationale or evidentiary description. They do this in respect to acoustic scenarios and resultant impacts on the dozens of special-status birds and bats involved. In doing so the DEIR/S erroneously lumps the unique hearing abilities, unique behaviors, and unique intraspecies and interspecies effects, etc. of numerous species under one umbrella assumption of impact criteria for a set of subjective standards, namely, "For each of the identified mechanisms, a noise threshold was set: Permanent hearing damage: 140 dBA, Temporary hearing damage: more than 93 but less than 140 dBA, Masking: 84 dBA (28 dBA greater than the lowest measured ambient noise in the LPSA, 56 dBA), Arousal: 77 dBA."⁶⁵ The DEIR/S does not give a clear explanation of (a) how they arrived at these very

⁶³ *Ibid.* p. 3-2

⁶⁴ *Ibid.*

⁶⁵ DEIR/S Wildlife Corridor Assessment Report p. 6-34

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specific and singular criteria, (b) how one criteria can apply to dozens of species with extremely differentiated – and for the most part, unmeasured – hearing abilities, (c) how these criteria are supported by the scientific evidence as it relates to the scenario of noise from a high speed train (not roads or overflight), and at what frequency noise pollution will be introduced, i.e. how often will trains pass by, and how many times a day and night. Indeed, the DEIR/S seems to ignore its own assertion where it states, “Wildlife response to noise depends on the timing, intensity, and frequency of the sound, as well as the species’ tolerance to noise. In general, species’ response to noise may result in behavioral changes (e.g., fleeing or hiding), interference with auditory cues (e.g., interference with mate attraction), or physiological responses (e.g., stress), each of which can result in broader effects on movement, foraging efficiency, reproductive success, and survival (Francis and Barber 2013).”⁶⁶ As such, these thresholds are unsupported by substantial expository evidence.

1678-2275

Aside from the DOT report above, virtually all of the rest of the DEIR/S’s assumptions about noise impacts on wildlife are drawn from one report,⁶⁷ again scripted not by independent biologists or wildlife agency acousticians, but the Department of Transportation. The report itself poses a disclaimer on the first page stating, “This document is not an official policy, standard, specification, or regulation and should not be used as such. Caltrans has not independently verified the results, conclusions or claims presented herein. Its content is for informational purposes only. This information should not be used without first securing competent advice with respect to its suitability for any general or specific application. Anyone utilizing this information assumes all liability arising from such use.”

⁶⁶ DEIR/S Wildlife Corridor Assessment Report p. 6-32

⁶⁷ The California Department of Transportation. 2016. *Technical Guidance for Assessment and Mitigation of the Effects of Highway and Road Construction Noise on Birds*. June. (Contract 43A0306.) Sacramento, CA. Prepared by ICF International, Sacramento, CA, Robert Dooling, Gaithersburg, MD, and Arthur Popper, Silver Spring, MD.

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And yet the DEIR/S cites this one reference at least ten times in support of its noise threshold criteria. The report provides an appendix of all the species studies of any kind related to acoustics that were reviewed for this DOT report, and not one of them concerned a special-status species mentioned in the DEIR/S, and only one species of water bird (mallard). The DOT correctly points out that, “Since there is substantial variation in bird hearing and behavior, considerable care must be taken when trying to extrapolate data between species, particularly when the species have different hearing capabilities and acoustic behaviors.”⁶⁸ They also pose the caveat that any guidelines are “interim” and informational, and that their application to specific scenarios requires further **study as it relates to traffic noise, not trains**. The authors also commit the serious flaw of anthropomorphizing bird sounds (i.e. an entire taxa of thousands of species) by stating that, “Given the lack of empirical data on [behavioral and physiological effects on birds] at this point, it is recommended that subjective human experience with the noise in question be used as an interim guideline to estimate acceptable noise levels for avoiding stress and physiological effects.”⁶⁹ This is unscientific and undermines the applicability and professional veracity of the entire report. If this were a peer-reviewed article it would have been rejected for publication for this digression from scientific standards. As such, the DEIR/S’s other determinations based almost entirely in this one report are specious, including erroneous claims about habituation,⁷⁰ unsupported claims that vibration effects are less extensive than noise effects, incorrect conclusions about masking being a limited occurrence,⁷¹ and unsupported claims about acoustic impacts having a limited effect on

⁶⁸ *Ibid.* p. 5

⁶⁹ *Ibid.* p.7

⁷⁰ DEIR/S CWA p. 4-32,33

⁷¹ *Ibid.*

The more overlap there is in spectral bandwidth between anthropogenic sounds and those used by an organism, the more likely they are to interfere with detecting biologically important signals. Masking of relevant sounds has the potential to reduce an organism’s auditory perceptual range, or listening area ([Payne and Webb, 1971](#); [Clark et al., 2009](#); [Barber et al., 2010](#)), and can interfere with an organism’s abilities to detect, interpret, and respond to cues in their environment. From: “Estimating Exposure and Effects of Sound on Wildlife.” National Academies of Sciences, Engineering, and Medicine. 2017. *Approaches to Understanding the Cumulative Effects of Stressors on Marine Mammals*. Washington, DC: The National Academies Press. doi: 10.17226/23479.

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reproduction (and other behaviors).⁷² As such, the DEIR/S’s theoretical thresholds are not based upon the best available science, and not adequately predictive of real world impacts of the Project.

1678-2276

Therefore, to attempt to responsibly and effectively mitigate impacts from construction and operational noise pollution as much as possible, the HSRA must commit to the most conservative actions and the precautionary principle to minimize impacts. The most effective would be avoidance of the GEA, other biodiversity hotspots, and key wildlife corridors by the alignment overall. Short of that, sound barriers must be constructed throughout the extent of the alignment where it intersects, borders, or is in proximity to the GEA and other refuges and wildlife corridors. The type of barriers created must provide the best baffling of sound possible; sound baffling is a complex science and thus design must follow the precautionary principle and best available science. In doing so these barriers should incorporate a design that is a complete enclosure of the rail, not just a wall.

1678-2277

The DEIR/S states in Appendix 3.7-C that, “In December of 2018, the Authority received a letter from the GEA Working Group that requested consideration of an enclosure structure similar to that used in China’s Shenzen-Maoming HSR program. This is a structure that would fully enclose the guideway and overhead contact system, to mitigate visual and acoustic impacts on waterfowl and shorebirds living in and moving across the adjacent habitat. Coincidentally, preliminary results of the Authority’s ongoing evaluation

⁷² Recent terrestrial studies have evaluated consequences of noise exposure such as declines in foraging efficiency (owls [Mason et al., 2016; Senzaki et al., 2016] and bats [Siemers and Schaub, 2011; Bunkley and Barber, 2015]), heightened vigilance (mammals [Shannon et al., 2014, 2016] and songbirds [Quinn et al., 2006; Ware et al., 2015]), declines in reproductive success (Halfwerk et al., 2011), and altered predator-prey relationships (Francis et al., 2009). From: “Estimating Exposure and Effects of Sound on Wildlife.” National Academies of Sciences, Engineering, and Medicine. 2017. *Approaches to Understanding the Cumulative Effects of Stressors on Marine Mammals*. Washington, DC: The National Academies Press. doi: 10.17226/23479.

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of impacts to waterfowl and shorebirds in the GEA Important Bird Area proximate to Mud Slough indicated potential for visual, noise, and bird-strike impacts. The Authority agreed to evaluate the enclosure concept, determine whether a similar structure would be suitable for the GEA crossing, and what the structure’s potential impacts would be.” The analysis in Appendix 3.7-C concludes that the structure “would support HSR operations and provide visual and acoustic mitigation at a greater level than a standard noise barrier mitigation measure. **In addition, noise barriers lacked the ability to prevent bird strikes, and were therefore eliminated from consideration. The enclosures were deemed conceptually feasible, and due to the sensitivity of resources and stringent regulatory requirements, the Authority is proposing an enclosure as a mitigation measure for regulatory assurance, and technical efficiency.**” In short, committing to a strict noise reduction standard that includes this guideway enclosure is not only feasible, but reasonable and necessary for adequate impact reduction of noise pollution and bird strikes. If the DEIR/S refuses to adopt these measures throughout the GEA, it must provide current, applicable, expository evidence as to what other measures will be better at reducing noise pollution impacts to below significant for the life of this Project.

1678-2278

D. The DEIR/S’s Impact Analysis and Mitigation for Eagles are Inadequate

According to CDFW, both bald and golden eagles have been observed around the Project Habitat Study Area (pers comm., Lara Sparks, June 17, 2020). The USFWS states that all breeding sites within a breeding territory are deemed occupied “while raptors are demonstrating pair bonding activities and developing an affinity to a given area.”⁷³ Without knowledge of recent eagle activity - not just presence of nests - throughout the Project site and vicinity, no comprehensive conclusions can be made regarding impacts to breeding or foraging territories. Not only are current eagle nesting territory surveys necessary for this Project’s impact analysis, so are ground surveys that assess presence and abundance of prey for foraging

⁷³ Pagel, J.E., D.M. Whittington, and G.T. Allen. 2010. Interim Golden Eagle inventory and monitoring protocols; and other recommendations. Division of Migratory Bird Management, U.S. Fish and Wildlife Service. p. 27

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eagles. As the American Eagle Research Institute points out in their protocol for golden eagle occupancy, reproduction, and prey population assessment, golden eagle reproduction and related foraging behavior is highly correlated with prey abundance of species like the black-tailed jackrabbits and ground squirrels; the primary prey of golden eagles in many areas of the western United States.⁷⁴ As written the DEIR/S presents no details on observations, density, or abundance of eagle prey species on or bordering the site, and thus cannot include this information in their creation of mitigation acreages to be impacted. Therefore accurate, current analysis regarding potential for use of the site by golden eagles for foraging is further prohibited.

1678-2279

The DEIR/S impact BIO-18 states that “There is wide variation in reported distances at which raptors are disturbed by human activities (PG&E 2016), so making broad generalizations about disturbance distances is difficult. For the purpose of this analysis, any bald or golden eagles nesting within 0.5 mile of the project footprint (generally, topography that blocks line of sight could shorten this typical distance) could be disturbed by construction noise or vibration, potentially causing nest abandonment. Artificial lighting of nighttime construction activities near active nests could also potentially cause nest abandonment.” The claim about inability to make generalizations about human disturbance is misleading. Studies have demonstrated that when observers were camped 400 meters from nests of golden eagles, adults spent less time near their nests, fed their juveniles less frequently, and fed themselves and their juveniles up to 67% less food.⁷⁵ In studies of golden eagle populations in the southwest, researchers reported that human disturbance, including distances close to a mile away, accounted for at least 85% of all known nest losses.⁷⁶ USFWS eagle experts also state that, “Golden Eagles visibly display

⁷⁴ Driscoll, D.E. 2010. Protocol for golden eagle occupancy, reproduction, and prey population assessment. American Eagle Research Institute, Apache Jct., AZ. 55pp. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83955&inline>

⁷⁵ Steidl, R. J., K. D. Kozie, G. J. Dodge, T. Pehovski And E. R. Hogan. 1993. Effects of human activity on breeding behavior of golden eagles in Wrangell-St. Elias National Park and Preserve; a preliminary assessment. National Park Service, Wrangell-St. Elias National Park and Preserve, Copper Center, Alaska, WRST Research and Resource Report; no. 93-3.

⁷⁶ Boeker, E. L. and T. D. Ray. 1971. Golden eagle population studies in the southwest. *Condor*,73:463-467.

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behavior that signifies disturbance when they are stressed by anthropogenic activities; whether it is a lone hiker walking 1000 meters or more from a nest, or extended construction or recreation activities 2000 – 5000 meters from a territory. These postures, movements and behaviors can be overt. However, with Golden Eagles, disturbance behaviors are often subtle and require an experienced observer.”⁷⁷ Additionally, USGS telemetry data clearly demonstrate how golden eagles will consistently regularly travel many miles to forage,⁷⁸ and therefore impacts to breeding adults can have unanticipated effects throughout a wide potential area of foraging around a nest.

1678-2280

The DEIR/S acknowledges that the golden eagle is a CDFW Fully Protected species, and that no take permit may be issued for them. It states that, “As part of the incidental take permit process, additional proposed compensatory mitigation locations and requirements would also be identified” for the golden eagle. Given the flawed and incomplete evidence provided for impact analysis to the species, this mitigation measure is lacking and must be revised to incorporate thorough surveys with actual mitigation details specified prior to permitting. As such the DEIR/S fails to adequately address how they propose to monitor and avoid any and all take of these species.

1678-2281

Upon review of scoping comments by agencies and stakeholders to this DEIR/S, comments for the previous DEIR/S/DEIS, and interim discussions and correspondences publicly available, it is clear that major concerns have been raised about the degree, scope, and resultant necessary mitigation for Project impacts from strikes, noise, lighting, vibration, and disruption of wildlife corridors for a minimum of 70 rare and endangered species, not to mention many others also poised to be impacted by a completely novel, anthropogenic structure moving at speeds over 200 mph, year-round, more or less 24 hours a day every day. As such, deferred, unscripted,

⁷⁷ Pagel, J.E., D.M. Whittington, and G.T. Allen. 2010. Interim Golden Eagle inventory and monitoring protocols; and other recommendations. Division of Migratory Bird Management, U.S. Fish and Wildlife Service. p. 8

⁷⁸ Tracey, J.A., Madden, M.C., Sebes, J.B., Bloom, P.H., Katzner, T.E., and Fisher, R.N. 2017. Biotelemetry data for golden eagles (*Aquila chrysaetos*) captured in coastal southern California, February 2016–February 2017: U.S. Geological Survey Data Series 1051, 35 p., <https://doi.org/10.3133/ds1051>.

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vaguely described mitigation with no clear exposition on how acreages of impact are determined leaves many impacts poorly described, and thus unmitigated. With deferred mitigation there is no assurance or specifics of accountability, oversight, necessary funding, or remediation. The HSRA must revisit this entire Project environmental impact review of biological resources and provide the substantial evidence for impact analysis and resultant necessary mitigation that is lacking as discussed herein. The HSRA should also provide clear, peer-reviewed, detailed data and specifics where such are lacking.

V. CONCLUSION

1678-2282

For the reasons outlined above, the Project DEIR/S fails to meet the necessary requirements of impact analysis and mitigation of biological resources. Based on my responses in this letter, and my extensive experience as a biologist and environmental consultant, it is my professional opinion that the DEIR/S has not met the obligations of CEQA and NEPA, and that the Project would result in significant and unmitigated impacts to several sensitive biological resources. The DEIR/S must be revised and resubmitted to disclose, adequately analyze, and mitigate the significant impacts. If the impacts cannot be reduced to less than significant, they are unavoidable. No further consideration should be given to the proposed Project until an impact analysis is prepared and circulated that addresses the omissions and errors discussed herein.

Sincerely,



Renée Owens
Conservation Ecologist
M.S. Ecology, M.S. Environmental Science

Professional Background

I am a conservation biologist and environmental consultant with over 27 years of professional experience in wildlife ecology and natural resource management. I hold a M.S. in Environmental Science and another M.S. in Ecology; my teaching experience includes college instruction since 1991 at various colleges and Universities. I taught field courses in Tropical Ecology in Ecuador and the Galapagos for Boston University, and was a Visiting Full Time Professor in Environmental Science and Biology at Imperial Valley College.

I have managed an independent environmental consultancy I founded in 1993, contracted for work in the U.S. and Latin America, including in California. Since 1994 I have held U.S. Fish and Wildlife (FWS) Recovery permits for listed species under the federal Endangered Species Act (ESA). I hold several state and federal certifications for surveys and monitoring of protected and special-status species. I have extensive experience monitoring and studying many species across several taxa, including herpetofauna, terrestrial invertebrates, passerines and raptors, and marine and terrestrial mammals. I have served as a biological resource expert on over 150 projects involving pipelines, water, urban and rural residential developments, mines, and industrial scale energy projects: on private, public, and military lands. I have experience observing the species and habitats discussed in the DEIR/S.

The scope of work I have conducted as an independent environmental contractor, supervisor, and employee has included assisting clients to evaluate and achieve environmental compliance, restoration, mitigation, and research as related to biological resources; as well as submitting analytical reports and comments for such work to oversight agencies. This work includes analyzing actions pursuant to the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), the Endangered Species Act, the Clean Water Act (CWA), the Migratory Bird Treaty Act (MBTA), and other regulations, along with surveying for and

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preparing Biological Technical Reports and Assessments. I have been contracted as an environmental consultant by the FWS, the USDA Forest Service, Ultrasystems, ICF, Helix Environmental, URS, AECOM, AMEC, GeomorphIS, Dudek, ESA, Tetra Tech, Bridgenet, among others.

My conservation and natural history research on endangered species in Latin America have received awards including the National Geographic Research and Exploration Award and the National Commission for Scientific and Technological Research Award. My research has been featured on National Geographic Television and Discovery Channel documentaries, and I have served as technical consultant for wildlife documentaries filmed by National Geographic Television, Discovery Channel, BBC, and Animal Planet. In 2017 I received a Special Commendation for contributions to environmental conservation from the City of San Diego.

I have gained particular knowledge of the biological resource issues associated with the Project through my extensive work on numerous research and consulting projects throughout California. My comments are based upon first-hand observations, review of the environmental documents prepared for the Project, review of scientific literature pertaining to biological resources known to occur in and near the Project area, consultation with other biological resource experts, and the knowledge and experience I have acquired throughout my almost 30 years of working in the field of natural resources research and management.

Renee Owens, M.S. - Biologist and Independent Environmental Consultant

RENÉE OWENS

Curriculum Vitae

- College Instruction in Biology and Environmental Science; Boston U, SDSU, Palomar College, Imperial Valley College
- Non-profit management
- National Geographic Research and Exploration Award
- Wildlife Conservation Society International Research Grant
- Endangered species Federal Recovery permits
- ESA, CEQA, NEPA, MMPA impact analyses
- Mitigation, Restoration, Project monitoring, HCP planning / implementation
- San Diego City, County, USFWS, BLM approved biologist
- U.S. National Championships Olympic Distance Triathlon
- Special Commendation for Contributions to Environmental Conservation, City of San Diego

Ms. Owens has been a college instructor, environmental consultant and biologist, non-profit manager, writer, and public speaker for over 30 years in the United States and Latin America.

College Instruction includes teaching in the broad fields of Environmental Science and Biology at Boston University, Palomar College, Imperial Valley College, and San Diego State University. She has certification in Community College Instruction from the University of California San Diego.

Award winning research by Ms. Owens has been featured by National Geographic, Discovery, BBC, Dateline NBC, Animal Planet, TIME magazine.

Sage Wildlife Biology consultancy founded by Ms. Owens in 1993 has provided services for projects involving endangered species, ethology, ecology, and conservation research, mitigation management, impact analysis, habitat conservation planning and implementation, and analytical reporting. Projects incorporate monitoring and regulatory compliance from the local to federal level with clients in the private, public, and government sectors, and include energy, housing, transportation projects. Contracts encompass many floral and faunal species, aquatic and terrestrial. She is an approved biologist for San Diego City and County, USFWS, and BLM.

The Wild Zone Conservation League is a wildlife conservation, education, and research non-profit. As Executive Director Ms. Owens applies her non-profit experience acquired over 30 years of volunteering to management of citizen science, environmental education, wildlife rescue, and advocacy training to promote conservation, stewardship, and land preserve acquisition. Ms. Owens

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gives lectures enhanced by her nature photography and international experiences on endangered species conservation, advocacy, predator co-existence, animal behavior, ornithology, and the cognitive science of environmental leadership and communication.

EDUCATION

- MS Environmental Science, Concentration in Education. Green Mountain College, Poughkeepsie, VT.
- Community College Instruction Certification. University of California San Diego, La Jolla, CA.
- Advanced Statistical Programming Certification. U of Tennessee, Knoxville.
- MS Biology (Ecology and Evolution). SDSU, San Diego, CA.
- BS Biology (Minor in Environmental Studies). State University of New York, Geneseo, NY.

LANGUAGE SKILLS Native English speaker, fluent in Spanish

WORK EXPERIENCE

TEACHING

Adjunct Professor, Instructor in Environmental Science, Biology. Department of Math, Science, and Engineering, Imperial Valley College, Imperial, CA. 2012 – 2018.

Director/Instructor, Wildlife Conservationist Certification Training Program, created by Ms. Owens with a San Diego Foundation Environmental Vision Fund grant. Provided education and training of adult volunteers for naturalist interpretive and conservation organizations. Wild Zone Conservation League, San Diego, CA. 2009-2011.

Visiting Assistant Professor, Department of Math, Science, and Engineering. Lecture, laboratory, and field trip instruction in Biology, Environmental Science, Botany. Imperial Valley College, Imperial, CA. 2008-2009.

Environmental Education Instructor, Outdoor instructor for educational youth program "Outdoor Explore" investigating Nearby Nature, grades k – 12. San Diego Audubon Society, CA. 2009 - 2010.

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Teaching Fellow, Tropical Ecology Program, based at Universidad de San Francisco, Ecuador. Lecture and field instruction in advanced coursework on tropical habitats included cloud and mangrove forest, Pacific intertidal zones, inland rainforest, Galapagos Islands, and high elevation paramo. Boston University. 1999 –2000.

Adjunct, Instructor in General Biology lecture and laboratory. Palomar College, San Marcos, CA. 1994 - 1996.

Teaching Assistant, Instruction for laboratories in General Biology, Zoology, and Invertebrate Biology included creation of additions and updates to General Biology laboratory (with live marine specimens), adopted by the Biology Department for all General Biology laboratories. San Diego State University, San Diego, CA. 1990 – 1992.

Instructional Tutor, for classes in psychology, biology, ecology, anthropology, oceanography, and human fertility. SUNY Geneseo, Geneseo, NY. 1983 – 1987.

PROFESSIONAL CONSULTING

Co-Founder, Sage Wildlife Biology LLC. Biological consultant for over 200 hundred projects, specializing in wildlife biology of for environmental compliance, impact analysis, research, and conservation in California and South America. 1993 – present.

Representative Projects:

Wind Turbine System Research. Created and implemented a Bird and Bat Monitoring program and analysis for patent-pending turbine system, Primo Wind renewable energy design. San Diego Naval Base, CA.

Endangered Species. Protocol surveys, monitoring, and reporting for federally and state protected species, HELIX Environmental Planning Inc., San Diego, CA.

CEQA/NEPA/ESA Consultant. Expert biological testimony provided regarding impact analyses on conventional energy, renewable energy, residential development, and coastal development projects in California.

Satellite Communications System LA-RICS. Los Angeles Regional Interoperable Communications System county-wide project, federally funded to create broadband wireless network using Long-Term Evolution (LTE) technology while minimizing impacts to

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native habitats and ecosystems. Contributed to Biological Assessment for PEIR/ PEIS, 218-site project with coastal, mountain, and desert habitats. Management recommendations included maximizing use of existing structures while avoiding impacts to watersheds and other sensitive biological resources. Los Angeles County, CA.

Habitat Conservation Planning. State Wildlife Grant program funded research and reporting for various state and federal endangered species; Migratory Bird Treaty Act nesting bird surveys; herptile surveys; population assessments; and concurrent development of Critical Habitat components of Habitat Conservation Plans including the San Diego Multiple Species Conservation Plan. San Diego, Los Angeles, Riverside, San Bernardino Counties, CA.

Mitigation and Restoration. Principal biologist, prepared Biological Assessment plus mitigation and monitoring plan for Black Mountain Open Space Park development project; supervised biological components of mitigation management, including coordination with the City of San Diego to implement restoration efforts within the MHCP. San Diego, CA.

Wildfire Habitat Management. Principal investigator for California Fire Safe Council responsible for habitat management projects in areas adjacent to U.S. Forest Service land. Included habitat mapping, sensitive species surveys, GIS, management of work teams (5 to 50 individuals), and preparation of the Biological Assessment for the Bureau of Land Management. Project development included consultation and coordination with private landowners, scientists, San Diego County Fire Authority, Homeowners Associations, USDA Forest Service and BLM. San Diego County, CA.

Wind Energy Project. Year-round monitoring and research contributed to Biological and Environmental Assessments, incorporating focused wildlife surveys throughout 15,000 acres of Bureau of Land Management land in Imperial County. Provided management recommendations for avoidance of impacts to sensitive habitats and species including golden eagles, Peninsular bighorn sheep, burrowing owls, and flat-tailed horned lizards, and post-construction monitoring and mortality surveys. Ocotillo, CA.

Mitigation Land Trust Management. Lead biologist for two Perpetual Land Management Habitat Conservation Plans managed by The Escondido Creek Land Conservancy. The Preserves incorporate 110 acres of riparian wetland, oak woodland, coastal sage scrub, and chaparral habitats; created in compliance with California Environmental Quality Act and Multiple Habitat Conservation Plan requirements, coordinated with third party

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trustees U.S. Fish & Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW). Escondido and San Marcos, CA.

California Wild Heritage Campaign. Wilderness Society contracted biologist and campaign organizer included biological surveys and mapping of proposed wilderness as well as coordination of volunteers, educational materials, and outreach with National Forest stakeholders. San Diego County, CA.

Endangered Species Biologist. Principal biologist, participated in a long-term research of the California gnatcatcher for Camp Pendleton Marine Base, including monitoring and Critical Habitat Assessment for USFWS and data collection for 40 + pairs spanning several thousand acres of habitat. Prepared reports on habitat suitability and contributed to critical habitat assessments and recovery planning. Oceanside, CA.

Least Bell's Vireo Endangered Species Recovery Plan. Conducted breeding season nest monitoring and invasive species management as part of the USFWS Species Recovery Plan for the Least Bell's Vireo; included monitoring, banding, and reporting monthly on 30 - 70 nesting pairs while providing reports for Critical Habitat evaluation and population recovery analysis. San Diego County, CA.

Biologist. HELIX Environmental Planning Inc., San Diego, CA. Responsible for terrestrial and aquatic fauna and flora surveys, monitoring, reporting, and research; Habitat Conservation Plans for private and government entities, mitigation and restoration implementation. 2000-2001.

Biologist. Sweetwater Biological, San Diego, CA. Conducted mammalian, ornithological, and herptile surveys and monitoring; mitigation and restoration monitoring, reporting, and management; included contributions to Habitat Conservation Plans for private and government entities. 1994-1996.

RESEARCH

Representative Projects:

Pinniped Natural History, breeding research and impact analysis of human interaction on Harbor seal and sea lion rookeries in San Diego, CA. 2010 – present.

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Endangered Species Conservation, South American project funded by the National Geographic Research Foundation, CITES, Wildlife Conservation Society, The Venezuelan National Council for Scientific and Technological Research (CONICIT), and PROFAUNA of Venezuela; co-lead in multi-year study of the green anaconda; the first of its kind in the wild. Research incorporated radio telemetry, mark and recapture, natural history, and mating system analysis; findings contributed to various documentaries and a conservation and ecotourism program for 175,000 acres of Llanos in Apure State, Venezuela. 1996 – 2002.

Avian Breeding System and Conservation, research included manakin lekking behavior (Tiputini Tropical Research Station, Ecuador), California gnatcatcher, least Bells' vireo nesting success, cowbird parasitism (San Diego county), passerine and *Polybia* nesting associations in flooded wetlands, resource partitioning in shorebird species (Apure State, Venezuela). 1994 – 1997, 2000 – 2007.

Predator Conservation and Ethology, natural history and conservation research for the jaguar, mountain lion, endangered giant otter, included recommendations for management and co-existence on cattle ranches in the Llanos and Orinoco tributaries. Included observations of genetically distinct giant otter population where previously considered extinct. Apure State, Venezuela. 1996-1997.

Endangered Species Reintroduction Programs, of the Orinoco crocodile, Arrau turtle, Red-footed tortoise, funded by Wildlife conservation society, Venezuelan Profauna. Research in highly remote regions to assess long term species survival post-reintroduction and related influence of local indigenous tribes. 1996 – 1998.

Cetacean Bioacoustics, research of the Commerson's dolphin included audiogram data collection on hearing thresholds and related recommendations for conservation management of this species and related genera. SDSU/ Hubbs Research Institute, San Diego, CA. 1991 – 1992.

Primate Research, Study of social and mating behavior dynamics of Pygmy chimpanzees (Bonobos). 1990-1991.

Avian Research Internship, research of water bird and passerine nesting predation and parasitism; included monitoring, banding, and mapping 250 nest boxes. Genesee Country Nature Center, Mumford, NY. 1987.

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Renee Owens, M.S. - Biologist and Independent Environmental Consultant

Independent Study, conducted undergraduate research on navigation and orientation of long distance avian migrant passerines using a planetarium equipped with an adjustable magnetic field. Principal investigator Dr. Robert Beason. SUNY Geneseo, Geneseo, NY. 1985-1987

NON-PROFIT MANAGEMENT

Executive Director, Wild Zone Conservation League. International wildlife non-profit focused on citizen science, education, research, and community collaboration for wildlife conservation. Long term mission of land acquisition in the U.S. and Central America for preservation and educational field study programs. 2015 - present.

Latin America Assistant Director, World Society for the Protection of Animals. Responsible for project development and campaign coordination for human-wildlife interface campaigns in Latin America. Included creation and implementation of training workshops, direction of campaigns for species in biodiversity hotspots including watersheds, coral reef, Pacific coastal rainforest and coasts. Coordinated emergency disaster relief with veterinary triage, organizational and material support, rescue training and oiled network response. Boston, MA. 1998-1999.

LABORATORY

Laboratory Technician, Palomar College, San Marcos, CA. Responsible for provisioning, preparation, and maintenance of biology and chemistry laboratories and equipment. 1994.

Laboratory Assistant, Toxicology and Physiology Departments. Included research in environmental toxicology, Muscular Sclerosis, Parkinson's disease. University of Rochester Medical Center, Rochester, NY. 1988 – 1990.

AWARDS / HONORS

- San Diego Sierra Club Silver Cup Conservation Award for Lifetime Achievement, 2017.
- Special Commendation for Contributions to Environmental Conservation, City of San Diego, 2017.
- San Diego County Democrats for Environmental Action Volunteer of the Year, 2017.
- Photo display, San Diego Museum of Natural History's "Best of Nature" Exhibit, 2016.
- San Diego Foundation Vision Fund Environmental Education and Conservation Grant, 2010.
- NOAA Environmental Hero Award, 2000.

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Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

Renee Owens, M.S. - Biologist and Independent Environmental Consultant

- Photo, "TIME Great Images of the 20th Century", TIME Magazine Publications, 2000.
- CONICIT Award for the Novel Researcher, 1998.
- CITES and Profauna Joint Research Grant, 1996.
- National Geographic Film and Research Grant, 1996.
- National Geographic Research and Exploration Award, 1996.
- Wildlife Conservation Society Research Grant, 1996.
- Sierra Club Emily Durbin Leadership in Conservation Award, 1995.
- SDSU Harry Hamber Academic Graduate Scholarship, 1991.
- U.S. National Triathlon Championships, 1989.
- New York State Regents Academic Scholarship, 1983.

CERTIFICATIONS

- U.S. Fish and Wildlife Recovery Permit for the endangered Coastal California gnatcatcher, Least Bell's Vireo, Quino checkerspot butterfly. 1994 – present.
- Acoustic Monitoring of Bats, Field Techniques. Sonobat Workshop, Wildlife Society, 2012.
- Desert Tortoise Council, Survey Techniques Workshop, Certificate of Completion November 2010.
- Flat-tailed Horned Lizard BLM Survey Techniques Workshop, Certificate of Completion, 2010.
- Desert Tortoise Council, Survey Techniques Workshop, Certificate of Completion, 2006.
- USFWS Arroyo Toad Workshop, Certificate of Completion, Camp Pendleton Marine Base, 1999.
- Willow Flycatcher Workshop, SD Natural History Museum, Certificate of Completion, 1995.

VOLUNTEERING

- National Sierra Club Marine Team Committee, 2013- present.
- National Sierra Club Wildlife and Endangered Species Committee, 2010 – present.
- San Diego Audubon Society Conservation Committee, 2010 – 2014.
- San Diego Sierra Club (SDSC) Executive Committee, 2008 – 2010.
- SDSC Conservation Committee, 2007 – 2010; 2014 – 2018.
- SDSC Wildlife Committee Chair 2001 – 2008, 2015 – 2018.
- Wildlife Research Institute Scientific Advisory Committee, 2005 – 2008.
- Lakeside Emergency Wildlife Rehabilitation Center, 2000 – 2005.

54

Renee Owens, M.S. - Biologist and Independent Environmental Consultant

SOCIETY CONFERENCE PRESENTATIONS

- "From Education to Stewardship: The Cognitive Science of Environmental Communication", Environmental Summit, San Diego, 2019.
- "The Cost of Mismanagement at a Pinniped Rookery and Coastal Urban Wildlife Interface", International Urban Wildlife Conference, San Diego, CA. June 2017.
- "Consorting with Coastal Wildlife: Conservation and Advocacy in the Real World", West Coast Ocean Forum, La Jolla, CA. 2016.
- "Conservation of the Green Anaconda in Venezuela", Annual Conference of the Society for the Study of Ichthyology and Herpetology, La Paz, Baja California, Mexico, 2000.
- "Trends in the International Reptile Pet Trade", Annual Conference for the Humane Society International, Boston, MA, 1998.
- "Bioacoustics and Conservation Implications for the Commerson's Dolphin", Biennial Conference for the Society for Marine Mammalogy, Orlando, FL, 1995.
- "Navigation and Orientation of Long-Distance Migrants: How Bobolinks use Stellar and Magnetic Cues for Migration", Annual Conference for the Society of Behavioral Ecology, Albany, NY, 1987.

WORKSHOPS

- Organized CEQA and NEPA Training Workshops, San Diego, CA. Presented instructional seminar regarding biological impact assessments. 2000, 2007, 2010, 2017.
- Organized the first annual West Coast Marine Environmental Forum, La Jolla. Held seminars on the National Ocean Policy, Ecosystem Based Management, critically endangered cetacean conservation, sustainable fishery science, and coastal wildlife conservation advocacy. 2017.

PROFESSIONAL AFFILIATIONS

- Association of Field Ornithologists
- Citizen Science League
- Marine Mammal Society
- National Association of Biology Teachers
- Society for the Study of Amphibians and Reptiles
- Wildlife and Habitat Conservation Coalition

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Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

Renee Owens, M.S. - Biologist and Independent Environmental Consultant

SELECT PUBLICATIONS

- Owens, R. Y. The Unpleasant Secrets of Clean Solar Energy: The Impacts to Wildlife in the Desert. *The Desert Report*, Dec 2016: pp 1, 8-9.
- Owens, R. Y. 2014. The USDA's Dirty Secret: A Century-Old Wildlife Killing Machine, *The EcoReport* (January). <http://www.theecoreport.com/green-blogs/sustainability/conservation/wildzone/the-usdas-dirty-secret-a-century-old-wildlife-killing-machine/>
- Owens, R. Y. and Hord, P. L. In revision. *Conservation Biology*. Economic and costs and ecological implications of "joint use" policy management of a Harbor seal rookery in an urban wildlife interface.
- Owens, R. Y. In revision. *Journal of Field Ornithology*. Nesting associations between wasps of the genus *Polybia* and passerine birds of the Venezuelan Llanos.
- Owens, R. Y. 2012. Rebirth of Green: Resolution for 2013. *San Diego Loves Green: The Wild Zone* (December).
- Owens, R. Y. 2012. Coyotes: The Media's Modern Bogeyman. *San Diego Loves Green: The Wild Zone* (October).
- Rivas, J.A. and Owens, R.Y. 1999. Teaching conservation effectively: a lesson from life history strategies. *Conservation Biology*, 13 (2): 453-454.
- Rivas, J.A. and Owens, R.Y. 2002. Orinoco crocodile (*Crocodylus intermedius*): Age at First Reproduction. *Herpetological Review*. 33 (3): 203.
- Rivas, J. A., R. Y. and S. A. Aktay, 2001. *Paleosuchus trigonatus* (Schneider's Smooth fronted Caiman): Nesting and hatching. *Herpetological Review*. 32: 251.
- Rivas, J. A., Owens R. Y. and Calle, P.P. 2001. *Eunectes murinus*: Juvenile predation. *Herpetological Review*. 32 (2): 107-108.
- Rivas, J. A. and R. Y. Owens. 2000. *Eunectes murinus* (green anaconda): cannibalism. *Herpetological Review*. 31(1):44-45
- Rivas, J. A., Thorbjarnarson, J. B., Owens, R. Y and M. C, Muñoz, 1999. *Eunectes murinus*: caiman predation. *Herpetological Review*. 30 (2): 101
- Owens, R.Y. Informe técnico al Servicio de Fauna de Venezuela: Regional population assessment of the endangered giant otter (*Pteronura brasiliensis*) in Apure State, Venezuela, and conservation recommendations for a highly endangered species. Dec 1997.
- Unpublished Master's Thesis, "Bioacoustics of the Commerson's Dolphin (*Cephalorhynchus commersonii*) with Recommendations for Applied Conservation" 1993.

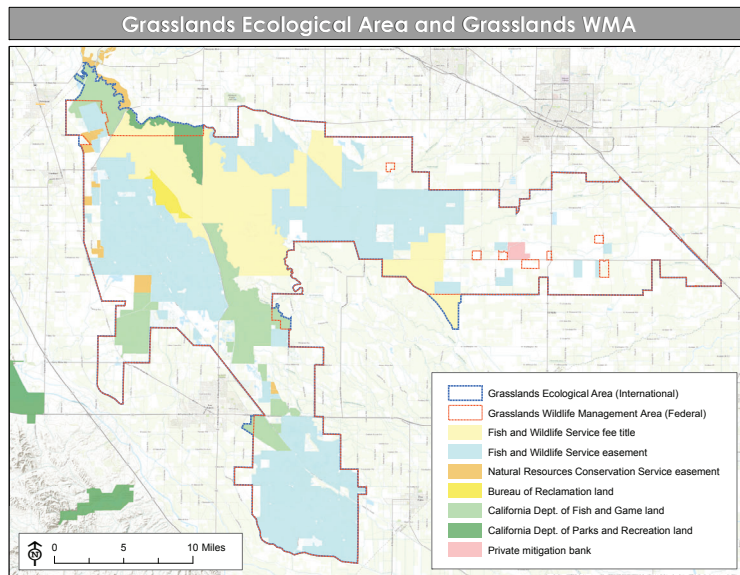
ATTACHMENT B

(Comments of Grassland Water District, Grassland Resource Conservation District, and Grassland Fund)

Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

ATTACHMENT C

(Comments of Grassland Water District, Grassland Resource Conservation District, and Grassland Fund)



Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

List of Literature on Wildlife Disturbance, Behavioral Effects, and Mitigation

November 26, 2018

Barber, Jesse R. et al., *The Costs of Chronic Noise Exposure for Terrestrial Organisms* (2009)*Barrientos, Rafael and Borda-de-Água, Luís, *Railways as Barriers for Wildlife: Current Knowledge* (2017)Beier, Paul, *Effects of Artificial Night Lighting on Terrestrial Mammals* (2005)Blumstein, Daniel T., *Developing an Evolutionary Ecology of Fear: How Life History and Natural History Traits Affect Disturbance Tolerance in Birds* (2006)Borgmann, Kathi L., *A Review of Human Disturbance Impacts on Waterbirds* (2010)Bratton, Susan P., *Boat Disturbance of Ciconiiformes in Georgia Estuaries* (1990)Bruderer, Bruno et al., *Behaviour of Migrating Birds Exposed to X-Band Radar and a Bright Light Beam* (1999)CGTN News Video at 11:45, https://news.cgtn.com/news/3d63544d7a49545a326c4754/share_p.html (2018)*Conomy, John T. et al., *Do Black Ducks and Wood Ducks Habituate to Aircraft Disturbance?* (1998)Da Silva, Arnaud, *Light Pollution Alters the Phenology of Dawn and Dusk Singing in Common European Songbirds* (2015)DeLong, Anita K., *Managing Visitor Use & Disturbance of Waterbirds – A Literature Review of Impacts and Mitigation Measures – Prepared for Stillwater National Wildlife Refuge* (2002)Dimmitt, Mark A. and Ruibal, Rodolfo, *Environmental Correlates of Emergence in Spadefoot Toads (Scaphiopus)* (1980)Dominoni, Davide M., *The Effects of Light Pollution on Biological Rhythms of Birds: An Integrated, Mechanistic Perspective* (2015)*Dooling, Robert J. and Popper, Arthur N., *The Effects of Highway Noise on Birds* (2007)Fatal Light Awareness Program (FLAP), *FLAP Canada Website* (2018)Fleskes, Joseph P., *Pintail North-South Flight Paths in the Grassland Ecological Area* (2002)Francis, Clinton D. and Barber, Jesse R., *A Framework for Understanding Noise Impacts on Wildlife: An Urgent Conservation Priority* (2013)*García de la Morena, Eladio L. et al., *On-Board Video Recording Unravels Bird Behavior and Mortality Produced by High-Speed Trains* (2017)Godin, Alfred J., *Birds at Airports* (1994)*Hockin, D. et al., *Examination of the Effects of Disturbance on Birds with Reference to Its Importance in Ecological Assessments* (1992)Holmes, Tamara L. et al., *Responses of Wintering Grassland Raptors to Human Disturbance* (1993)Hui, Zhang, *New High-speed Railway Keeps Pandas, Rare Birds Safe* (2017)Jacobson, Sandra L., *Mitigation Measures for Highway-caused Impacts to Birds* (2005)Jones, Jenny, *Impact of Lighting on Bats* (2000)Korschgen, Carl E. et al., *Disturbance of Diving Ducks by Boaters on a Migrational Staging Area* (1985)*Korschgen, Carl E. et al., *Human Disturbances of Waterfowl: Causes, Effects, and Management* (1992)*Livezey, Kent B. et al., *Database of Bird Flight Initiation Distances to Assist in Estimating Effects from Human Disturbance and Delineating Buffer Areas* (2016)Longcore, Travis and Rich, Catherine, *Ecological Light Pollution* (2004)Lustick, Sheldon, *The Effect of Intense Light on Bird Behaviour and Physiology* (1973)Manci, Karen M. et al., *Effects of Aircraft Noise and Sonic Booms on Domestic Animals and Wildlife: A Literature Synthesis* (1988)McClure, Christopher J. W. et al., *An Experimental Investigation Into the Effects of Traffic Noise on Distributions of Birds: Avoiding the Phantom Road* (2013)McFadden, Tyler N. et al., *Waterbird Responses to Regular Passage of a Birdwatching Tour Boat: Implications for Wetland Management* (2017)New China TV, *Hush! China's high-speed rail cuts down noise running through Birds' Paradise*, <https://www.youtube.com/watch?v=A0meS6SNCuE> (2018)Novak, Annie, *The 9/11 Tribute in Light Is Helping Us Learn About Bird Migration* (2018)Ortega, Catherine P., *Effects of Noise Pollution on Birds: A Brief Review of Our Knowledge* (2013)Pease, Melissa L. et al., *Effects of Human Disturbances on the Behavior of Wintering Ducks* (2005)Perry, Gad et al., *Effects of Artificial Night Lighting on Amphibians and Reptiles in Urban Environments* (2008)Poot, Hanneke et al., *Green Light for Nocturnally Migrating Birds* (2008)Popp, J.N. and Boyle, S.P., *Railway Ecology: Underrepresented in Science?* (2016)Powell, Hugh, *The Sky Above: It's Not Just Air, It's Habitat* (2018)Quanlin, Qiu, *Noise Barrier Protects Birds from Loud Trains* (2017)Ríos-Chelén, Alejandro A. et al., *Anthropogenic Noise Is Associated with Changes in Acoustic but Not Visual Signals in Red-winged Blackbirds* (2015)Rodgers, James A. and Smith, Henry T., *Buffer Zone Distances to Protect Foraging and Loafing Waterbirds from Human Disturbance in Florida* (1997)Ruddock, M. and Whitfield, D.P., *A Review of Disturbance Distances in Selected Bird Species* (2007)

Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

Scarton, F., *Flight Initiation Distances in Relation to Pedestrian and Boat Disturbance in Five species of Waders Breeding in a Mediterranean Lagoon* (2018)

Schummer, Michael L. and Eddleman, William R., *Effects of Disturbance on Activity and Energy Budgets of Migrating Waterbirds in South-Central Oklahoma* (2003)

Shuford, W. David et al., *Patterns of Distribution, Abundance, and Habitat Use of Breeding Black-necked Stilts and American Avocets in California's Central Valley in 2003* (2004)

Stone, Emma Louise et al., *Impacts of Artificial Lighting on Bats – A Review of Challenges and Solutions* (2015)

Terra Borealis, *Effects of Noise on Wildlife Conference Proceedings* (2003)

Trulio, Lynne A. and White, Heather R., *Wintering Waterfowl Avoidance and Tolerance of Recreational Trail Use* (2016)

Van Doren, Benjamin M. et al., *High-Intensity Urban Light Installation Dramatically Alters Nocturnal Bird Migration* (2017)

Volberg, Jeffrey A., *Bullet Through the Heart of the Grasslands* (2017)

Various Authors, *Wildlife and Hight Speed Rail* (2005)

Various Authors, *Avian Issues* (2005)

Wise, Sharon, *Studying the Ecological Impacts of Light Pollution on Wildlife: Amphibians as Models* (2007)

Weston, Michael A., *Birds, Buffers and Bicycles: A Review and Case Study of Wetland Buffers* (2009)

Wright, Mark D. et al., *Exploring Behavioural Responses of Shorebirds to Impulsive Noise* (2010)

*Duplicate reference to those presented by the High Speed Rail Authority on August 15 and October 17, 2018.

3

San Jose - Merced - RECORD #1675 DETAIL

Status : Unread
Record Date : 6/24/2020
Submission Date : 6/23/2020
Interest As : Local Agency
First Name : Ellen
Last Name : Wehr
Attachments : Attachment D.pdf (335 kb)
 Attachment E.pdf (177 kb)
 Attachment F.pdf (660 kb)

Stakeholder Comments/Issues :

Good afternoon,
 Please find attached Attachments D, E, and F to the comments of Grassland Water District, Grassland Resource Conservation District, and the Grassland Fund. There are no further attachments.

Thank you,

Ellen Wehr
 Grassland Water District
 (916) 873-2020
 ewehr@gwdwater.org<mailto:ewehr@gwdwater.org>

 This e-mail may be confidential and privileged for the sole use of the intended recipient. If that is not you, please contact me and delete all copies without reviewing or forwarding.

From: Ellen Wehr
 Sent: Tuesday, June 23, 2020 4:56 PM
 To: 'san_jose_merced@hsr.ca.gov' <san_jose_merced@hsr.ca.gov>
 Cc: Ric Ortega (rortega@gwdwater.org) <rortega@gwdwater.org>; Jessica Wright <jwright@gwdwater.org>; 'Emma Hansen' <hansenemma23@gmail.com>
 Subject: RE: Comments on Draft EIR/EIS for San Jose to Merced Project Section (Message 2)

Good afternoon,
 Please find attached Attachments A, B, and C to the comments of Grassland Water District, Grassland Resource Conservation District, and the Grassland Fund. Further attachments will follow by separate email.

Ellen Wehr
 Grassland Water District
 (916) 873-2020
 ewehr@gwdwater.org<mailto:ewehr@gwdwater.org>

 This e-mail may be confidential and privileged for the sole use of the intended recipient. If that is not you, please contact me and delete all copies without reviewing or forwarding.

From: Ellen Wehr

Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

Sent: Tuesday, June 23, 2020 4:54 PM

To: 'san.jose_merced@hsr.ca.gov' <san.jose_merced@hsr.ca.gov<mailto:san.jose_merced@hsr.ca.gov>>

Cc: Ric Ortega (rortega@gwdwater.org<mailto:rortega@gwdwater.org>)

<rortega@gwdwater.org<mailto:rortega@gwdwater.org>>; Jessica Wright

<jwright@gwdwater.org<mailto:jwright@gwdwater.org>>; 'Emma Hansen'

<hansenemma23@gmail.com<mailto:hansenemma23@gmail.com>>

Subject: Comments on Draft EIR/EIS for San Jose to Merced Project Section (Message 1)

Good afternoon,

Please find attached comments from Grassland Water District, Grassland Resource Conservation District, and the Grassland Fund. Attachments will follow by separate email.

Thank you,

Ellen Wehr

Grassland Water District

(916) 873-2020

ewehr@gwdwater.org<mailto:ewehr@gwdwater.org>

This e-mail may be confidential and privileged for the sole use of the intended recipient. If that is not you, please contact me and delete all copies without reviewing or forwarding.

ATTACHMENT D

(Comments of Grassland Water District, Grassland Resource Conservation District, and Grassland Fund)

Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

HIGH SPEED RAIL AND THE GEAs: INITIAL RESPONSES TO PRELIMINARY IMPACTS ANALYSIS







- Methodology of Analysis
- Conclusions Regarding Severity of Impacts
- Requests for Mitigation
- *This presentation of initial responses to HSRA's preliminary analysis does not replace or supersede previously submitted written comments or references cited therein*

METHODOLOGY OF ANALYSIS: NOISE AND VIBRATION

- 65 dBA as baseline noise level is too high. See Dooling (background noise levels are 40-45 dBA in a quiet rural area).
- 28 dB as critical ratio for birds does not reflect variation among bird species. See *id.* (range is 21 dB to 32 dB).
- 93 dBA threshold for behavioral responses in birds is inconsistent with scientific literature. See *id.* (audible highway noise has potential behavioral / physiological effects independent of direct effects on auditory system; effects of chronic noise exposure may begin at 55-60 dBA), Kaseloo and Ward (under "various authors"), Manci, Barber, Wright (behavioral response in shorebirds more likely than not at above 65.5 dBA, flight with site abandonment is likely at above 72.2 dBA).
- Assumption of 1.7% of the day for masking of bird vocalization does not reflect higher train frequency in early morning and early evening when birds vocalize the most. Masking is a serious issue and varies among species. See McClure, Blumstein

Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

METHODOLOGY OF ANALYSIS: LIGHTING AND GLARE

- **Lack of information regarding:**
 - » Height and abundance of lights
 - » Types of lights that will be used (e.g., low pressure sodium, high pressure sodium, LED, etc.)
 - » Luminosity of bulbs
 - » Specific locations of light fixtures (during both construction and operation)
 - » Expected daytime glare/reflection from high-speed trains
- **This information is essential to evaluating project impacts because effects to wildlife depend on the illumination (light incident per unit area), intensity (number of photons per unit area), and spectral content (expressed by wavelength)**

3

METHODOLOGY OF ANALYSIS: WILDLIFE DISTURBANCE AND WILDLIFE CORRIDOR IMPACTS

- **Focusing on “guilds” detracts from a close analysis of impacts to bird species that nest in the GEA (black-necked stilts, American avocets, killdeer, mallards, gadwalls) and those that rely on the GEA for migration (black-bellied plovers, yellowlegs, curlews, dunlins, dowitchers).**

4

Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

SEVERITY OF IMPACTS: NOISE AND VIBRATION

- Area of adverse noise impacts is underestimated due to 93 dBA threshold.
- Conclusion that habituation is inconsistent with scientific literature. See Conomy et al. (black ducks habituated to aircraft noise, wood ducks did not.), Wright (no detectable decrease in disturbance thresholds due to repeated treatments), Francis (behavioral modifications due to noise – even for those that outwardly appear to habituate – can lead to decreased fitness).
- Conclusion that decreased reproduction will not occur fails to acknowledge that studies have had mixed results. See Mancí (declines observed), Ortega (summarizing potential effects).
- Conclusion that “vibration effects are less extensive than noise effects” masks that vibration has effects independent of noise. Vibration can cause burrow collapse and can artificially arouse animals buffered from noise (e.g. in burrows), reducing fitness and reproductive success. See Dimmitt (western spadefoot toads highly susceptible to artificial emergence from overwintering sites due to soil vibration).
- Conclusion that there is little potential for masking beyond zone of temporary hearing damage, or if present, impacts potentially offset by louder vocalizations (Lombard effect), is inaccurate. Any increase in noise levels has potential for masking, and significance depends on the level of masking. Very loud train noises will result in effects for several hundred meters from the train. See Dooling, Ortega.

5

SEVERITY OF IMPACTS: LIGHTING AND GLARE

- Conclusion that “visual disturbance is a more extensive effect” than night lighting, based on the distance of impacts from the rail, is not sufficient to discount potentially significant impacts associated with night lighting.
 - » Night lighting causes different types of effects, which could be significant regardless of effects associated with noise and visual disturbance. Even if visual disturbance may extend greater distances, night lighting may have more severe (“extensive”) effects on some species, e.g. reptiles and amphibians that are less sensitive to noise and often buffered from visual impacts by vegetation, but become highly susceptible to predation and other adverse effects if their habitat is exposed to night lighting.
 - » Night lighting, in association with visual and noise disturbance, may cause significant interactive or cumulative effects.
 - » Night lighting effects are associated with wildlife orientation/disorientation, attraction/repulsion (movement), reproduction, communication, community ecology, competition, predation, behavior (foraging, social behavior), ecosystem effects, and disruption of biological clocks. Literature on night lighting effects on birds, bats, reptiles and amphibians is provided. See *Beier, Bruderer, Da Silva, Dimmitt, Dominoni, FLAP, Jones, Longcore, Lustick, Novak, Perry, Poot, Stone, Van Doren, Wise*

6

Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

SEVERITY OF IMPACTS: WILDLIFE DISTURBANCE AND WILDLIFE CORRIDOR IMPACTS

- General and pervasive impacts of train disturbance on birds (such as richness, abundance, and behavioral changes) must be acknowledged. See Borda de Água, Borgmann
- Potential impacts to north-south flight patterns of birds in the GEA should be discussed. See Fleskes

7

REQUESTS FOR MITIGATION: NOISE AND VIBRATION

- Commitment to install a barrier, using best available and achievable technology, to reduce noise and vibration throughout the segment where impacts to GEA resources may occur, similar to the Shenzhen-Maoming Railway. See CGTN News Video, New China TV, Quanlin
- Commitment to install, operate, and report bird observations and bird strikes using an on-board recording system, and to implement additional adaptive mitigation if unpredicted or unreasonable direct impacts to birds occur. See García de la Morena
- See Letter Requesting Mitigation

8

Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

REQUESTS FOR MITIGATION: LIGHTING AND GLARE

- No nighttime lighting on railway within visual distance of the GEA (during both construction and operation).
- No unessential night lighting on railway-associated buildings or structures, and commitment to specific guidelines for any lighting that is essential for security or worker safety on railway-associated buildings or structures:
 - » Motion sensors instead of fixed night lighting
 - » Maximum height limits for night lighting and shielding requirements
 - » Bird-friendly lightbulb types
- Train window design shall darken / reduce night lighting spill from passing rail cars.
- Train headlights shall be minimum required luminosity and use bird-friendly lightbulbs.
- Trains shall be designed using materials or colors that reduce sunlight glare.

9

REQUESTS FOR MITIGATION: WILDLIFE DISTURBANCE AND WILDLIFE CORRIDOR IMPACTS

- Mitigation for wildlife disturbance that can be achieved through design and operation measures shall not be superseded by HSRA's existing commitment to mitigate for growth inducement and habitat fragmentation through acquisition of easements or fee title lands.
- Wildlife corridor / passage design shall be approved by the California Department of Fish and Wildlife.
- Project features through the GEA shall be designed to reduce visual impacts to wildlife, including the use of neutral or natural colors and/or patterns, avoidance of reflective or bright materials, and streamlined physical profiles whenever possible.

10

Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

ATTACHMENT E

(Comments of Grassland Water District, Grassland Resource Conservation District, and Grassland Fund)

Grasslands IBA Background and Justification for Use of GEA Boundary in Environmental Impacts Analysis (Audubon California, March 2020)

Important Bird Areas (IBAs) identify sites that provide essential habitat for birds, and Audubon does not necessarily consider the potential benefits or adverse effects to other taxa when designating an IBA. As such, IBAs establish a useful framework for helping guide efforts that focus on bird conservation.

Classification of Important Bird Areas (IBAs) began in Europe in 1985 by BirdLife International as a means to identify and encourage conservation of habitats for preserving avian biodiversity. This international conservation program was a response to growing concerns over bird habitat fragmentation and loss. In the United States, the IBA program is administered by the National Audubon Society.

While conferring no regulatory authority, a site's designation as an IBA is a powerful distinction which can be utilized to leverage conservation efforts when no other designations exist in a particular region. For example, the IBAs in New York State served as a model for the State Bird Conservation Area Program, which now legally integrates bird conservation into agency planning, management, and research. However, in the Grasslands region other designations do exist and therefore must be evaluated to determine which is most representative of the full suite of taxa that may be impacted by a development project, such as the construction and operation of the high speed rail. In addition, the Grassland Ecological Area boundary is recognized by the Western Hemisphere Shorebird Reserve Network and the Central Valley Joint Venture.

In California, the IBA program designated 50 sites between 1995 and 1998. Since 2000, Audubon California has administered the statewide IBA program. During this time, Audubon California consulted with local bird experts and utilized bird survey data collected by local Audubon chapters to add 98 new IBA sites, increasing the number of IBAs in California to 148. Between 2006 and 2008, Audubon California created maps to define IBA boundaries as a critical step towards promoting on the ground conservation. These maps are now available online at <https://ca.audubon.org/conservation/california-iba-interactive-site-map>. IBA boundaries were initially based on the site descriptions in Important Bird Areas of California (Cooper 2004). However, site descriptions were often based on jurisdictional boundaries (i.e. state wildlife areas and national wildlife refuge boundaries), which were not always comprehensive, and additional research was often necessary to complete the mapping process. Audubon engaged in additional local review from Audubon chapters, birders, and local experts during the mapping process to attempt to make the maps as accurate as possible.

However, IBA boundaries are always considered approximations of the best habitat for which an area was originally designated. Additionally, over the past 16 years new science has shed light on species range shifts (including for Tricolored Blackbird outside the existing IBA boundary), the importance of habitat connectivity, working lands as surrogate habitat, impacts of land-use change, and other pressures on habitat quantity and quality as well as water availability. As a result, Audubon California recognized the need to update existing IBA boundaries and, to date, approximately one-third of the 148 IBAs in California have been updated within the past 2 years, focusing on areas with threatened or at-risk species and in desert regions.

Though at this time the Grasslands IBA has not been updated since 2008, preliminary evaluations suggests that the boundary should be expanded in key areas to reflect existing habitat, changes in land-use patterns, and bird response to those changes. While this process is undertaken, Audubon California advises that the Grasslands Ecological Boundary provides greater representation than the current IBA boundary, of the area's taxa, including birds, and should be used to evaluate any environmental impacts.

Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

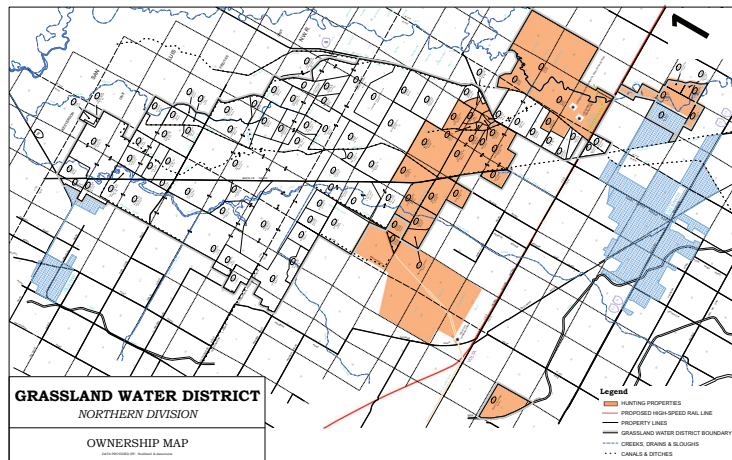
References:

Cooper, D.S. 2004. Important Bird Areas of California. Audubon California, Pasadena, CA. 240 pp.

ATTACHMENT F

**(Comments of Grassland Water District, Grassland Resource
Conservation District, and Grassland Fund)**

Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued



Response to Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020)

1678-2172

The Authority appreciates your comments on the Draft EIR/EIS. In subsequent individual comments, the Grasslands Water District provided specific detailed comments regarding project description, alternatives, tiering, the regulatory baseline, impacts, and mitigation. Each of these specific comments is addressed below. The Authority disagrees with commenter and stands by its determination the fact that the Draft EIR/EIS was developed in compliance with both CEQA and NEPA.

1678-2173

The Draft EIR/EIS was developed in compliance with both CEQA and NEPA and recirculation of the entire Draft EIR/EIS is not necessary. The Authority has issued a limited recirculation of and prepared a supplement to the Draft EIR/EIS to reflect recent changes to the status of the coastal population of mountain lion and the monarch butterfly. The California Fish and Game Commission listed the coastal population of mountain lion as a candidate species under CESA on April 21, 2020. The U.S. Fish and Wildlife Service also took action that made the listed monarch butterfly as a candidate for listing threatened under FESA. As a result of these listings, the Authority issued a limited recirculation of and prepared a supplement to the Draft EIR/EIS to include the impacts and mitigation measures focused on the mountain lion and the monarch butterfly. No other new or significant information has been identified that meets the applicable criteria for recirculation under CEQA or supplementation under NEPA.

1678-2174

Comment noted. Please refer to individual responses to Grassland Water District comments for responses to specific issues.

1678-2175

Chapter 9, Public and Agency Involvement, and Appendix 9-A, Public and Agency Meeting List, of this Final EIR/EIS have been updated to reflect confirmed additional meetings held with Grasslands Water District and Grasslands Ecological Area stakeholders. The Authority considered feedback from stakeholders and have used these meetings to inform the development and refinement of the project description and the analysis in the Draft EIR/EIS, including but not limited to Bio-MM#80, which provides mitigation in the form of noise barriers and a guideway enclosure to address GEA stakeholders' concerns. Please refer to Appendix 9-A for a summary of topics covered during the meetings with Grassland Water District. For more information regarding the mitigation, please refer to the response to submission SJM-1678, comment 2190.

1678-2176

Refer to Standard Response SJM-Response-ALT-1: Alternatives Selection and Evaluation Process, SJM-Response-ALT-2: Project-Specific Alternatives Considerations.

The comment notes that the Authority Board of Directors adopted a resolution directing staff to consider all "feasible mitigation through the Grasslands Ecological Area." In compliance with this resolution as well as CEQA and NEPA, all reasonable and feasible mitigation measures with a nexus to project-specific effects have been applied to impacts on the GEA. These include BIO-MM#10, BIO-MM#74, BIO-MM#80, and BIO-MM#83 all of which state that "mitigation implemented under this measure would be consistent with and would help advance mitigation commitments at the program level, including mitigation intended to address impacts in the GEA."

The comment notes that the Draft EIR/EIS does not discuss this long history of the Grasslands Groups involvement in the Bay Area to Central Valley. The Authority recognizes and appreciates the comments, meeting attendance, and work products developed by the GEA working group prior to and during the preparation of the Final EIR/EIS, as well as commitment to protecting biological and recreational resources. In response to this comment, Chapter 9, Public and Agency Involvement, of the Final EIR/EIS has been updated with meetings conducted with the Grasslands Working Group and related entities.

Response to Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2177

Refer to Standard Response SJM-Response-OUT-1: Public Outreach.

All technical reports and other documents referenced in the Draft EIR/EIS, including references listed in Chapter 12 as well as the referenced program-level documents, were available in electronic form by request via the Authority's website or by calling the Authority office at (800) 455-8166. While the repositories were closed or operating with limited public access in compliance with Governor Newsom's shelter in place order (Executive Order N-33-20) and applicable County Health Officer directives, the Notice of Availability informed the public that printed and/or electronic copies of the Draft EIR/EIS and electronic copies of associated technical reports were also available for review during business hours at the Authority's Northern California Regional Office at 100 Paseo de San Antonio, Suite 300, San Jose, CA 95113 and the Authority's Headquarters at 770 L Street, Suite 620 MS-1, Sacramento, CA. These offices remained open to the public during the public comment period.

On April 28, 2020, Grasslands Water District contacted the Authority to confirm the location of the published Draft EIR/EIS on the website. The Authority confirmed the website location on the same day. On May 26, 2020, Grasslands Water District submitted a request via a phone call for all technical reports and reference documents. On May 27, 2020, the Authority provided all of the requested materials electronically.

Chapter 9, Public and Agency Involvement, and Appendix 9-A, Public and Agency Meeting List, of this Final EIR/EIS reflect the Authority's continued engagement with Grasslands Water District and Grasslands Ecological Area stakeholders spanning from 2009 to 2020. The Authority will continue to coordinate with stakeholders upon request; however, comments received after the close of the public comment period may not be responded to formally in the Final EIR/EIS.

1678-2178

The commenter outlines and summarizes the general requirements under CEQA. Specific responses to the issues outlined in the commenter's summary are provided in individual responses to subsequent comments, which raise specific concerns regarding these items.

1678-2179

Refer to Standard Response SJM-Response-BIO-5: Lighting Impacts to Wildlife.

The comment states that the Draft EIR/EIS fails to adequately describe the project. The description of alternatives in Chapter 2, Alternatives, and in Volume 3, Preliminary Engineering for Project Design Record, are legally sufficient as they provide a "general description of the project's technical, economic, and environmental characteristics, considering the principal engineering proposals if any and supporting public service facilities" Additional information has been added in Chapter 2 in the Final EIR/EIS regarding lighting at HSR facilities; also, additional information regarding operational lighting, including on vehicles (trains), has been added in appropriate locations in Chapter 2. Specifically, information on vehicle lighting has been added to Section 2.4.2, Vehicles, of the Final EIR/EIS. Information on station lighting has been added to Section 2.4.3, Stations, of the Final EIR/EIS. For all track profile types, Section 2.4.4, Infrastructure Components, clarifies that flood lighting or night lighting would not be installed along the HSR guideway for track operations or maintenance, except for specific facilities, including maintenance and systems sites. Chapter 2 of the Final EIR/EIS also clarifies lighting requirements to meet safety standards for at-grade crossings, traction power facilities, and signaling and train-control elements. The changes to Chapter 2 of the Final EIR/EIS also provide additional information regarding the maintenance-of-way facility (near Gilroy) and the maintenance-of-way siding facility (in the San Joaquin Valley), including the type and height of lighting proposed. The fencing around both facilities would be screened, which would help to minimize light spillover outside the facilities. For all essential lighting necessary for safety and security, Chapter 2 clarifies that lighting would incorporate motion sensors, height limits, shielding, and downward-facing orientation where feasible and consistent with safety and security. The Authority has revised BIO-IAMF#12 slightly in Volume 2, Appendix 2-E, Project Impact Avoidance and Minimization Features, in the Final EIR/EIS to clarify the use of bird-friendly lighting (i.e., lighting with shorter wavelengths toward the blue and green spectrum) on all stationary light sources within the GEA. Impact BIO#47 in Section 3.7, Biological and Aquatic Resources, has been revised in the Final EIR/EIS to provide additional analysis and discussion regarding operational lighting, and information regarding the type and extent of lighting within the GEA has been added to the impact discussion. AVQ-IAMF#1 in Section 3.16, Aesthetics and Visual Quality, of the Draft EIR/EIS also describes project features related to lighting. Detailed

Response to Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2179

descriptions of locations, heights, abundances, and types of bulbs, luminosity/brightness, illumination (light incident per unit area), intensity (number of photons per unit area), and spectral content (expressed by wavelength), are not required for the analysis of impacts due to light. The Draft EIR/EIS analyzes the maximum lighting scenario that could occur during construction and operation because the location and number of lighting fixtures has not been finalized. BIO-MM#76 will require shielding of nighttime light during construction and BIO-MM#3 will establish environmentally sensitive areas and nondisturbance zones, where lighting would be limited if necessary to avoid impacts on the environmentally sensitive area. BIO-MM#80 would mitigate operational impacts due to lighting within GEA. Train lights would be limited to the tracks within the extent of the noise barrier and enclosed track. There would be no daytime glare or reflection visible within the extent of the noise barrier and track enclosure. The project description is stable and sufficient to analyze the effects of the project. Specific locations, types, and number of lighting fixtures will be determined as part of Detailed Design Post-ROD. The Authority will validate that design refinements are within the scope of the impacts analyzed and disclosed as part of the Final EIR/EIS. The request for a project lighting plan is noted. Lighting commitments are provided in project features and mitigation measures.

1678-2180

The comment states that the locations of appurtenant O&M facilities are not clearly described in the Draft EIR/EIS. Please refer to Section 2.4.11, Maintenance Facilities, of the Final EIR/EIS for information on the various types of facilities that would be included in the project. Figures 2-42, 2-43, 2-44, and 2-45 in Chapter 2, Alternatives, illustrate the specific locations of the maintenance facilities. The Volume 3, Preliminary Engineering for Project Design Record drawings include alternate locations for some of the facilities. The selection of one of the alternate locations will take place during Detailed Design Post-ROD. The Authority has disclosed the preferred locations of these sites in Table 8-3 in Chapter 8 of the Draft EIR/EIS. Impact analysis in the EIR/EIS conservatively assumes that both alternate locations would be built; however, only one will ultimately be constructed. The EIR/EIS therefore overstates the project impacts with respect to systems sites with alternate locations.

Please refer to response to submission SJM-1678, comment 2193 for a description of site-specific impact avoidance and minimization. The Authority will continue to engage jurisdictions and stakeholders throughout the design, construction, and operation of the project.

Response to Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2181

Refer to Standard Response SJM-Response-ALT-1: Alternatives Selection and Evaluation Process, SJM-Response-ALT-2: Project-Specific Alternatives Considerations.

The Draft EIR/EIS does not include an analysis of design alternatives that would entirely avoid impacts through the GEA, including a below-grade design or an above-grade enclosure. All four alternatives are in the same vertical and horizontal alignment through the GEA. As a result of the significant impacts associated with train noise, visual disturbance, light, and train strike, the Authority developed BIO-MM#80, which includes noise barriers and a 3.4-mile long enclosure enveloping the train's operating envelope to minimize or avoid such impacts. Incorporation of this mitigation measure, in combination with the other mitigation measures included in the EIR/EIS, satisfies the duty of the Authority to incorporate all reasonable and feasible mitigation measures to reduce project impacts. The comment further stated that the Draft EIR/EIS does not fully evaluate impacts on CDFW's properties under Section 4(f). Please refer to Table 4-3 in Section 4.5.1, Parks, Recreation, and Wildlife and Waterfowl Refuges, of the Final EIR/EIS for the CDFW-owned properties that are included in this analysis. In addition, please see Sections 4.6.1.27, Volta Wildlife Area Use Assessment (Resource #41), and 4.6.1.28, Los Banos Wildlife Area Use Assessment (Resource #47), of the Draft EIR/EIS for the Section 4(f) use assessments for Los Banos Wildlife Area and Volta Wildlife Area. These use assessments fully evaluate the potential effects on Los Banos Wildlife Area and Volta Wildlife Area by examining the potential for permanent use, temporary occupancy, and constructive use. Lastly, economic effects are not a consideration under Section 4(f) and are not discussed in Chapter 4, Section 4(f)/6(f) Evaluation, of the Draft EIR/EIS; however, economic effects are discussed in Section 3.12, Socioeconomics and Communities, of the Draft EIR/EIS.

1678-2182

Refer to Standard Response SJM-Response-ALT-1: Alternatives Selection and Evaluation Process, SJM-Response-ALT-2: Project-Specific Alternatives Considerations, SJM-Response-BIO-1: Wildlife Connectivity in Coyote Valley and Pacheco Pass.

As noted by the commenter, Executive Order 11990 requires federal agencies to "avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds: (1) that there is no practicable alternative to such construction, and (2) that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use." Impacts on the wildlife and wetlands in the GEA have been examined and mitigation has been proposed. Please refer to the response to submission SJM-1678, comment 2181.

Response to Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2183

Refer to Standard Response SJM-Response-ALT-1: Alternatives Selection and Evaluation Process, SJM-Response-ALT-2: Project-Specific Alternatives Considerations.

The additional cost of a tunnel in the GEA is not feasible. The Authority developed BIO-MM#80, which mitigates noise, visual, and train strike impacts. The cost of a tunnel would also certainly include additional costly impact avoidance, minimization, and mitigation measures specific to tunnel construction. A reasonable range of feasible alternatives was analyzed in the Draft EIR/EIS, including options for the San Joaquin Valley portion of the alignment. Factors taken into consideration included aquatic resources, wildlife, and state park resources. As identified in Table 2-3 in Chapter 2, Alternatives, of the Draft EIR/EIS, options to go around the GEA were withdrawn. Additional detail on the alternatives screening process can be found in Appendix 2-1, Alternatives Considered During Alternatives Screening Process (located in Volume 2, Technical Appendices, of the Draft EIR/EIS). Going around the GEA to the north would have additional aquatic resources and Section 4(f) impacts. Going around the GEA to the south would have additional impacts on aquatic resources, cost, and logistical issues because of the longer alignment. Further, cut-and-cover tunnel and bored tunnel options can be approximately 2 times and bored tunnel options can be approximately 2.5 times more costly more costly than a viaduct option. As a result, the Authority determined a tunnel alternative for portions of the San Joaquin Valley Subsection would be not feasible for reasons of cost.

1678-2184

Section 4(f) does require the consideration of all prudent and feasible alternatives and all possible measures to minimize harm when it has been determined that a resource would result in a "use". As described in Chapter 4, Section 4(f)/6(f) Evaluation, of the Draft EIR/EIS, the activities occurring near Los Banos and Volta Wildlife Areas would not result in a use of either wildlife area. Therefore, consideration of all prudent and feasible alternatives and all possible measures to minimize harm is not required. However, the Authority has considered ways to minimize harm to the wildlife areas and proposes to incorporate numerous mitigation measures to reduce project effects, as discussed in detail in Chapter 4 of the Draft EIR/EIS. An assessment of constructive use at both wildlife areas is provided in Chapter 4 of the Draft EIR/EIS. Additional information about the overnight parking areas at the entrance to both the Los Banos and Volta Wildlife Areas has been added to Section 3.14 Parks, Recreation, and Open Space of the Final EIR/EIS. These overnight parking areas, which can accommodate recreational vehicles (RVs) are not "sleeping areas within campgrounds", which are protected by Section 4(f), and are not classified as sensitive noise receptors. However, as a result of this comment, the Authority has analyzed noise impacts on the overnight parking area. The noise level at Los Banos Wildlife Area overnight parking area would be 73 Ldn, which is an increase from 69 Ldn under existing conditions. The noise level at Volta Wildlife Area overnight parking area would be 72 Ldn, which is an increase from 64 Ldn under existing conditions. Chapter 4 of the Final EIR/EIS has been revised to identify these two additional severe noise impacts at the Volta and Los Banos Wildlife Area's overnight parking areas. Although significant before mitigation, implementation of mitigation measure BIO-MM#80: Minimize Permanent Intermittent Noise, Visual, and Train Strike Impacts on Wildlife Movement would reduce the impacts. With the noise barriers provided in BIO-MM#80, there would be no noise impact at the Los Banos overnight parking area and a moderate residual noise impact at the Volta Wildlife Area's overnight parking area. Regarding noise interfering with wildlife viewing, as discussed in Chapter 4 and Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS, the Authority would implement BIO-MM#58 to compensate for noise impacts on aerial species and BIO-MM#80 to avoid and minimize impacts from noise on wildlife movement, or some combination of the two measures if necessary. These measures would avoid or minimize noise impacts on habitat or provide for the preservation and enhancement of waterbird habitat. These measures are expected to reduce or eliminate effects on wildlife in the wildlife areas and would avoid substantial changes to wildlife

Response to Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2184

viewing in the wildlife areas, thus avoiding a constructive use. Regarding ecological intrusion, the use assessments for both wildlife areas have been revised; please refer to Section 4.6.1.30, Volta Wildlife Area Use Assessment (Resource #48), and Section 4.6.1.31, Los Banos Wildlife Area Use Assessment (Resource #49). With implementation of mitigation measures BIO-MM#58 and BIO-MM#80, the effects on wildlife and wildlife habitat would be reduced or eliminated, avoiding the diminishment of the wildlife habitat. Access to both wildlife areas would not be affected by the project alternatives. Finally, wildlife use would not be substantially reduced with implementation of mitigation measures BIO-MM#58 and BIO-MM#80, or some combination of the two measures if necessary. Therefore, constructive use would not result at either wildlife area. Given the above considerations, the Section 4(f) analysis of both wildlife areas is not inconsistent with other sections of the Draft EIR/EIS.

1678-2185

See response to submission SJM-1678, comment 2184. Increases in noise associated with the project would not substantially interfere with the use and enjoyment of the Los Banos and Volta Wildlife Areas. The noise analysis uses FRA noise impact criteria, not State of California Land Use Compatibility Guidelines. As discussed in Section 3.7, Biological and Aquatic Resources, and Chapter 4, Section 4(f)/6(f) Evaluation, of the Draft EIR/EIS, the Authority would implement BIO-MM#58 to compensate for noise impacts on shorebirds and wintering waterbirds, BIO-MM#80 to avoid and minimize impacts from noise on wildlife movement, or some combination of the two measures if necessary. These measures would avoid or minimize noise impacts on habitat or provide for the preservation and enhancement of waterbird habitat in the GEA IBA to compensate for the reduction in caloric uptake that may occur as a result of avoidance or limited use of habitat close to the railroad. These measures are expected to reduce or eliminate effects on wildlife using corridors. These measures would avoid substantial changes to wildlife viewing in the wildlife areas because wildlife would not be scared away. In addition, through implementing the requirements of these mitigation measures, they would avoid the diminishment of the wildlife habitat and wildlife use would not be substantially reduced, avoiding ecological intrusion. Please refer to Section 4.1.3, Section 4(f) Applicability, for a definition of lands subject to Section 4(f)/6(f) protection; they do not include conservation easements. Please refer to Figure 3.12-6 in Section 3.12, Socioeconomics and Communities, of the Draft EIR/EIS for the location of Volta Elementary School. No impacts would occur on Volta Elementary School from the project. Please refer to Section 4.1.3, Section 4(f) Applicability, for a definition of lands subject to Section 4(f)/6(f) protection; they do not include conservation easements.

Please refer to Figure 3.12-6 in Section 3.12, Socioeconomics and Communities, of the Draft EIR/EIS for the location of Volta Elementary School. No impacts would occur on Volta Elementary School from the project.

Response to Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2186

The Grassland Environmental Education Center and Van Atta Interpretative Marsh Trail were added to Section 3.15.5.1 as features within Los Banos Wildlife Area. Impacts to Los Banos Wildlife area are identified in Section 3.15. In addition, new noise analysis has been provided that describes impacts to the overnight parking areas at the edges of the Los Banos Wildlife area. No additional or new impacts have been identified for these areas within the wildlife area. See response to submission SJM-1678, comment 2184, for a detailed discussion of noise impacts at the overnight parking areas and wildlife viewing areas within Los Banos and Volta Wildlife Areas.

1678-2187

The Noise and Vibration Technical Report (Appendix 3.4-Ain Volume 2 of the Draft EIR/EIS) is used to analyze noise impacts on people. The noise analysis uses FRA noise impact criteria, not State of California Land Use Compatibility Guidelines. The analysis in Chapter 4, Section 4(f)/6(f) Evaluation, of the Draft EIR/EIS also discusses noise impacts on wildlife and states that the Authority would implement BIO-MM#58 to compensate for noise impacts on aerial species and BIO-MM#80 to avoid and minimize impacts from noise on wildlife movement, or some combination of the two measures if necessary. These measures would avoid or minimize noise impacts on habitat or provide for the preservation and enhancement of waterbird habitat. These measures are expected to reduce or eliminate effects on wildlife in the wildlife area, and wildlife viewing would still be available. This conclusion is consistent with Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS as well. Please refer to Table 3.4-5 in Section 3.4, Noise and Vibration, of the Draft EIR/EIS for the description of Category 3, which is appropriate for the wildlife refuges, institutional land uses with primarily daytime and evening use. This category includes schools, libraries, theaters, and churches, where it is important to avoid interference with such activities as speech, meditation, and concentration on reading material. Places for meditation or study associated with cemeteries, monuments, and museums can be considered to be in this category. Certain historical sites, parks, campgrounds, and recreational facilities are also included.

1678-2188

Chapter 4, Section 4(f)/6(f) Evaluation, of the Draft EIR/EIS provides a detailed assessment of the potential for constructive use at both wildlife areas, including an assessment of whether visual impacts would preclude the use of either wildlife area. The assessment determined that, after the implementation of mitigation measures, user experience would not be substantially degraded, and the use of the wildlife areas would not be precluded by the addition of HSR infrastructure. There would be minor proximity impacts from changes in noise and in the visual environment. Noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Los Banos Wildlife Area for protection under Section 4(f) would be substantially impaired, and no constructive use would result.

1678-2189

See response to submission SJM-1678, comments 2184 through 2188. The comment misstates the Section 4(f) evaluation process. The Section 4(f) methodology and the analysis of constructive use in Chapter 4, Section 4(f)/6(f) Evaluation, of the Draft EIR/EIS is valid and takes into account all necessary requirements. Chapter 4 of the Draft EIR/EIS provides a detailed assessment of the potential for constructive use at both wildlife areas. The assessment determined that, after the implementation of mitigation measures, the protected activities, features, or attributes that qualify these wildlife areas for protection under Section 4(f) would not be substantially impaired, and no constructive use would result.

Response to Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2190

The Authority and FRA prepared a second program EIR/EIS to address the connection between the Bay Area and the northern part of the Central Valley (i.e., north of Fresno), which was completed in 2008 (Authority and FRA 2008, as cited in Chapter 1, Project Purpose, Need, and Objectives, of the Draft EIR/EIS). State litigation resulted in the Authority preparing and circulating a revised analysis in 2010, and again in 2012, leading to completion of a Partially Revised Final Program EIR in 2012 (Authority 2012a, as cited in Chapter 1 of the Draft EIR/EIS). The FRA's 2008 decision and the Authority's 2012 decision can be summarized as follows: 2008/2012 Tier 1 Decisions Selection of preferred alignment corridors—Selected preferred alignment corridors for connecting the Bay Area to the Central Valley north of Fresno to be studied in more detail in second-tier EIR/EIS documents for the geographic sections between San Francisco and Fresno. Selection of preferred station locations—Station locations along the preferred alignment corridors subject to be studied in more detail in second-tier EIR/EISs. Adoption of mitigation strategies—Adopted broad mitigation strategies to be refined and applied at the second tier, as part of project planning and development and environmental review.

These first-tier decisions established the broad framework for the HSR System that shapes the scope of issues and project elements ripe for consideration and decision at the second tier (e.g., this current second-tier San Jose to Merced Project Section decision). The issues ripe for decision through this second-tier, project-level EIR/EIS process are the precise location of the project (alignment, ancillary facilities, station), as well as detailed mitigation measures to address impacts.

The San Jose to Merced Project Section is fully consistent with the prior first-tier EIR/EISs and decisions. The geographic scope is consistent with the 2005 Statewide Program EIR/EIS (Authority and FRA 2005, as cited in Chapter 1 of the Draft EIR/EIS) geographic scope. The train technology, alignments, and stations in the San Jose to Merced Project Section EIR/EIS are consistent with prior first-tier decisions. The EIR/EIS utilizes the mitigation strategies adopted with the first-tier decisions to avoid and minimize impacts through incorporation into project features and design, as well as by refining the general mitigation strategies into detailed mitigation measures. The project-level EIR/EIS has been prepared in the context of the previous broader analysis but is focused on the alternatives ripe for consideration and potential decision at the second tier. It provides a detailed description of the project alternatives for the San Jose to

1678-2190

Merced Project Section and detailed analysis about the potential impacts from construction and operations. The Draft EIR/EIS therefore builds on the prior, more general program EIR/EIS analysis but focuses on the more detailed second-tier project. Furthermore, regarding items (A) THROUGH (F):

[A] Appropriate assessment of biological resources was done in the project area for the EIR/EIS. Given the known presence of species in the GEA and other areas, conducting specific absence/presence surveys in the area would not indicate absence; as such, the EIR/EIS presumes presence which is a conservative approach.

[B] The Draft EIR/EIS includes a comprehensive analysis of impacts to biological resources from multiple sources. Please refer to Section 3.7, Biological and Aquatic Resources.

[C] During project development, the footprint of the facilities was minimized to the extent feasible in proximity to the GEA.

[D] The Authority has been consulting with CDFW, USFWS, and the GWD throughout preparation of the EIR/EIS. Please refer to Chapter 9, Public and Agency Involvement for more details.

[E] The Authority has conducted supplemental analysis of lighting effects on wildlife resources, which has been incorporated into Section 3.7, Biological and Aquatic Resources.

[F] To clarify that the Authority remains committed to the mitigation commitments intended to address impacts to the GEA described in the 2008 EIR/EIS, a new mitigation measure, BIO-MM#P1: Compensatory Mitigation for Impacts to the Grassland Ecological Area, has been added to the Final EIR/EIS that describes how the commitments will be implemented in conjunction with the other compensatory habitat mitigation measures set forth in the Draft EIR/EIS. In summary, the San Jose to Merced Project Section Draft EIR/EIS properly tiers by: being consistent with the broad policy decisions previously reached about the system; explaining the relationship between the first tier and the second tier (Program EIR/EISs and project-level EIR/EIS); utilizing the Program EIR/EISs for background information and to inform the second-tier analysis and making the Program EIR/EISs available to the public; and by focusing on and analyzing the impacts of implementing a specifically defined high-speed train project between San Jose and Merced.

Response to Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2191

Please see response to submission SJM-1678, comment 2232 regarding the use of species modeling and the approach used in the EIR/EIS. The Authority disagrees with the commenter's assertion that a lack of field surveys and use of species modeling would result in an underestimation of impacts. The species models were developed in consultation with the USFWS, CDFW, and NMFS, through numerous meetings and conference calls, and The Authority used the most current and best available information to develop the models. Furthermore, the species models use a broad approach to estimating potentially suitable habitat, assuming that all potentially suitable habitat would be occupied habitat in the impact assessment in the Draft EIR/EIS. It is rare for all potentially suitable habitat to be actually occupied, and therefore the species modeling approach is likely to overestimate the amount of occupied habitat being affected. Additionally, numerous mitigation measures require protocol-level surveys prior to project construction, thus ensuring that avoidance and minimization of impacts is implemented in habitat determined to be occupied at the time of construction. Lastly, the commenter asserts that the use of species modeling is flawed because it results in a flawed analysis and consideration of the environmental baseline. Please see response to submission SJM-1678, comment 2205, which describes why the use of predictive species models is a common practice and why it is appropriate for this project.

1678-2192

Refer to Standard Response SJM-Response-BIO-1: Wildlife Connectivity in Coyote Valley and Pacheco Pass, SJM-Response-BIO-2: Greater Wildlife Impacts Associated with Alternative 3, SJM-Response-BIO-3: Coyote Valley Wildlife Crossings.

Although the commenter suggests that ecosystem fragmentation impacts, impacts on waterfowl flight patterns, collision and electrocution impacts, and glare impacts are not addressed in the Draft EIR/EIS, such impacts are in fact addressed. Fragmentation impacts are addressed in Impact BIO#43. Impacts on use of wildlife corridors, including waterfowl flight patterns, are addressed in Impact BIO#44. Collision impacts, including electrocution as a consequence of collision, are addressed in Impact BIO#49. Visual and lighting disturbance impacts are addressed in Impacts BIO#46 and BIO#47, and a specific discussion of glare is included in the Final EIR/EIS, Chapter 2, Alternatives. Overall, the Draft EIR/EIS does analyze how wildlife movement, including waterfowl, may be altered.

1678-2193

Please refer to the response to submission SJM-1678, comment 3180 for a description of the selection of alternate systems sites.

The Authority has selected construction staging areas and systems sites to minimize the project footprint and environmental impacts. The following discussion provides a rationale for the facilities within the GEA boundary along the HSR alignment, between Moraga Road and approximately station 4675+00, as well as between the Santa Fe Canal and Deep Well Road.

The large MOWS would be immediately adjacent to the GEA's eastern boundary and not within the GEA. Reducing the footprint of these facilities would not minimize the project footprint within the GEA.

Both TPF Paralleling Station C2 alternate locations are within the GEA boundary; however, the footprint will be minimized by the selection and construction of only one of these sites. Both sites are located on remnant and nonviable parcels that are enclosed by the HSR tracks and proposed roads and therefore provide limited habitat and wildlife connectivity values. Furthermore, the track and roadway embankments would block light at the TPF on the south side of the tracks from reaching the GEA on the north side.

TPF Paralleling Station C3, has alternate sites, one of which would be selected for construction. This will minimize the footprint of the HSR facilities that will be constructed, relative to what is included in the EIR/EIS. As listed in Table 8-3, the Paralleling Station C3 included in the Preferred Alternative is Location 1, which is outside of the GEA. The Selection Rationale has been updated in Table 8-3 to reflect that this site is preferred to avoid impacts on biological and aquatic resources.

The Mercy Springs Road staging areas are outside the GEA boundary. The 1.1-acre construction staging area at Midway Road would be temporarily affected during construction, would be restored to the existing conditions, and would not result in a permanent impact within the GEA boundary. This area is needed for construction of the Midway Road cul-de-sac. There are no other construction staging areas designated within the GEA.

Response to Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2193

Only one SAR, JM 12, is within the GEA boundary, not two as the comment claims. SAR JM 11, which is between Badger Flat Road and Nantes Avenue, is not with the GEA boundary. SAR JM 12 cannot be relocated as it is required at this location for project operation.

The two ATC locations for JM9 are alternate sites, one of which would be selected for construction. This will minimize the footprint of the HSR facilities that will be constructed, relative to what is included in the EIR/EIS. Location 1 is included in the Preferred Alternative. Although Location 1 is within the GEA boundary, it is within an existing disturbed area entirely enclosed by Box Car Road, Henry Miller Road, and the West Delta Canal and therefore provides limited habitat and wildlife connectivity values.

For ATC Type D JM8, Alternate Location 1 is included in the Preferred Alternative and is outside the GEA boundary. The Selection Rationale has been updated in Table 8-3 to reflect that this site is also preferred to avoid impacts on biological and aquatic resources. The ATC sites between Badger Flat Road and Nantes Avenue, are not within the GEA boundary.

The preferred location for the TPF Switching Station C west of Santa Fe Grade is Alternate Location 1, on the south side. This is also the location furthest away from the Grassland Environmental Education Center. The Selection Rationale for this site has been updated in Table 8-3 to reflect that Location 1 also minimizes impacts on biological and aquatic resources.

The systems sites described herein cannot be relocated as the functionality of the system requires these sites to be placed at specific intervals along the track. Due to the width of the GEA, systems sites cannot be relocated outside the boundaries. Alternate locations for systems sites have been provided so that a site can be selected with lower environmental impacts. The Authority has minimized footprint impacts within the GEA to the extent feasible.

1678-2194

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife.

Detailed construction phasing is not available at this stage of design. During Detailed Design Post-ROD, the contractor will develop detailed construction phasing in coordination with the relevant resource agencies. Without detailed information about construction scheduling, equipment, and intensity, the Authority has analyzed and disclosed the greatest extent of construction disruption and impacts that could occur. Construction may occur for durations of up to 1.5 years with many locations being completed much faster, particularly in areas with low embankments, seasonal construction windows, and no facilities other than the HSR track. Accordingly, the Final EIR/EIS has taken a conservative approach.

Section 3.4, Noise and Vibration generally analyzes impacts to human receptors, while the analysis of noise impacts to wildlife is included in Section 3.7, Biological and Aquatic Resources. Special status species-specific impacts include a discussion of construction noise, and several other impacts address how noise would affect wildlife movement during construction and operations.

The Authority has incorporated BIO-IAMF#1, BIO-IAMF#3, BIO-IAMF#5, and BIO-IAMF#8 (described in Impact BIO#1) into project design to avoid and minimize impacts on wildlife movement. In addition, during construction, the contractor would minimize noise disturbance of wildlife by implementing such measures as construction of noise barriers, careful routing of truck traffic, construction of walled enclosures, scheduling noisy operations into the same period, and phased construction (NV-IAMF#1). Pile driving and construction disturbance within or near the GEA would also be reduced by BIO-MM#44 and BIO-MM#76.

Response to Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2195

Refer to Standard Response SJM-Response-BIO-5: Lighting Impacts to Wildlife.

As noted in the response, the Authority conducted additional analysis of artificial lighting impacts from construction and operations in the Revised/Supplemental Draft EIR/EIS, which has been incorporated into the Final EIR/EIS. SJM-Response BIO-5: Lighting Impacts to Wildlife focuses on operations impacts from artificial lighting at night, which have been found through additional analyses to be significant. The Revised/Supplemental Draft EIR/EIS also conducted additional analysis of the impacts of lighting during construction and found that these impacts could also be significant. Mitigation measure BIO-MM#76 would minimize this impact by requiring construction activities to avoid known wildlife crossings and to keep them unobstructed during construction. Overall, the primary finding of the revised analysis found potentially significant impacts from artificial light at night at some locations and for some species, resulting in a potentially significant impact during operations. Mitigation measure BIO-MM#89 was included in the Revised/Supplemental Draft EIR/EIS to address this impact. BIO-MM#89 would avoid and minimize the impacts from artificial light at night through the design and use of lights at permanent facilities and on train headlights. The Final EIR/EIS has incorporated this analysis and mitigation regarding artificial lighting impacts. Lastly, the Authority acknowledges the coordination with the working group stakeholders, which was summarized in Table 1-2 in the Wildlife Corridor Assessment, (Appendix C of Authority 2020a, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS). The Authority has considered the comments and input from the GEA stakeholders and has implemented several of these measures where feasible.

1678-2196

Refer to Standard Response SJM-Response-BIO-5: Lighting Impacts to Wildlife.

Please see response to submission SJM-1678, comment 2195

1678-2197

Refer to Standard Response SJM-Response-BIO-5: Lighting Impacts to Wildlife.

Please see response to submission SJM-1678, comment 2195

1678-2198

With respect to the 10,000-acre program commitment, please see response to comment #168, submission #1364. With respect to the Marxan methodology noted by the commenter, Authority staff coordinated with Patrick Huber regarding his conservation mapping efforts and Marxan results and have incorporated this work into a Preliminary Compensatory Mitigation Plan. In summary, the Authority is continuing to work towards the commitments for impacts in the GEA considering the specific conservation goals and objectives within the GEA.

1678-2199

Refer to Standard Response SJM-Response-BIO-4: Grasslands Ecological Area Boundary.

1678-2200

Refer to Standard Response SJM-Response-BIO-4: Grasslands Ecological Area Boundary.

1678-2201

Refer to Standard Response SJM-Response-BIO-4: Grasslands Ecological Area Boundary.

1678-2202

Refer to Standard Response SJM-Response-BIO-4: Grasslands Ecological Area Boundary.

Response to Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2203

Refer to Standard Response SJM-Response-BIO-4: Grasslands Ecological Area Boundary.

As described in that response, impacts on waterfowl habitat were described based on landcover types suitable for waterfowl, regardless of whether they occur in the Audubon IBA or GEA, and thus all areas of potential habitat are described and the EIR/EIS does not understate the project's environmental impacts.

1678-2204

Refer to Standard Response SJM-Response-BIO-4: Grasslands Ecological Area Boundary, SJM-Response-BIO-5: Lighting Impacts to Wildlife, SJM-Response-BIO-6: Noise Impacts on Wildlife.

Regarding the commenter's assertions regarding the Merced County General Plan, Appendix 2-J, Regional and Local Plans and Policies, of the Draft EIR/EIS provides a summary of the Merced County General Plan elements relevant to transportation projects for biological and aquatic resources, and Appendix 2-K, Policy Consistency Analysis, of the Draft EIR/EIS provides a consistency analysis with the General Plan, as well as other local and regional plans.

1678-2205

The Authority disagrees with the commenter's assertion that the use of predictive species models is flawed and results in a flawed analysis. In fact, the use of predictive species modeling is a common approach for large projects and especially projects where site access is limited. The approach has been used on numerous habitat conservation plans, including the Santa Clara Valley habitat plan, which overlaps with the project study area. As described in the Biological and Aquatic Resources Technical Report (Authority 2020a, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS), as referenced in the Draft EIR/EIS, the models were developed in close coordination with species experts from NMFS, USFWS, and CDFW. Multiple rounds of review and revisions were undertaken, and all comments received on the models were carefully documented and responded to, while changes and adjustments were made to the models as necessary based on the comments. The detailed results of this careful coordination effort with the agencies was provided in Appendix F to the Biological and Aquatic Resources Technical Report. Regarding the commenter's assertion that the models rely on the CNDDDB, this is not correct. The CNDDDB was used as a method to check the models; however, it was not used to develop the models. Lastly, the Authority acknowledges that Appendix F in the Biological and Aquatic Resources Technical Report has formatting issues; however, copies of the spreadsheet were provided to the agencies multiple times during the development of the models. The formatting issues with the appendix do not affect the validity of the models or result in a flaw in the approach. A corrected version of Appendix F is available upon request.

1678-2206

The Authority disagrees with the commenter's assertion that the findings and conclusions of the EIR/EIS lack substantial evidence. Because the comment is largely prefatory and precedes longer, more detailed comments that follow, those comments are addressed in detail. Regarding the commenter's assertion that impacts within the GEA were improperly identified due to the boundaries of the GEA or the use of species modeling to determine species habitat, please see Standard Response SJM-Response-BIO-4: Grasslands Ecological Area Boundary and response to submission SJM-1678, comment 2232, which discusses the use and adequacy of species modeling to estimate impacts.

Response to Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2207

Refer to Standard Response SJM-Response-BIO-4: Grasslands Ecological Area Boundary.

1678-2208

The Authority disagrees with the commenter's assertion that the use of habitat models results in a flawed analysis and is not permissible under CEQA and NEPA. On the contrary, as noted in response to submission SJM-1678, comments 2232 and 2205, the use of habitat models to conduct the impact analysis likely overestimates potential effects on species and habitats. The models are based on the best available information, were developed in coordination with resource agency input (NMFS, CDFW, and USFWS), and the information is readily available for review with the Draft EIR/EIS. Regarding the commenter's assertions that the EIR/EIS lacks appropriate success and performance criteria, the Authority disagrees. The mitigation measures have and has included specific performance standards and success criteria into mitigation measures as appropriate. Regarding the commenter's assertions that seasonal or annual variabilities in habitats also result in an incomplete or flawed analysis, the Authority disagrees and notes that, in most instances, mitigation measures requiring pre-construction surveys and assessments for species are based on approved agency survey protocols, where such protocols exist. In several instances, these survey protocols require multiple visits, sometimes over more than 1 year. Consequently, the Authority believes the claims made by the commenter have no merit.

1678-2209

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife.

The impacts noted by commenter are discussed in the Draft EIR/EIS analysis within Section 3.7, Biological and Aquatic Resources, under Impact BIO#44 and supported by reference to published studies, along with other adverse impacts not mentioned by commenter. Commenter is correct that noise impacts would be intermittent. Maintenance noise has been identified as infrequent and of low intensity. Additionally, the Authority notes that the Revised/Supplemental Draft EIR/EIS provided additional analysis regarding noise under Impact BIO#44, and this information has also been incorporated into the Final EIR/EIS.

1678-2210

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife.

The analysis of noise impacts on mammals has been substantially revised to address comments of this nature and no longer uses the FRA guidance to analyze noise effects on wildlife. This analysis has been included in the Revised Draft EIR/Supplemental Draft EIS and has been incorporated into the Final EIR/EIS.

1678-2211

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife.

The Authority notes that the Revised/Supplemental Draft EIR/EIS provided additional analysis regarding noise, considering additional information available, under Impact BIO#44, and this information has also been incorporated into the Final EIR/EIS. The analysis no longer relies on the FRA's 100 dBA criterion. On the basis of the revised analysis, the Revised/Supplemental Draft EIR/EIS revisited mitigation for noise impacts as suggested by the commenter. The Final EIR/EIS includes revisions to BIO-MM#80 requiring additional noise barriers to minimize impacts of noise on wildlife.

1678-2212

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife.

Refer to response to submission SJM-1678, comment 2211.

Response to Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2213

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife.

Please refer to Chapter 8, References, in the WCA (Appendix C of Authority 2020a, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS) for a list of published sources used in the analysis of noise impacts on wildlife. Dooling and Popper (2016) is one of these sources, and it was written by two of the most experienced analysts of noise impacts on avifauna. Additionally, the Authority notes that the Revised/Supplemental Draft EIR/EIS provided additional analysis regarding noise, considering additional information available, under Impact BIO#44 and this information has also been incorporated into the Final EIR/EIS. Lastly, the Authority notes that vibration impacts were discussed in the Draft EIR/EIS under Impact BIO#45 with supporting studies and information provided in the WCA (Appendix C of Authority 2020a, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS).

1678-2214

Refer to Standard Response SJM-Response-BIO-5: Lighting Impacts to Wildlife.

The Authority notes that the Revised/Supplemental Draft EIR/EIS provided additional analysis regarding artificial lighting at night, considering additional information available, under Impact BIO#47, and this information has also been incorporated into the Final EIR/EIS. On the basis of the revised analysis, the Final EIR/EIS concluded that the project could have a potentially significant impact on wildlife and wildlife movement from artificial lighting. Consequently, the Final EIR/EIS includes a new mitigation measure, BIO-MM#89, requiring additional mitigation to minimize impacts of artificial lighting on wildlife.

1678-2215

The Authority disagrees with the commenter's assertion that impacts on rare plants are unmitigated, that mitigation that is provided is not sufficient, and that surveys don't comply with state guidelines and survey protocols. The Draft EIR/EIS includes BIO-MM#7, which requires the Authority to conduct surveys consistent with CDFW and USFWS survey protocols. Furthermore, BIO-MM#8 requires the Authority to relocate or propagate special-status plant species that cannot be avoided during construction. Lastly, BIO-MM#12 requires compensatory mitigation for impacts on listed plant species, consistent with authorizations issued under FESA and/or CESA. Collectively, these measures ensure that potential impacts on rare plant species are mitigated and that impacts are reduced to a less-than-significant level.

1678-2216

The Draft EIR/EIS found (Impact BIO#18: Permanent Conversion or Degradation of Habitat for and Direct Mortality or Disturbance of Golden Eagle and Bald Eagle) significant impacts to eagles, that would be less than significant with implementation of mitigation (BIO-MM#48: Conduct Pre-Construction Surveys for Eagles, BIO-MM#49: Implement Avoidance Measures for Active Eagle Nests, and BIO-MM#50: Provide Compensatory Mitigation for Loss of Eagle Nests). Commenter provides no further evidence that project would result in significant impacts on bald or golden eagles. Surveys are unnecessary at this time because potential presence of eagles is assumed in the analysis.

Response to Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2217

The Authority appreciates the mapping of hunting areas provided by the Grasslands Water District, and has updated Figures 3.12-7 and 3.12-8 and the discussion in Impacts SOCIO#16 and SOCIO#19 in this Final EIR/EIS to reflect additional private hunting areas near the project alignment. However, the conclusions included in Section 3.12, Socioeconomics and Communities, of the Draft EIR/EIS--that both temporary and permanent impacts on private recreational use (waterfowl hunting) in important bird areas would not adversely affect waterfowl hunting or the economic viability of private recreational use--remain the correct determinations based on the effects and analysis presented in Section 3.12.

The commenter also has raised a concern about perceived inconsistency between conclusions in Section 3.7, Biological and Aquatic Resources, and Section 3.12 of the Draft EIR/EIS. Section 3.7 of the Draft EIR/EIS concludes that Mitigation Measures BIO-MM#1-6, BIO-MM#10, and BIO-MM#58 would minimize disturbance of waterfowl and compensate for habitat loss such that the impact on waterfowl and shorebirds would be less than significant. The conclusion in Section 3.12 of the Draft EIR/EIS builds on analysis conducted for Section 3.7 and concludes that there would be no adverse effect on waterfowl hunting or the economic viability of private recreational uses based on the limited habitat loss relative to the GEA as a whole and the temporary nature and limited scope of construction-related disruption on waterfowl hunting activities and waterfowl nesting. The Authority disagrees with the assertion that these conclusions are inconsistent.

The commenter also raised a concern that the project has the potential to impede access to hunting properties. Additional discussion has been added to Impact SOCIO#16 to clarify that temporary road closures and detours would inconvenience waterfowl hunters during the construction period, but access to properties would be maintained during project construction and operations.

The commenter also expressed concern about continued operation of waterfowl hunting if errant gunshots pose the possibility of striking passing trains on elevated structures. The law prohibits hunting or discharging a firearm over a public road or other established way open to the public (Fish and Game Code, Section 3004(a)(b)). The HSR alignment is located immediately adjacent to the south side of Henry Miller Road;

1678-2217

therefore, discharging a firearm over the HSR alignment would be prohibited. The operation of HSR trains adjacent to an existing public roadway is not anticipated to substantially increase the risk associated with errant gunshots.

1678-2218

The Authority has updated Figures 3.12-7 and 3.12-8 and the discussion in Impacts SOCIO#16 and SOCIO#19 to reflect additional private hunting areas identified by Grasslands Water District near the project alignment. The text of Impacts SOCIO#16 and SOCIO#19 has been revised for clarity. References to relevant biological resources mitigation measures, which are described in detail in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS have been added to these impacts, to further explain the conclusions. However, no new mitigation measures to avoid or minimize effects are warranted, and the analysis continues to support the finding that the adverse effect on waterfowl hunting and the economic viability of private recreational uses as a result of project construction or operations would be confined to small areas within club boundaries and mitigation as described in Section 3.7 of the Draft EIR/EIS would reduce these impacts.

Response to Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2219

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife.

Commenter accurately summarizes proposed mitigation for noise impacts on the GEA. The commenter states the proposed mitigation is "inadequate", but provides no evidence that the proposed mitigation is insufficient to achieve its stated purpose. The Authority also notes that Bio MM#80 has been revised in the Final EIR/EIS to provide additional analysis related to noise and requirements to construct noise barriers. Additionally, Bio MM#80 requires the Authority to construct an enclosure for approximately 3.4 miles in the GEA IBA, centered approximately at Mud Slough. The Authority believes the mitigation is sufficient to reduce the impact to less than significant under CEQA because it includes a performance standard requiring at least a 10 dBA attenuation of noise, which would reduce noise impacts to below the identified impact thresholds. Regarding the commenter's suggestion of an extension of the bird enclosure to include the section between the IBA and the Volta Wildlife Area, the Authority has evaluated this option and has determined that it is prohibitively expensive and not economically feasible. Additionally, as noted above, the noise barrier proposed under BIO-MM#80 in the Volta area would attenuate sound to a certain extent. If attenuation of sound does not reduce impacts to below specified thresholds, the Authority would expand mitigation through additional compensatory mitigation, as noted under BIO-MM#58.

1678-2220

The commenter suggests that the level of noise reduction required under BIO-MM#80 (10 dBA reduction) is too low and should be at least a 12 dBA reduction. The Authority has evaluated the technical and engineering aspects of an enclosure and has determined that 10 dBA is a feasible reduction. It is possible that the enclosure could result in a greater reduction; however, such a reduction cannot be expected with reasonable certainty. Consequently, the Authority must define mitigation in the EIR/EIS that is reasonably certain and has specified mitigation under BIO-MM#80 that requires a "minimum" of a 10 dBA reduction. The Authority has also incorporated BIO-MM#58, which provides for additional compensatory mitigation, if noise levels are not reduced to below threshold levels. Essentially, the Authority is incentivized to achieve the maximum level of noise reduction possible to minimize the need for additional compensatory mitigation.

1678-2221

The Authority believes that the commenter has misinterpreted the requirements outlined under BIO-MM#80. The measure does require that the Authority provide a minimum of 10 dBA attenuation of sound, as measured 50 feet from the enclosure. The measure does not rely on modeling to verify the required sound attenuation but instead relies on direct measurements. Additionally, BIO-MM#80 further describes that, if sound levels cannot be reduced to at or less than specific thresholds, additional compensatory mitigation would be required. The Authority believes this approach is consistent with what the commenter is suggesting.

1678-2222

The Authority has revised BIO-MM#58 in the Final EIR/EIS as suggested by the commenter to note that mitigation would occur within the GEA and UPR IBAs and only in an alternative location if mitigation within those areas is determined to be infeasible.

1678-2223

The commenter is requesting additional specificity regarding compensatory mitigation planning. As the commenter is likely aware, compensatory mitigation planning for a project as large as HSR is very complex. The Authority has already coordinated with the Grasslands Water District, as noted in other responses to comments, to obtain their consultant's Marxan results identifying potential acquisition areas that could meet the Authority's commitment to mitigate for impacts to the GEA. BIO-MM#10 describes the requirement to prepare an HMP and discusses the use of conservation easements to protect habitat in perpetuity. The Authority is including a new mitigation measure in the Final EIR/EIS, BIO-MM#P1: Provide Compensatory Mitigation for Impacts to the Grassland Ecological Area, that describes how the programmatic mitigation commitments for the GEA would be implemented in conjunction with the other compensatory habitat mitigation measures. As noted in BIO-MM#10, the HMP requires a full description of habitat restoration or enhancements, success criteria that would be used, management actions to be implemented, adaptive management to be used, and financial assurances that would be provided to ensure the mitigation is completed as planned.

Response to Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2224

The commenter asserts that several compensatory mitigation measures are vague or lack specificity. The Authority notes that specific species or habitat compensatory mitigation measures are considered in the context of BIO-MM#10, which describes the overall process and requirements that would be used to reach a full CMP. As noted in response to submission SJM-1678, comment 2223, the CMP requires a full description of habitat restoration or enhancements, success criteria that would be used, management actions to be implemented, adaptive management to be used, and financial assurances that would be provided to ensure the mitigation is completed as planned. The comment does not explain why the relevant text is inadequate.

1678-2225

The commenter asserts that the oversight and legally binding enforcement mechanisms are improper. The Authority is the lead agency under CEQA and NEPA and thus the approach used in the Draft EIR/EIS is both appropriate and legally binding. Under CEQA, the Authority must implement mitigation as required in the EIR/EIS, regardless of who oversees the project or the mitigation. Additionally, under NEPA, the legal requirement to implement mitigation comes from the selection of mitigation in the ROD, as defined in the Mitigation Monitoring and Enforcement Plan that would be an appendix to the ROD. As noted by the commenter, numerous other mitigation measures do also rely on other state or federal permits, and abundant additional oversight would occur during the construction of the project.

The commenter also asserts that several of the compensatory mitigation measures (i.e., BIO-MM#12, BIO-MM#55, BIO-MM#58, BIO-MM#72, and BIO-MM#80) lack any specific criteria or process for implementation and will not be enforceable through a legally binding agreement or permit. As noted in the various species-specific measures, the implementation of compensatory mitigation will be coordinated through the implementation of BIO-MM#10, Prepare and Implement a Habitat Mitigation Plan for Species and Species Habitat. BIO-MM#10 does provide specific criteria and requirements for the types of mitigation that are considered acceptable (i.e., mitigation credits from an approved bank, protection of habitat through acquisition and conservation easement, etc.), how impacts will be confirmed to ensure the mitigation is commensurate with the impacts. The measure requires the Authority to describe habitat restoration or enhancement that must occur, management actions that would occur on the conserved lands, an adaptive management process, and specific description of the financial assurances that would be required to successfully implement the mitigation. As noted above, the measure is legally binding, and must be implemented by the Authority. Lastly, the Authority acknowledges that several other state and federal permits will be required which will also require compensatory mitigation and thus there are also additional regulatory oversight steps that will occur.

Response to Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2226

The Authority disagrees with the commenter's assertion that the Draft EIR/EIS improperly defers mitigation measures. The commenter specifically mentions two mitigation measures, BIO-MM#58 and BIO-MM#80. These measures rely on specific noise measurements that can only be made after construction, and they include specific performance standards and criteria based on those measurements, and thus they are not improperly deferring mitigation. With regard to the commenter's assertion that BIO-IAMF#5 also impermissibly defers mitigation measures, the commenter is incorrect. BIO-IAMF#5 does not defer mitigation because it is simply a requirement to compile all measures in the EIR/EIS to facilitate the Authority's compliance during implementation. It does not require the creation of new or different measures from those required in the EIR/EIS.

1678-2227

The Authority disagrees with the commenter's general assertion that the Draft EIR/EIS defers development of mitigation measures. The Draft EIR/EIS includes numerous mitigation measures defined with specific requirements related to the project. As noted in response to submissionSJM-1678, comment 2226, in cases where mitigation must be implemented during or after project construction, the mitigation properly requires specific actions based on criteria or thresholds and thus is not deferred to some undefined later process or date. Consequently, because mitigation is not improperly deferred as asserted by the commenter, changes to mitigation measures and recirculation of the Draft EIR/EIS are not required.

1678-2228

Specific information on the project footprint used to conduct the impact assessment was provided in Volume 3, Preliminary Engineering for the Project Design Record, of the Draft EIR/EIS. The project footprint does vary in width depending on the type of track profile, topography, and other project components at specific locations. The Biological and Aquatic Resources Technical Report (Authority2020a, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS), associated with and referenced in the Draft EIR/EIS (and available for review upon request) included habitat maps for the entire alignment for all alternatives. The Authority acknowledges the challenges associated with depicting and having the public review a very long linear project such as HSR; however, the methods used to calculate and define impacts are clear in the Draft EIR/EIS, and the maps referenced by the commenter do not represent a deficiency in the analysis. Note that the comment conflates the Habitat Study Area, in which information is gathered, and impacts, which have a specific relationship to a finite footprint with discrete geospatial limits.

1678-2229

The Authority has acknowledged in the Draft EIR/EIS that surveys were limited and were reconnaissance in nature. As noted in other responses to comments, the Authority relied on a species modeling approach to characterize habitats and to quantify impacts. As noted previously, this approach likely overestimates potential impacts. Lastly, specific field surveys are required under numerous mitigation measures, with specific survey guidance and agency protocols used and cited when available. Collectively, the Authority believes the approach used is transparent and, most importantly, accurately characterizes the nature and spatial locations of impacts while tending to overestimates the potential quantity of those impacts from the project.

Response to Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2230

The Authority acknowledges that access to some parcels was granted; however, overall, access to most parcels within the project footprint was not available. Consequently, the Authority relied on a species and habitat modeling approach to conduct the impact assessment. The adequacy of this approach and extensive agency collaboration on these models have been described in other comment responses. As noted in responses to other Grasslands Water District comments, the Draft EIR/EIS includes numerous mitigation measures requiring surveys prior to construction, based on defined survey protocols and guidelines, where such guidelines exist.

1678-2231

The Authority disagrees with the commenter's assertion that the findings and conclusions of the EIR/EIS lack substantial evidence. Furthermore, the commenter does not provide additional evidence with the comment, nor do they identify specific evidence that the Authority failed to consider. Regarding the commenter's assertions regarding focused/protocol surveys, the Authority used predictive species modeling to establish baseline conditions and to estimate species and habitat impacts, which is a common approach for large projects and especially projects where site access is limited. The approach has been used on numerous habitat conservation plans, including the Santa Clara Valley habitat plan, which overlaps with the project study area. As described in the Biological and Aquatic Resources Technical Report (Authority 2020a, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS), as referenced in the Draft EIR/EIS, the models were developed in close coordination with species experts from NMFS, USFWS, and CDFW. Multiple rounds of review and revisions were undertaken, and all comments received on the models were carefully documented and responded to, while changes and adjustments were made to the models as necessary based on the comments. The detailed results of this careful coordination effort with the agencies was provided in Appendix F to the Biological and Aquatic Resources Technical Report. Substantial evidence is defined by regulation as "facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts," and "enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion" (14 Cal. Code of Regulations Section 15384). Here because the Authority used an industry standard approach for modeling habitats (relied upon by other agencies such as the SCVHA), and solicited and incorporated significant expert feedback on those models the Authority has used substantial evidence contrary to the comment's assertion that substantial evidence was lacking.

Response to Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2232

Species models are described in Section 4.4.4, Special-Status Species Habitat Modeling, of the Biological and Aquatic Resources Technical Report (Authority 2020a, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS), with further details provided in Appendix D, Species Habitat Modeling Methods Memorandum, to that report. As there noted, "Habitat models bring together information about environmental attributes, species life history, and environmental requirements to map potentially suitable habitat." Thus, the models show areas where a species could exist, and are inherently conservative because they do not require any demonstration that the species does exist in those areas. Accordingly, the commenter's suggestion that habitat models must be based on protocol surveys is less conservative; it is a technique that would only protect habitat where a species is known and proven to occur. The Final EIR/EIS has not been revised to address this comment.

1678-2233

Please refer to the response to submission SJM-1678, comment 2232. As noted there, habitat models identify areas where a species could exist. Mitigation is provided for loss of modeled habitat for species, and thus pre-construction surveys are irrelevant to the question of whether habitat is affected. However, it is generally necessary to minimize the risk that any organisms will be killed in the process of affecting their modeled habitat, and this is the purpose of pre-construction surveys—to identify if organisms are present, and if they are, to implement measures to minimize risk to those organisms. Collectively, the model shows the extent of impacts while overestimating those impacts, and the pre-construction surveys minimize those impacts.

1678-2234

Please refer to the responses to submission SJM-1678, comments 2232 and 2233, which show that surveys are not protective of habitat and serve only to inform real-time efforts to protect individual organisms.

1678-2235

The habitat model development process is discussed in Section 4.4.4, Special-Status Species Habitat Modeling, of the Biological and Aquatic Resources Technical Report (Authority 2020a, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS), with further details provided in Appendix D, Species Habitat Modeling Methods Memorandum, to that report. These texts provide an accurate description of how species habitat models were developed. Commenter will note that the models were developed interactively with input from the state and federal fish and wildlife agencies, thus, the models were peer-reviewed. This technique of habitat model development has been in place for many years and is routinely applied in uses as varied as selection of restoration sites, assessment of population viability, and estimation of project impacts; thus it is neither theoretical nor experimental.

1678-2236

Commenter notes that Appendix B of the Biological and Aquatic Resources Technical Report (Authority 2020a, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS) contains cells in a table that are blank or contain the statement (misrepresented by commenter) "None due to lack of understanding of habitat parameters; effects to be assessed in coordination with resource agency staff." The Authority has maintained regular communication and coordination with the resource agencies, and agency staff have not indicated that they are unable to assess status or potential impacts on special-status species that fall within their agencies' responsibilities. Regarding species lacking a habitat model, inspection of Appendix B reveals that potential occurrence of these species is based on their "General Habitat Description" as presented in the same table.

1678-2237

Commenter notes that "total impact to species might not be accurately assessed if assessment is based on model alone" but fails to note that impacts of the project are not based on models alone and that models are merely one part of an assessment that also includes additional measures that vary between species and collectively provide substantial assurances of protection and mitigation. Commenter cites an example of a species detected during construction surveys, which is an excellent example of why pre-construction surveys would be required for many sensitive species.

Response to Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2238

Appendix F to the Biological and Aquatic Resources Technical Report (Authority 2020a, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS) documents the modeling approach and close coordination with the agencies during development of the species habitat models. The Authority acknowledges the formatting issues with the appendix; however, there are no inconsistencies or flaws in the species modeling effort and analysis due to the formatting issue. Additionally, the Authority notes that the wildlife agencies were provided with the source spreadsheet multiple times during development of the models and as the Authority worked through comments and responses with them. While the Authority did not agree with every assertion made by the agencies during that process, the methods and rationale and response, based on available data, are all documented in the spreadsheet.

1678-2239

The commenter is incorrect that the Draft EIR/EIS and species models rely heavily or seemingly solely on the CNDDDB. Species models developed for the project utilize CNDDDB as one source of information; however, many other sources of information are used to inform the models, as noted in the Biological and Aquatic Resources Technical Report (Authority 2020a, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS).

1678-2240

The Authority agrees with the commenter. The model's reliance on habitat type does greatly reduce the predictability of the presence of special-status species. As a consequence, the model overpredicts the amount of suitable (but not necessarily occupied) habitat for special-status species. The result of this is that the Draft EIR/EIS likely also overestimates the potential effects on species.

1678-2241

The impact analysis, AMMS, and mitigation measures to offset effects on San Joaquin kit fox would be refined in coordination with the CDFW through the California Endangered Species Act Section 2081 ITP permit application process. For the purpose of the EIR/EIS, the Cypher model is considered adequate. It is a comprehensive model in that it covers all land cover types, except urban, within the species' known, potential range, which includes eastern Pacheco Pass and southern Santa Clara valley where the species has not been detected, to the knowledge of the Authority, for over 10 years. As such it is likely over rather than under predictive.

1678-2242

The Authority disagrees that the species modeling approach underestimates the amount of habitat present in the project footprint. Please refer to the response to submission SJM-1678, comment 2232. The Authority also notes that the Draft EIR/EIS includes numerous mitigation measures that require surveys and habitat assessments prior to construction. Those measures are based on state and federal guidelines and survey protocols, where such protocols exist. Where protocols do not exist, survey measures are based on common biological survey practices.

1678-2243

Surveys for special-status plants are required under BIO-MM#7, which requires the Authority to conduct surveys consistent with CDFW and USFWS survey protocols. In essence, the Draft EIR/EIS includes mitigation to conduct the exact surveys suggested by the commenter and CDFW. Because the model used for analyzing and disclosing impacts is overpredictive, the Authority can characterize the severity of potential impacts and then survey for those species prior to construction in order to mitigate those impacts.

Response to Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2244

The commenter asserts that limits on field surveys have resulted in errors in avoidance and mitigation measures. With respect to the methods used to estimate species impacts, please refer to the response to submission SJM-1678, comment 2232 regarding the conservative nature of species models and the consequences of commenter's idea that species presence should be based solely upon results of surveys. Additional information on the methods used to evaluate impacts can be found in Section 3.7.5, Methods for Evaluating Impacts, of the Draft EIR/EIS and in the associated Biological and Aquatic Resources Technical Report (Authority 2020a, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS), which was available with the Draft EIR/EIS upon request.

1678-2245

The Authority disagrees with the commenter's general assertion that the Draft EIR/EIS defers development of mitigation measures. The Draft EIR/EIS includes numerous mitigation measures, defined with specific requirements related to the project. For example, as noted in response to submission SJM-1678, comment 2226, in cases where mitigation must be implemented during or after project construction, the mitigation properly requires specific actions based on criteria or thresholds and thus is not deferred to some undefined later process or date. The combined use of habitat suitability models to predict the location and degree of impacts, pre-construction surveys, and compensatory mitigation allows the Authority to adequately identify, disclose, refine, and mitigate impacts.

1678-2246

Please refer to response to submission SJM-1678, comment 2245.

1678-2247

BIO-IAMF#5 is not a mitigation measure as noted by the commenter. This feature is part of the proposed project, as described in Chapter 2, Alternatives, of the Draft EIR/EIS. Regardless, the Authority believes the intent of the impact avoidance and minimization feature is clear; it provides a method for compiling all mitigation and other permit requirements into a single location to facilitate tracking during construction and to ensure that all measures from all permits and the EIR/EIS are implemented. The comment asks about permit conditions for permits that are not yet issued and are not required prior to CEQA or NEPA review.

1678-2248

The Authority notes that its responsibilities under CEQA and NEPA require it to define and to use qualified biologists, as noted in BIO-IAMF#1. However, additionally, the Authority notes it must obtain numerous other permits and approvals, each with other agency oversight. Collectively, this level of engagement also provides assurances that the construction and operations aspects of mitigation would be implemented as planned.

1678-2249

The BRMP referenced by the commenter is not a mitigation measure, it is an IAMF (BIO-IAMF#5) considered part of the proposed project, as described in Chapter 2, Alternatives, of the Draft EIR/EIS. As noted in other responses, the BRMP is intended to compile all EIR/EIS mitigation as well as other permits and agency approvals into a single document to ensure that all requirements are tracked and implemented consistent with the Authority's responsibilities. The comment speculates that project biologists will be compromised in some way however lead agencies routinely retain and review biological staff for construction monitoring and management to protect biological resources.

1678-2250

Please refer to response to submission SJM-1678, comment 2226.

Response to Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2251

The commenter does not make a specific comment on the content of the Draft EIR/EIS; however, the Authority notes that mitigation in the Draft EIR/EIS does provide for adaptive management, where necessary.

1678-2252

The commenter does not make a specific comment on the content of the Draft EIR/EIS but appears to ask generally what measures would be implemented if sensitive species are killed or injured during operations. The Authority notes that numerous impacts in the Draft EIR/EIS discuss the potential for species to be killed or injured during construction. Numerous mitigation measures are therefore required to survey for and, if possible, avoid plants and animals. However, the Authority acknowledges that not all plants and animals can be avoided, and thus some would likely be killed or injured from the project. The Authority has committed to several extensive and costly measures to prohibit or reduce the chances of wildlife coming in contact with the guideway and being struck or injured by trains. These include BIO-MM#80, which requires an enclosure within the GEA IBA, as well as other noise barriers in various locations throughout the alignment important to wildlife movement, and BIO-MM#83, which requires the Authority to monitor for and remove animal carcasses if any are found, to minimize impacts on other scavenger or forager species. In addition the Authority would seek and obtain all relevant take authorization for project operations required under state and federal law.

1678-2253

Please refer to response to submission SJM-1678, comment 2226.

1678-2254

Please refer to the response to submission SJM-1678, comment 2232 regarding the conservative nature of species models and the incorrect assertion that species presence should be based solely upon results of surveys

1678-2255

BIO-MM#7 states that the special-status plant species and special-status plant community surveys within a work area would be conducted in accordance with Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018c, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS) and Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants (USFWS 2000, as cited in Section 3.7 of the Draft EIR/EIS) in all potentially suitable habitats. As such, the surveys for special-status plant species would be comprehensive under these protocols, which require the surveys to be floristic in nature, cover the entire project area, use systematic field techniques, be conducted at the times of year when the plants will be both evident and identifiable, may require multiple visits, and will include reference sites. The use of modeling, informed by surveys, to assess impacts, surveys prior to construction, and compensatory mitigation allows the Authority to identify, disclose, refine, and mitigate impacts consistent with CEQA and NEPA.

1678-2256

These species are not included in Section 3.7, Biological and Aquatic Resources, because the range of these species does not overlap the RSA. All of these species are restricted to counties north or west of the RSA. They have never been recorded in the RSA, with the exception of Contra Costa goldfields, which is considered to be extirpated from Santa Clara County. These species all have very specific habitat requirements that do not exist in the regional RSA. For example, Menzie's wallflower occurs on coastal dunes, which do not occur in the RSA.

1678-2257

Comment noted. Thank you.

Response to Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2258

Refer to Standard Response SJM-Response-ALT-1: Alternatives Selection and Evaluation Process, SJM-Response-ALT-2: Project-Specific Alternatives Considerations.

All four alternatives analyzed in the San Jose to Merced Project Section Draft EIR/EIS use the same alignment through the San Joaquin Valley Subsection. As a result, it is not a key factor in determining the Least Environmentally Damaging Practicable Alternative.

1678-2259

Refer to Standard Response SJM-Response-BIO-4: Grasslands Ecological Area Boundary.

1678-2260

Refer to Standard Response SJM-Response-BIO-4: Grasslands Ecological Area Boundary.

1678-2261

Impact S&S#12 in the Draft EIR/EIS describes potential impacts resulting from derailment and concludes that there would be a less-than-significant impact under CEQA on community safety from rail-related hazards. The conclusion is related to human safety and would meet FRA regulations. The Authority is not required to develop such a plan for biological and aquatic resources.

1678-2262

Please refer to the response to submission SJM-1678, comment 2232 regarding the conservative nature of species models for estimating areas that could be occupied by species for the purpose of evaluating potential impacts and the unfortunate consequences of commenter's proposal that species presence should be based solely upon results of surveys.

1678-2263

Refer to Standard Response SJM-Response-BIO-5: Lighting Impacts to Wildlife, SJM-Response-BIO-6: Noise Impacts on Wildlife.

Collision impacts are addressed in Impact BIO#49. Additional analysis of noise, visual, and lighting disturbance impacts were included in the Revised/Supplemental Draft EIR/EIS and were addressed in Impacts BIO#44, BIO#46 and BIO#47, with additional information included in the discussion of lighting disturbance impacts and a specific discussion of glare included in the Final EIR/EIS, Chapter 2, Alternatives. The analysis in the Revised/Supplemental Draft EIR/EIS and now in the Final EIR/EIS also addresses the frequency and number of trains, described in the EIR/EIS as intermittent. The commenter provides no substantive information to indicate that the completed analyses do not use all available data or reach inappropriate conclusions. The commenter provides no new information on which to base any changes in the analysis. As pointed out, there have, however, been changes in the analysis of lighting and noise impacts.

1678-2264

Refer to Standard Response SJM-Response-BIO-5: Lighting Impacts to Wildlife.

Commenter's assertion that the vegetation plantings would serve as attractants is speculative, particularly since, in the same sentence, commenter alleges that those wildlife would be impacted by noise and glare, factors which would seem to serve as deterrents. Additionally, the Authority notes that BIO-IAMF#12 in the Draft EIR/EIS requires the Authority to construct the project infrastructure to minimize effects on birds through a series of design considerations. The comment offers no evidence that plantings will attract wildlife.

1678-2265

AVQ-MM#7 in the Final EIR/EIS has been modified to clarify that "Transparent materials would not be used in noise barriers located in Audubon Important Bird Areas or where noise barriers are being used to attenuate bird startle effects."

Response to Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2266

Refer to Standard Response SJM-Response-BIO-5: Lighting Impacts to Wildlife.

Besides the information in SJM-Response-BIO-5, note that APLIC guidelines are applicable to HSR trains and their associated facilities; these are electric trains, and the project includes new electrical transmission lines to deliver that electricity. The title of BIO IAMF#12 is intended to be descriptive. The commenter does not provide a factual basis for the assertion the project cannot be bird safe. Comment noted.

1678-2267

Refer to Standard Response SJM-Response-BIO-5: Lighting Impacts to Wildlife.

Refer to Standard Response SJM-Response-BIO-5: Lighting Impacts on Wildlife. The potential for birds to strike powerlines, OCS, or traction power facilities is assessed in Impact BIO#49, which notes a variety of minimization measures but still finds the impact significant; several mitigation measures are required. No take of fully protected species is anticipated after the implementation of design features and mitigation measures.

1678-2268

Refer to Standard Response SJM-Response-BIO-5: Lighting Impacts to Wildlife.

1678-2269

Refer to Standard Response SJM-Response-BIO-5: Lighting Impacts to Wildlife.

1678-2270

Refer to Standard Response SJM-Response-BIO-5: Lighting Impacts to Wildlife.

1678-2271

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife.

Commenter's assertion that major construction is a maintenance activity is incorrect; refer to Section 2.8.2, Maintenance Activities, of the Draft EIR/EIS for a description of maintenance activities. As noted there, "Most adjustments to the track and routine maintenance would be accomplished in a single night at any specific location with crews and material brought by work trains along the line." This is the basis for statements that maintenance would be intermittent and not of sufficient duration to substantially affect wildlife movement. Commenter's reference to use of construction equipment during train operations is unclear; no such use is proposed.

1678-2272

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife.

Please refer to Standard Response: SJM-Response-BIO-6: Noise Impacts on Wildlife.

1678-2273

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife.

The analysis of noise impacts on mammals has been extensively revised, and no longer cites the FRA report.

1678-2274

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife.

Also, note that the thresholds for hearing damage, masking, and arousal have been revised to make it clear that they apply only to birds, not to bats.

1678-2275

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife.

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife.

Commenter references a "DOT report" but does not cite this report, and the Authority could not find the report the commenter is referring to. The analysis of noise impacts on wildlife draws on many published information sources as cited in the Draft and Final EIR/EIS.

Response to Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2276

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife. In particular, note that noise barriers are now proposed at several areas important to wildlife movement.

1678-2277

The enclosure described by commenter is included in project mitigation and is specified in Mitigation Measure BIO-MM#80.

1678-2278

As commenter notes, comprehensive conclusions regarding impacts on eagles require knowledge of recent eagle activity. Since the project would not be constructed for several years and would not be operational until after construction, that knowledge is clearly not available within the timeframe of EIR/EIS preparation and certification, and the analysis must be based upon best available science. This is why impacts on eagles are assessed in terms of loss of modeled habitat (as detailed in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS, Impact BIO#18), and why detailed assessments would be performed at the time of project construction, as specified in BIO-MM#48, BIO-MM#49, and BIO-MM#50, which call for surveys, avoidance measures, and compensatory mitigation to remedy any loss of eagle nests.

1678-2279

Refer to Standard Response SJM-Response-BIO-5: Lighting Impacts to Wildlife.

Commenter's cherry-picking highly selective citation from the large number of published studies of eagle disturbance by human activities illustrates the difficulty of making broad generalizations. Fortunately, studies of this kind have been comprehensively reviewed by academic authorities and by civil authorities charged with regulating human disturbance of nesting eagles. Perhaps the best example is the National Bald Eagle Management Guidelines promulgated by USFWS (2007, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS), which recommend that noisy construction activities (referred to as "Category B") observe a minimum separation of 660 feet from any active nest, unless blasting or other loud impulsive noises (such as pile driving) are proposed, in which case the minimum separation distance is 0.5 mile. Thus, the separation distance assessed in Impact BIO#18 is conservative. Commenter seems to also assert that if golden eagles observe human activity in the course of their foraging flights, this constitutes an impact. Commenter provides no evidence in support of this statement, and the Authority knows of none.

1678-2280

Impacts on bald and golden eagles are assessed in Impact BIO#18, and mitigation is specified in BIO-MM#48, BIO-MM#49, and BIO-MM#50. No incidental take permit is proposed for golden eagle, a fully protected species. The mitigation measure identified by commenter is not specified and is unclear, but the required mitigation (BIO-MM#48) specifies pre-construction surveys for golden eagles.

1678-2281

Commenter misunderstands the proposed project and is referred to Chapter 2, Alternatives, of the Draft EIR/EIS, which specifies that the number and frequency of trains would pass any given point for no more than a few minutes per day. Impacts referred to by commenter are all assessed in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS.

Response to Submission 1678 (Ellen Wehr, Grassland Water District, June 23, 2020) - Continued

1678-2282

The Authority appreciates the comments on the Draft EIR/EIS but disagrees with the commenter's conclusions. In previous individual comments, the commenter provided specific suggestions regarding biological and aquatic resources. Each of these specific comments is addressed above.

Submission 1363 (Emma Hansen, Grassland Water District, Grassland Resource Conservation District, May 27, 2020)

San Jose - Merced - RECORD #1363 DETAIL

Status : Action Pending
Record Date : 6/12/2020
Submission Date : 5/27/2020
Interest As : Business and/or Organization
First Name : Emma
Last Name : Hansen

Stakeholder Comments/Issues :

MS. HANSEN: Well, thank you. My name is Emma Hansen, E-M-M-A H-A-N-S-E-N. And I am calling in today on behalf of the Grassland Water District and the Grassland Resource Conservation District.

MR. GOLDMAN: Yes. Please go ahead and share your comment. Thank you.

1363-183

MS. HANSEN: Okay. Yesterday, we submitted a written request that the High-Speed Rail Authority extend the public review and comment period for the Draft Environmental Impact Report and Environmental Impact Statement for the San Jose to Merced Section of the project. We would like to request at least 30 additional days to effectively review and comment on the report.

Per the CEQA guidelines, all documents referred to in the environmental review document must be made available to the public. Although the Authority was intending to make these documents available at public libraries and offices, unfortunately, those facilities have remained closed due to the COVID-19 pandemic.

In addition with restricted access to documents, the Grassland Districts and the general public are facing a lack of access to their standard work offices, printers, and internet services. For those reasons, we are unable to fully evaluate and comment on the analysis of the project's conclusions and impacts in the limited time provided.

We are all living through strange times and it would be extremely helpful for our districts and many others if the Authority could extend the public comment period by at least 30 days.

Thank you.

Response to Submission 1363 (Emma Hansen, Grassland Water District, Grassland Resource Conservation District, May 27, 2020)

1363-183

Refer to Standard Response SJM-Response-OUT-1: Public Outreach.

Submission 1364 (Ricardo Ortega, Grassland Water District, Grassland Resource Conservation District, May 27, 2020)

San Jose - Merced - RECORD #1364 DETAIL

Status : Action Pending
Record Date : 6/12/2020
Submission Date : 5/27/2020
Interest As : Business and/or Organization
First Name : Ricardo
Last Name : Ortega

Stakeholder Comments/Issues :

MR. ORTEGA: Great. Thank you. My name is Ricardo Ortega, R-I-C-A-R-D-O O-R-T-E-G-A. And I'm the General Manager at the Grassland Water District and Research Conservation District.

MR. GOLDMAN: Please proceed with your comment.

- 1364-166 | MR. ORTEGA: Great. In addition to requesting a 30-day extension of the public comment period, I wanted to express four of our primary concerns about the EIR/EIS.
- 1364-167 | First, the Authority continues to use the National Audubon Society's designation of an Important Bird Area instead of the larger Grassland Ecological Area boundary which is recognized under international treaty and the Merced County General Plan. It is also coterminous with the Grassland Wildlife Management Area boundary that was set, established by congress, to direct the U.S. Fish and Wildlife Service to acquire conservation easement.

We object to the use of the smaller boundary designation adopted by the Audubon Society. The result is more impacts near the Volta Wildlife Area, which is a very important part of the Grassland Ecological Area. It is arbitrary, inaccurate, and not in the spirit of the prior promises made by the High-Speed Rail Authority.
- 1364-168 | Second, we are alarmed to see that the prior commitment to preserve 10,000 acres in and around the grassland Ecological Area is not mentioned in this EIR/EIS.

We worked with the Authority staff and consultants for over two years to better define this mitigation approach and have always been concerned about the Authority's lack of planning and establishment of the pathway forward towards achieving this commitment. Omitting this from the EIS/EIR altogether is very concerning.
- 1364-169 | Third, while we appreciate the Authority working with us to develop a plan for a sound reduction enclosure to protect the wildlife and the grasslands. The commitment is not as protective or as mandatory as it should be. The Authority does not have a good track record of meeting its mitigation commitments and we need something much more definitive to achieve protections for wildlife and the grasslands.
- 1364-170 | Fourth, the concerns of the California Department of Fish and Wildlife regarding impacts on hunting and habitat and public use in the Volta Wildlife Area, Los Banos Wildlife Area, and nearby state conservation easements are not being heard. We urge the Authority to not -- the Authority not to continue to ignore the concerns CDFW has raised related to the impacts through this alignment.

Response to Submission 1364 (Ricardo Ortega, Grassland Water District, Grassland Resource Conservation District, May 27, 2020)

1364-166

Refer to Standard Response SJM-Response-OUT-1: Public Outreach.

1364-167

Refer to Standard Response SJM-Response-BIO-4: Grasslands Ecological Area Boundary.

1364-168

The Authority acknowledges the commitments made in the 2008 San Francisco Bay Area (Bay Area) to Central Valley High-Speed Train (HST) Program Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) (Authority and FRA 2008, as cited in Chapter 1, Project Purpose, Need, and Objectives, of the Draft EIR/EIS). We have continued to advance our planning to meet these commitments as well as the project-specific mitigation requirements for the San Jose to Merced Project Section in the most efficient and cost-effective manner possible. As noted in BIO-MM#10, the Authority is committed to preparing an HMP. As also noted in this mitigation measure, "Mitigation implemented under this measure would be consistent with and would help advance mitigation commitments at the program level, including mitigation intended to address impacts in the GEA." To clarify that the Authority remains committed to the mitigation commitments intended to address impacts in the GEA described in the 2008 EIR/EIS, a new mitigation measure has been added to the Final EIR/EIS. New measure BIO-MM#P1: Provide Compensatory Mitigation for Impacts to the Grassland Ecological Area, provides additional detail regarding the 10,000-acre commitment and how the commitments will be implemented in conjunction with the other compensatory habitat mitigation measures set forth in the Draft EIR/EIS. In summary, the Authority is continuing to work towards all commitments in good faith and considering the specific conservation goals and objectives within the GEA and surrounding region.

1364-169

The Authority respectfully disagrees with the commenter's assertion that the sound reduction enclosure is not as protective or mandatory as it should be. BIO-MM#80 in the Draft EIR/EIS is specific and requires the authority to enclose the train's operating envelope and OCS for approximately 3.4 miles in the GEA IBA using an enclosure designed to provide a minimum of 10 dBA attenuation of sound generated by HSR operations. This is a substantial (and costly) mandatory commitment by the Authority to reduce effects in the GEA. While the Authority believes this mitigation commitment will substantially reduce effects within the GEA, and the feasibility of the measure has been vetted, BIO-MM#80 also includes a provision for additional compensatory mitigation if residual noise cannot be reduced to below specified thresholds. Collectively, the Authority believes the mitigation is definitive and achieves the protections necessary for wildlife within the GEA.

1364-170

Comment noted. CDFW provided comments on the Draft EIR/EIS, including comments about hunting and habitat and public use in the Volta Wildlife Area, Los Banos Wildlife Area, and nearby state conservation easements, and the Authority has provided responses. Please see individual responses to submission SJM-2070 for responses to specific issues raised by CDFW.

Submission 1672 (Christine Duymich, Monterey Bay Air Resources District, June 23, 2020)



24580 Silver Cloud Court
Monterey, CA 93940
PHONE: (831) 647-9411 • FAX: (831) 647-8967

June 23, 2020

California High-Speed Rail Authority
Attn: San Jose to Merced: Draft EIR/EIS
100 Paseo de San Antonio, Suite 300
San Jose, CA 95113

Email: San_Jose_Merced@hsr.ca.gov

SUBJECT: San Jose to Merced: Draft EIR/EIS

Hello,

Thank you for providing the Monterey Bay Air Resources District (Air District) with the opportunity to comment on the San Jose to Merced: Draft EIR/EIS. The Air District has reviewed the document and has the following comments:

Air Quality/Greenhouse Gas Emissions:

1672-2113

- **PM 10 - Construction Dust:** (Sections 3.3 and 3.3.9)
The Air District appreciates the Authority's employment of dust control plans during construction phases of grading, excavating or boring operations. Regardless of these measures, it is understood that Alternatives 1,2 and 4 would result in a temporary impact on air quality during construction due to increased PM 10 emissions which would exceed MBARD's significance threshold. Should the Authority opt for Alternative 1,2 or 4, please contact David Frisbey, Planning and Air Monitoring Manager at (831) 647-9411 or dfrisbey@mbard.org to discuss mitigation measure offsets.

1672-2114

- **Construction Equipment:** (Section 3.3.9.1)
The Air District is pleased with the Authority's employment of Tier 4 construction equipment and renewable diesel.

Transportation:

1672-2115

- **Chapter 17: Transportation:**
 - MBARD recommends that the project include publically available dual post Level 2 and/or DC fast charge stations within the project site.

1672-2116

- Consider the installation of Adaptive Traffic Control Systems (ACTS) and roundabouts at intersections affected by the project to further reduce traffic congestion and related emissions.

Richard A. Stedman, Air Pollution Control Officer

Permits:

- **Portable Equipment:**
The Air District permits to operate, or statewide portable equipment registration, may be required for portable and/or auxiliary equipment such as engine generator sets and compressors. Please make sure to contact the Air District's Engineering Division at (831) 647-9411 to discuss if a Portable Registration is necessary for any portable equipment planned to be utilized for this project.
- **Demolition, Grading and Trenching Activities (pg. 3.3-75):**
If any asbestos piping or asbestos material are uncovered as part of building demolition, earth moving and/or trenching during any part of the project in San Benito County, Air District rules may apply. Notification to the Air District is required at least ten days prior to renovation or demolition activities. Air District Rule 424 National Emissions Standards for Hazardous Air Pollutants can be found online at <https://www.arb.ca.gov/drdb/mbu/cur.htm>. Please contact Shawn Boyle or Cindy Searson at (831) 647-9411 for more information regarding these rules.

The Air District appreciates the level of detail and analysis provided in the Draft EIR/EIS. Should you have any questions, please contact me at (831) 647-9411 or cduymich@mbard.org.

Best Regards,

Christine Duymich
Air Quality Planner II

cc: David Frisbey
Shawn Boyle
Cindy Searson

Richard A. Stedman, Air Pollution Control Officer

Response to Submission 1672 (Christine Duymich, Monterey Bay Air Resources District, June 23, 2020)

1672-2113

Refinements were made to the particulate matter mass emissions inventory in the Final EIR/EIS to more comprehensively capture emissions reductions that would be achieved through implementation of AQ-IAMF#1: Fugitive Dust Emissions. The revised emissions analysis demonstrates that none of the project alternatives would result in construction emissions above MBARD's PM10 threshold. Accordingly, Impact AQ#2 would be less than significant for all project alternatives and emissions offsets in the MBARD are no longer required or identified as mitigation in the Final EIR/EIS. Please refer to Impact AQ#2 in the Final EIR/EIS.

1672-2114

Comment noted. Thank you.

1672-2115

The comment does not indicate any specific concern regarding any of the conclusions in the Draft EIR/EIS. In future phases of design, it is likely that the project would include electric vehicle charging stations within its parking lots. The equipment would be designed to meet the latest facility standards at the time of design and installation. Additional information regarding the Authority's sustainability plans and policies are available at the following locations:

https://hsr.ca.gov/wp-content/uploads/2021/04/Sustainability_signed_policy.pdf

[https://hsr.ca.gov/wp-](https://hsr.ca.gov/wp-content/uploads/docs/programs/green_practices/sustainability/Sustainability_implementation_plan_SUMMARY.pdf)

[content/uploads/docs/programs/green_practices/sustainability/Sustainability_implementation_plan_SUMMARY.pdf](https://hsr.ca.gov/wp-content/uploads/docs/programs/green_practices/sustainability/Sustainability_implementation_plan_SUMMARY.pdf)

1672-2116

Refer to Standard Response SJM-Response-TR-1: Site-Specific Mitigation for Traffic Impacts.

The comment recommended that the Draft EIR/EIS should consider the installation of adaptive traffic control systems and roundabouts at intersections affected by the project. Please refer to Mitigation Measure TR-MM#1 in Section 3.2, Transportation, of the Final EIR/EIS for a discussion of the site-specific mitigation identified for the NEPA LOS effects. While adaptive traffic control and roundabouts were considered as potential mitigation for project intersection effects, physical improvements other than these modifications were identified to mitigate the identified NEPA LOS effects.

1672-2117

The comment noted that the project is subject to air district permits. Please refer to Section 3.3.2.3, Regional and Local, of the Draft EIR/EIS for a statement on air district rules applicable to the project. This section of the Draft EIR/EIS refers readers to the Air Quality and Greenhouse Gases Technical Report (Draft EIR/EIS Volume 2, Appendix 3.3-A). Section 3.3.1.2, Monterey Bay Air Resources District, of the Air Quality and Greenhouse Gases Technical Report discloses that the project would be subject to Rule 200 and may require District permits.

1672-2118

The comment noted that the project is subject to Rule 424. Please refer to Section 3.3.2.3, Regional and Local, of the Draft EIR/EIS for a statement on air district rules applicable to the project. This section of the Draft EIR/EIS refers readers to the Air Quality and Greenhouse Gases Technical Report (Draft EIR/EIS Volume 2, Appendix 3.3-A). Section 3.3.1.2, Monterey Bay Air Resources District, of the Air Quality and Greenhouse Gases Technical Report discloses that the project would be subject to Rule 424.

Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020)



MORGAN HILL UNIFIED SCHOOL DISTRICT
16800 CONCORD CIRCLE • MORGAN HILL, CA 95037 • (408) 201-6023

June 22, 2020

VIA E-MAIL (SAN.JOSE_MERCED@HSR.CA.GOV) & USPS

San Jose to Merced Project Section: Draft EIR/EIS
100 Paseo de San Antonio, Suite 300
San Jose, CA 95113

Re: Comments on the Draft Environmental Impact Report/Environmental Impact Statement for the High-Speed Rail Project – San Jose to Merced Project Section

Dear Madam or Sir:

The Morgan Hill Unified School District (“District”) hereby submits the following comments on the Draft Environmental Impact Report/Environmental Impact Statement (“Draft EIR/S”) pursuant to the California Environmental Quality Act (“CEQA”) and the National Environmental Policy Act (“NEPA”) for the California High Speed Rail Authority’s (“Authority”) California High-Speed Rail Project – San Jose to Merced Project Section (“Project”). Specifically, this letter provides the District’s comments on the Project’s Draft EIR/S and identifies the need for further analysis and/or mitigation in the areas of air quality, land use, public services, and traffic and parking. As a result, the Draft EIR/S needs revision and recirculation to disclose the significant new information to the public and allow comment on such new information before certifying a final EIR/S.

1858-659

1858-660

The public has entrusted the District with providing its students with a high-quality education, which includes insuring that its students have adequate facilities, are safe, and not significantly or cumulatively impacted by development. The District instructs approximately 8,500 students at its six elementary, two elementary/middle, one dual immersion magnet, two middle, two comprehensive high, one continuation high, and community adult public schools. Four schools appear to be most affected by this Project: Charter School of Morgan Hill, Central High School, San Marin/Gwinn Elementary School, and Adult Education School. The Project’s proximity to and effects on these schools raises concerns that the construction and operation of the Project will adversely affect the learning environment at these schools, delay school buses and student drop-off and pick-up, which was either not addressed in the Draft EIR/S or inadequately analyzed. These impacts need to be fully analyzed and mitigated to ensure the safety, public education, and use of our schools is not significantly or adversely impacted.

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1858-661

1. EIR TYPE.

In Section S.2 of the Executive Summary, the Draft EIR/S claims to be a project-level EIR/S because it evaluates proposed alignments and stations in site-specific detail to provide a complete assessment of the direct, indirect, and cumulative impacts of the proposed project. (Draft EIR/S, p. s-5.) Despite being a site-specific analysis, in many instances, the Draft EIR/S still advances the mitigation measures approved of in the 2005 Final Program EIR/EIS for the Proposed California High-Speed Train System that defers mitigation measures and plans out until construction. (*Id.* pp. 3.3-75 [contractor to prepare Construction Management Plan to avoid and minimize asbestos emissions], 3.4-115 [contractor to prepare a Noise-Monitoring Program and Noise Control Plan prior to construction], 3.11-40 [contractor to prepare a Construction Safety Transportation Management Plan to maintain emergency vehicle access during construction], 3.11-49 [contractor would create a Construction Access Plan for transporting construction materials and equipment], p. 3.11-83 [Emergency Vehicle Priority Treatment Plan would be developed for at-grade crossings that would increase emergency response by 30 seconds or more], 3.12-38 [contractor would prepare a Construction Transportation Plan to maintain access to public facilities], p. 3.12-59 [Fugitive Dust Control Plan to control construction dust emissions], p. 3.15- [contractor to prepare a restoration plan for replanting trees and vegetation].) Yet, the Draft EIR/S does not explain why these mitigation measures must continue to be deferred. Armed with site-specific knowledge of the Project, the Draft EIR/S cannot continue to rely on deferred mitigation measures and must formulate concrete, enforceable mitigation measures to ensure significant impacts will be mitigated to less than significant.

2. AIR QUALITY.

The District’s expert, PlaceWorks, has evaluated the Draft EIR/S’ impact analyses on air quality. PlaceWorks’ Memorandum is attached as **Exhibit “A”** and identifies the following air quality issues. The Draft EIR/S acknowledges that schools are sensitive air receptors. (*Id.* p. 3.3-39.) Even with implementing the mitigation measures from the prior program EIR/S, the Project’s construction would still cause significant Volatile Organic Compound (“VOC”) and nitrogen oxide (NOx) emission impacts. (*Id.* pp. 3.3-50 and 3.3-53.) The Preferred Alternative 4 would create the greatest emission impacts due to the construction of the embankment. (*Id.* p. 3.3-53.) Additionally, Alternatives 1, 2, and 4 would cause significant PM₁₀ impacts. (*Id.* p. 3.3-54.)

1858-662

1858-663

The Draft EIR/S discloses that short-term exposures to N₂ above CAAQS and NAAQS can aggravate respiratory diseases (e.g., asthma) or coughing and wheezing. (*Id.* p. 3.3-62.) It further notes that the main health effects of PM exposure above CAAQS and NAAQS are irritation of airways, decreased lung function, irregular heartbeat, nonfatal heart attacks, and premature death. (*Ibid.*) Tables 3.3-15, 3.3-16, 3.3-17, and 3.3-18 of the Draft EIR/S show that the construction of

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Page 2

Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

1858-663 | the Morgan Hill and Gilroy Subsection of the Project will cause exposures to NO₂, PM_{2.5}, and PM₁₀ well above CAAQS and NAAQS. (Id. pp. 3.3-63 through 3.3-70.) The Draft EIR/S concludes that even with the program EIR/S mitigation measures, the NO₂ and PM emissions would remain significant and unavoidable and that no other mitigation measures are available. (Id. p.3.3-71.)

1858-664 | The Draft EIR/S is not entirely honest about the health effects from NO₂ exposure. What the Draft EIR/S does not do is disclose that children are more susceptible to NO₂ than adults:

“Infants and children are particularly at risk because they have disproportionately higher exposure to NO₂ than adults due to their greater breathing rate for their body weight and their typically greater outdoor exposure duration. Several studies have shown that long-term NO₂ exposure during childhood, the period of rapid lung growth, can lead to smaller lungs at maturity in children with higher compared to lower levels of exposure. In addition, children with asthma have a greater degree of airway responsiveness compared with adult asthmatics. In adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease.” (<https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health>)

This information is required in a revised Draft EIR/S that is recirculated for public comment.

1858-665 | Also missing from the Draft EIR/S is a prediction of the extent of the health impacts from these significant emissions. The Draft EIR/S tries to side-step the issue by claiming that it is not technically feasible to perform a quantitative analysis of regional emission sources. (Id. p. 3.3-25.) However, the Draft EIR/S is silent when it comes to the point source emissions from construction of the Project itself. How many students, faculty, staff, and parents are expected to experience these health impacts caused by the Project? What is the anticipated severity of the health impacts that our students, faculty, staff, and parents are expected to endure by the construction of the Project? These questions must be answered in a revised Draft EIR/S that is recirculated for public comment.

1858-666 | Per Education Code section 17213, a school shall not be located where, “The health risks from the facilities or other pollution sources do not and will not constitute an actual or potential endangerment of public health to persons who would attend or be employed at the school.” (Id. § 17213(c)(2)(B).) For health risks from air pollution, Education Code section 17213(b) instructs that sources of Toxic Air Contaminants (“TAC”) within one-fourth mile of a school requires direct analysis. “‘Hazardous air emissions’ means emissions into the ambient air of air contaminants that have been identified as a toxic air contaminant by the State Air Resources Board or by the air pollution control officer for the jurisdiction in which the project is located.” (Id. § 17213(d)(1).) Particulate emissions from diesel-fueled engines (“DPM”) is identified as TAC. (<https://ww2.arb.ca.gov/resources/documents/carb-identified-toxic-air-contaminants>) The Draft EIR/S acknowledges that DPM is a TAC. (Id. pp. 3.3-2 and 3.3-7.) DPM emissions make up parts of PM_{2.5} and PM₁₀. Unfortunately, the Draft EIR/S does not separately identify the expected levels of DPM at the District’s schools. Even more concerning is that the construction Health Risk Assessment that was performed only evaluated residential receptors. “Health risk calculations were also performed to evaluate the incremental cancer risks and acute and chronic noncancer

1858-667 | health effects on residential receptors located near the construction work areas.” (Draft EIS/R, Appendix E: Localized Impacts from Construction, p. E-3.) Nowhere does Appendix E even mention the word, “school.”

1858-667 | Given that Barrett Elementary School, Central High School, Charter School of Morgan Hill, and San Marin/Gwinn Elementary School are within one-fourth mile of the Project, the Authority must evaluate impact of DPM upon these schools, and if that impact is significant, the Authority must provide mitigation measures to the impacted schools during Project construction to include at least temporary HVAC systems with appropriate MERV rated filters for the school buildings. Please note that gymnasiums at Live Oak High School, San Martin/Gwinn K-8 School, and Britton Middle School do not have air conditioning, so if air filtering is required for these gymnasiums, the Authority would have provide air conditioning as well.

1858-668 | The Draft EIR/S concludes, “Changes in on-road vehicle operation associated with project operations would not contribute to new or worsened violations of health-protective NAAQS. As such, localized changes in PM emissions from on-road vehicles would not be expected to contribute a significant level of air pollution such that individuals would be exposed to substantial PM concentrations. Therefore, CEQA does not require mitigation.” (Id. p. 3.3-90.) These conclusions are illogical. It is undisputed that Project would cause vehicle trip delays due to closed intersections during train passing. This trip delay will cause parents taking their children to school and other drivers to seek alternative routes to avoid the crossing delays, thereby increasing their VMT. The lengthening of vehicle trips will, in turn, increase air pollution. The Draft EIR/S must include an analysis of the anticipated lengthening of vehicle trips and determine the extent of additional air pollution before concluding that the air quality impact from Project operations would be less than significant.

1858-669 | PlaceWorks notes that the Greenhouse Gas Emissions analysis in the Draft EIR/S is based on outdated and unreliable data. (Ex. “A”, p. 3.) In order to accurately understand the Project’s effect on greenhouse gas emissions, the Draft EIR/S requires revision and recirculation.

3. LAND USE CONSISTENCY.

1858-670 | A requirement of CEQA is to evaluate the consistency of a project with land use plans, codes, regulations, ordinances, and guidance and policy documents. and report on the Project’s consistency with these. Only in Appendix 3.4, Noise and Vibration Technical Report does it disclose that under the Morgan Hill Municipal Code section 8.28.040, it is unlawful to create “any excessive noise on any street adjacent to any school ... while the same is in use ... which noise unreasonably interferes with the works of such institution...” (Appendix 3.4-A: Noise and Vibration Technical Report, p. 3-12.) There is no evaluation of this municipal code or consistency determination on it in the Draft EIR/S. Additionally, section 8.28.040(N)(2) of the Morgan Hill Municipal Code states that horns cannot be “unreasonably loud or harsh...” Given that noise is an environmental impact, the Authority must evaluate the Project’s consistency with Morgan Hill’s noise ordinances and mitigate excessive noise generated by the Project on the District’s schools, which is inconsistent with the Morgan Hill Municipal Code.

Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

4. NOISE & VIBRATION.

1858-671 | The Draft EIR/S discloses schools are sensitive noise receptors. (*Id.* § 3.4.1.1, p. 3.4-2.) The Draft EIR/S goes on to disclose that the Project will cause thousands of significant noise impacts with the preferred Alternative 4 causing the most. (*Id.* pp. S-58, Table 3.4-16, p. 3.4-41, Table 3.4-17 p. 3.4-42.) As highlighted by PlaceWorks, it is disturbing that the noise monitoring is stale (in some cases over 10 years old) and that the Draft EIR/S fails to specifically identify which properties these significant noise impacts will occur and instead relies on high-level maps to identify a general area where these significant noise impacts will occur. (Ex. “A”, p. 3; Draft EIR/S Figure 3.4-10, p. 3.4-46.) This is unacceptable. The Draft EIR/S must identify the specific properties (e.g., the District’s schools) where these numerous significant noise impacts will occur to properly understand the full impacts of the Project.

1858-672 | Despite there being a smattering of noise monitoring sites used to analyze the ambient noise along the alignment, none of the sites are proximate to any of the Morgan Hill schools either directly adjacent to the Project or close by. (Draft EIR, Table 3.4-11, p. 3.4-26; Ex. “A”, pp. 4-5.) Additionally, the Draft EIR/S provides no direct analysis of noise impacts on any specific sensitive noise receptor schools. For the Morgan Hill and Gilroy Subsection, the Draft EIR/S states, “The closest school is approximately 145 feet from the existing railway line.” (Draft EIR/S, p. 3.4-30.) This begs the question, “Which one?” Further, this is incorrect. The District’s Adult Education School is closer than 145 feet.

1858-673 | The Draft EIR/S employs mitigation measure NV-MM#1: Construction Noise Mitigation Measures to have the construction contractor to create a noise-monitoring program for only the Authority to approve. (*Id.* p. 3.5-79.) This noise-monitoring program is only required to reduce construction noise to 80 dBA L_{eq} (8 hr.) for daytime residential, 85 dBA L_{eq} (8 hr.) for commercial, and 90 dBA L_{eq} (8 hr.) for industrial. (*Ibid.*) This is wholly inadequate for schools. (Ex. “A”, p. 6.) Further, California’s land use compatibility guidelines show that anything above 70 dB is unacceptable. (*Id.* Figure 3.4-3, p. 3.4-8.) The California Department of Education’s School Site Selection and Approval Guide, background noise in a classroom should not exceed 30 decibels. (<https://www.cde.ca.gov/ls/fa/sf/schoolsiteguide.asp#Noise>.) CDE’s Guide explains that the California Department of Transportation considers noise at 50 decibels in the vicinity of schools to bet the point at which it will take correct action for noise generated by freeways. (*Ibid.*) See also Streets and Highways Code section 216(c):

“If the noise level produced from the freeway traffic, or the construction of the freeway, exceeds 55dBA, L10, or 52dBA, Leq., the department shall undertake a noise abatement program in any classroom, library, multipurpose room, or space used for pupil personnel services to reduce the freeway traffic noise level therein to 55dBA, L10, or 52dBA, Leq., or less, by, measures including, but not limited to, installing acoustical materials, eliminating windows, installing air-conditioning, or constructing sound baffle structures.”

1858-674 | CDE’s Guide recognizes that the American Speech-Language-Hearing Association guidelines recommend that in classrooms sounds dissipate in 0.4 seconds or less (and not reverberate) and that background noise not rise above 30 decibels. Further, PlaceWorks has explained that the World Health Organization’s guidelines set maximum background classroom noise at 35 dBA and typical classroom attenuation is approximately 25 dBA. (Ex. “A”, p. 6.) On this, PlaceWorks

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1858-674 | opines that the significant noise threshold at a classroom’s façade is 60 dBA. (*Ibid.*) Unfortunately, without noise impact analyses on the District’s specific schools being included in the Draft EIR/S, the severity of the Project’s noise impacts on the District’s schools are far from being fully disclosed or understood.

1858-675 | The Draft EIR/S considers startle effect of the Project and concludes that because the HSR right-of-way will be fenced off from the public, there would be no significant startle effect. (*Id.* p. 3.4-60.) But the EIR/S did not consider the startle effect on special needs children. In fact, the Draft EIR/S does not consider any noise and vibration sensitivity of special education students being taught in Barrett Elementary School, Charter School of Morgan Hill, Central High School, of San Marin/Gwinn Elementary School. The District’s Special Education Director has provided key information on the sensitivity of special education students that draws for her experience and training. A copy of the District’s Special Education Director, Dr. Rebecca O’Brien’s letter is attached hereto as **Exhibit “B”**. Therein, she explains that it well understood in the special education world that students with autism and other disabilities are extremely sensitive and disturbed by train horns and other types of noise and vibration that the Project will generate and impose upon these students.

1858-676 | Additionally, the Executive Director of Charter School of Morgan Hill, Paige Cisewski, reports that existing train noise already disrupts their learning environment. A copy of her letter is attached hereto as **Exhibit “C”**. Thus, the Project’s addition of numerous high-speed trains that incessantly blow their horns will only exacerbate the disruptions to children’s learning at Charter School of Morgan Hill. Thus, a specific noise and vibration impact analysis has been done on Charter School of Morgan Hill and the District’s other schools, be reported in a revised Draft EIR/S that includes appropriate and enforceable noise and vibration mitigation measures to reduce the Project’s disruptions to less than significant, and recirculated for public comment.

1858-677 | The Draft EIR/S concludes that operational noise impacts would be significant and severe—noting that HSR horns are the main culprit. (*Id.* p. 3.4-43.) If the severe noise and vibration impacts to the District’s schools render them unusable for general public schooling, then the Authority must adopt mitigation measures to secure new school site and fund the movement of those schools to acceptable locations.

1858-678 | In mitigation measure NV-MM#3: Implement Proposed California High-Speed Rail Project Noise Mitigation Guidelines, it identifies the use of noise barriers and building sound insulation, but says, “the Authority would consider providing sound insulation as a potential additional mitigation measure on a case-by-case basis.” (*Id.* p. 3.4-82.) The Authority must commit to providing impacted District’s schools with barriers and insulation that are compatible with, and not interfere, with the school’s educational programs. (Ex. “A”, p. 6.) We suggest that the Authority amend these mitigation measures to commit them to the District’s schools and coordination with the District on their implementation. If these mitigation measures are not effective, the third mitigation measure of noise easements would be completely ineffective for schools. (See Draft EIR/S, p. 3.4-82.) In such a circumstance, the Authority would need to fund movement of the school.

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Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

1858-679 | Given the extensive and severe noise impacts that are expected, the Authority must conduct specific noise and vibration impact analyses on the District's schools. Neither the District nor its students, faculty, and staff should have to tolerate a Project that appears to have such wide sweeping noise and vibration impacts.

5. SOCIOECONOMICS AND COMMUNITIES.

1858-680 | The Draft EIR/S discloses that construction would be harmful to the District students:

“Those schools within 1,000 feet of construction would be exposed to higher levels of construction noise. Most of the affected schools are in the Morgan Hill and Gilroy Subsection. Severe construction noise could temporarily disrupt children’s learning ability and lease to increased stress, which could, in turn, affect children’s health.” (*Id.* p. 3.12-60.)

The only mitigation proffered is a deferred Construction Management Plan (NV-IAMF#1, SOCIO-IAMF#1) that would include noise controls (noise barriers, combining noisy operations, avoiding impact pile driving) construction phases “to minimize effects on children’s health and safety and points the reader to mitigation in the noise section of the Draft EIR/S. (*Ibid.*) This deferred noise mitigation is impermissible under CEQA and NEPA because it does not commit to employing specific mitigation, it does not identify specifically which sensitive receptors would receive the noise mitigation. (Ex. “A”, p. 6.) More importantly, the Construction Management Plan does not commit to mitigating the significant noise and vibration impacts to less than significant nor does it identify what the effectiveness of the noise and vibration mitigation would be. (*Ibid.*) Concrete noise and vibration mitigation measures for the District’s schools must be identified in a revised Draft EIR/S and disclose how the noise and vibrations would be after mitigation.

1858-681 | The Construction Safety Transportation Management Plan (SS-IAMF#1) only requires contractors to coordinate with local jurisdictions for maintain emergency vehicle access. (Draft EIR/S, p. 3.12-60.) Given the Draft EIR/S’ disclosure that the District’s schools would experience impeded emergency access during construction, the Authority and contract must also coordinate with the District’s leadership and individual schools to make sure that emergency access to school is maximized to protect student health and safety. The Draft EIR/S claims that Safe Routes to Schools would be maintained and enhanced. (*Id.* p. 3.12-39.) This is a bare statement without any explanation how Safe Routes to Schools would be maintained and enhanced. The Draft EIR/S needs to be revised with information on how Safe Routes to Schools would be maintained and enhanced and making sure the contractor accomplishes both.

1858-682 | The Draft EIR/S claims that implementing deferred mitigation measure AQ-IAMF#1, fugitive dust plan would “control” dust emissions by covering haul truck, cleaning haul trucks and equipment, and suspending dust-generating activities when the average wind speed exceeds 25 mph. (*Id.* p. 3.12-59.) without further analysis or explanation, the Draft EIR/S concludes that dust is not expected to compromise children’s health or affect quality of life. (*Ibid.*) What is missing is any analysis showing that the dust control measures would achieve specified reductions in dust levels to less than significant or a commitment to achieve a less than significant level of dust at the District’s schools. To mitigate the dust impacts at the District’s schools, the Authority must

1858-682 | commit to providing dust filtration at the District’s schools to reduce the impact to less than significant and to coordinate with the District’s schools to ensure dust controls are effective.

1858-683 | In the most shocking statement made, the Draft EIR/S states, “The CEQA Guidelines do not include a threshold for impacts on children. Any potential impacts have been reported in the primary analysis for each resource topic. Therefore, CEQA does not require mitigation.” (*Id.* p. 3.12-61.) This is absurd. CEQA does not have to specify a threshold for an impact to be significant and subject to CEQA. CEQA absolutely includes children safety. (See CEQA Guidelines, § 15186(a) requiring projects near schools to evaluate hazard material exposure.) Further, case law acknowledges that development impacts on schools is required by CEQA. In *Chawanakee Unified School Dist. v. County of Madera* (2011) 196 Cal.App.4th 1016, 1028-29, the appellate court explained that a project’s indirect impacts on schools are “not excused from being considered and mitigated.” The appellate court expressly pointed out that construction dust and noise are subject to CEQA review and need to be included in the CEQA document. (*Id.* p. 1029.)

6. PUBLIC SERVICES.

1858-684 | Police and fire suppression services are key to keeping the District’s schools safe, and the Project impedance of these services could significantly impact the safety of District’s students. Missing from the Draft EIR/S is any consultation with the Morgan Hill Police Department to determine whether the Project would have a significant impact on police protection services. The Police Department must be consulted, and the results be reported in a revised Draft EIR/S.

1858-685 | The Draft EIR/S does not adequately analyze the impact on fire department services because it does not disclose any consultation with the Morgan Hill Fire Department. Furthermore, there is no statement from the Fire Department that it could adequately provide fire protection services to the Project without additional facilities. Thus, the Draft EIR/S’s analysis is incomplete and the conclusion that the impact on fire protection services is less than significant is unsupported. The Fire Department must be consulted, and the results reported in a revised Draft EIR/S that is recirculated for public comment.

7. RAILROAD SAFETY.

1858-686 | As identified by PlaceWorks, a railroad safety study required for all District’s schools that are within 1,500 feet of the Project. (Ex. “A”, pp. 6-7.) Per Title 5 California Code of Regulations section 14010(d), a school cannot be sited within 1,500 feet of a railroad track easement unless a railroad safety study is conducted that demonstrates that students and staff will be adequately protected. Thus, an unsafe railroad in proximity to the District’s schools would be a significant impact. This is especially important considering the energy of a train that derailed at speeds up to 220 miles per hour, and the Draft EIR/S’ acknowledgement of pedestrian rail trespass fatalities being the highest in California. (Draft EIR/S, pp. 1-1, 1-27.) The Draft EIR/S acknowledges, “The hazards to schools in the event of an HRS train derailment would include the train colliding with a school structure or people in occupied areas of school property, which could only occur adjacent to the right-of-way and could only occur if train components left the guideway as a result of a derailment incident.” (*Id.* p. 3.11-74.) It is common sense that a train derailment at 220 miles per hour would easily leave the guideway and it is foreseeable that it could careen far outside the right-if-way. (Ex. “A”, p. 7.) The Draft EIR/S fails to disclose what the true danger zone is and

Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

1858-686

does not provide a specific analysis for any of the District's schools. Yet, the Draft EIR/S blithely concludes that with some undefined "safety elements" incorporated into the Project design, the safety impact is miraculously reduced to a safe level. (*Id.* p. 3.11-75.) This conclusion is woefully unsupported. (Ex. "A", p. 7.)

1858-687

In addition to analyzing accident and derailment rates, a railroad safety study includes evaluating pedestrian and vehicle safeguards and the presence of high-pressure gas lines near tracts that could rupture with a derailment. (*Ibid.*) None of this was included in the Draft EIR/S.

Accordingly, the Draft EIR/S needs to be revised to include a specific railroad safety study for each school within 1,500 feet of the Project, and if the safety study reveals unsafe conditions, mitigation measures must be developed and proposed to remedy the unsafe conditions in order for the Project's impact on the school be reduced to less than significant. Since these safety studies were not conducted, the Draft EIR/S must be revised and recirculated for public review and comment.

8. EMI & POWER LINES.

1858-688

PlaceWorks notes that per Title 5, California Code of Regulations section 14010(c), a school site must have the following setbacks to power line easements:

- (1) 100 feet from 50-133 kV line;
- (2) 150 feet from a 220-230 kV line; and
- (3) 350 feet from a 500-550 kV line. (Ex. "A", p. 7.)

The Draft EIR/S analyzes the Project's Electromotive Interference ("EMI") along the various alignments and acknowledges that schools are sensitive receptors to EMI. (*Id.* p. 3.5-1.) However, none of the EMI measurement locations include a District school site. (See *Id.* Table 3.5-8, p. 3.5-16, Figure 3.5-3, p. 3.5-19; Ex. "A", p. 7.) The Draft EIR/S does model certain magnetic field strength at Barrett Elementary School, Charter School of Morgan Hill, Central High School, and San Marin/Gwinn Elementary School, but none of these results are compared to the setback requirements under section 14010(c) to determine is the usability of the school sites are significantly impacted by the Project. (*Ibid.*)

1858-689

The Draft EIR/S claims that the Authority is a state agency and therefore is not required to comply with local land use and zoning regulations. (*Id.* p. 3.5-10.) However, environmental review is not predicated on whether particular laws apply to a lead agency. CEQA is concerned with potential environmental impacts without regard to legality. Thus, the Authority is required to evaluate the Project's consistency with local land use and zoning regulations and report that in the Draft EIR/S. That has not been done. Accordingly, the Draft EIR/S must be revised and recirculated for public comment.

9. TRANSPORTATION.

1858-690

Although CEQA no longer considers vehicle delay as a significant impact, a safety analysis is required. The District is concerned with the delay on the bus to automobile drop-off and pick-up activities caused by the Project. The added delay can disrupt the educational day and could

1858-690

contribute to more frequent absences. Such disruptions would detract from the most effective educational program.

1858-691

Drop-off and pick-up traffic at Charter School of Morgan Hill is very congested and will be made worse by the Project. The Executive Direct of Charter School Morgan Hill, Paige Cisewski reports that between the hours of 7:45 a.m. to 8:15 a.m. during drop-off and 2:30 p.m. to 3:20 p.m. During the pick-up of 650 students, traffic spills onto Monterey Road a regional highway with a 55-mile speed limit, resulting in dangerous congestion conditions. (See Ex. "C".) Additional delays resulting from construction and operation of the Project would exacerbate the current unsafe conditions with students exiting and entering vehicles. The queue of vehicles creates temporary restrictions to sight lines that exacerbate the safety risk. Therefore, the Draft EIR/S must be revised to include a traffic safety impact analysis on Charter School of Morgan Hill and to apply appropriate enforceable mitigation measures to reduce any found safety impacts to less than significant.

1858-692

Moreover, PlaceWorks notes that VMT decrease claimed in the Draft EIR/S is based on data that is over 15 years old and is no longer reliable. (Ex. "A", p. 1.) Accordingly, the VMT calculations need to be updated in a revised Draft EIR/S that is recirculated.

10. DISTRICT'S ECONOMIC IMPACTS.

1858-693

The Draft EIR/S discloses that the impact to the District's property taxes would amount to \$1,125,832 under Alternative 2 and would be less than one percent loss. (*Id.* Table 3.12-15, p. 3.12-78; Ex. "A", p. 8.) The District disagrees that this annual loss of over 1.7% (=District's annual loss of \$1,125,832 / District's annual operating budget of \$65,394,803 X 100%) of the District's annual revenue would not materially affect school funding. Ex. "A", p. 8.) Such a loss of funding causes the District to reduce education programs for its students and causes needed facility maintenance to be forgone.

CONCLUSION.

1858-694

The District desires that the Project's potential significant and cumulative impacts to the students, parents, faculty, and staff of the District's schools are fully analyzed and mitigated. Accordingly, the District respectfully requests that the Draft EIR/S be revised to include those analyses and mitigation measures as set forth herein and recirculated for further public comment.

Thank you for the opportunity to participate in the review process and for your consideration of the above.

Respectfully,



Steve Betando
Superintendent

cc: Kirsten Perez, Deputy Superintendent and Chief Financial Officer
Stan M. Barankiewicz II, Orbach Huff Suarez & Henderson LLP

Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued



MEMORANDUM

DATE June 17, 2020

TO Morgan Hill Unified School District

ADDRESS 15600 Concord Circle
Morgan Hill, CA 95307

CONTACT Kirsten Perez

FROM Nicole Vermilion, Principal, Air Quality
Alexis Mena, Senior Associate
Josh Carman, Senior Associate, Noise
Steve Bush, PE, Senior Engineer, Health Risk

SUBJECT Comments on the Draft Environmental Impact Report/Environmental Impact Statement for the California High-Speed Rail – San Jose to Merced Project Section

PROJECT NUMBER MHUS-07

Per your request, PlaceWorks staff including technical experts have reviewed the *Draft Environmental Impact Report/Environmental Impact Statement for the California High-Speed Rail – San Jose to Merced Project Section*, prepared by the California High-Speed Rail Authority and dated April 2020, and associated technical reports. PlaceWorks provides the following comments below for transportation, air quality and health risk assessment (HRA), greenhouse gases, rail safety, noise, and economic impacts.

Transportation

As with other section of the Draft EIR/S, key assumptions are obfuscated. This is true of the assumptions for vehicle miles traveled (VMT) reduction, including the number of people using HSR on an average day in 2029 and 2040, and whether these riders drive or fly without HSR, or not travel at all.

The VMT decrease of 20 percent claimed in the Draft EIR/S appears to be based on an outdated report (*California High-Speed Rail Ridership and Revenue Model, Business Plan Model Version 3* (Authority 2016a), which relies on a lot of data from 2005 (https://www.hsr.ca.gov/docs/about/business_plans/2020_Business_Plan_CHSR_Ridership_and_Revenue_Model_BP_Model_Ver3_Model_Doc.pdf). These data are 15 years old and can no longer be relied upon. Additional data was also based on another outdated report: *Caltrain Peninsula Corridor Electrification Project (PCEP) EIR* (PCJPB 2015).

1858-695

Furthermore, since most VMT models are based on weekday trips and not annual models, it is not clear if the Draft EIR/S is using the ridership on an “average day” to get annual VMT reductions or if peak ridership (e.g., Summer, Spring Break, Winter vacation trips on HSR) are considered.

Since traffic models are typically not weighted to vacation or peak travel times and are weighted on socio-economic trips associated with home-to-work, retail trips, etc. Therefore, the high utilization by 2040 assumption and associated VMT reductions are not conservative and overexaggerated.

1858-696

Air Quality and Health Risk Assessment

As detailed above under *Transportation*, the VMT decrease of 20 percent claimed in the Draft EIR/S is based on outdated and unreliable data. The high utilization by 2040 assumption and associated VMT reductions are not conservative and overexaggerated and, therefore, the associated operational air quality emission reductions are unsubstantiated and should be recalculated.

1858-697

The Draft EIR/S acknowledges that schools are sensitive air receptors. (*Id.* p. 3.3-39.) Even with implementing the mitigation measures from the prior program EIR/S, the Project’s construction would still cause significant Volatile Organic Compound (“VOC”) and nitrogen oxide (NOx) emission impacts. (*Id.* pp. 3.3-50 and 3.3-53.) The Preferred Alternative 4 would create the greatest emission impacts due to the construction of the embankment. (*Id.* p. 3.3-53.) These exceedances could conflict with applicable air quality plans. (*Id.* p. 3.3-62.)

1858-698

The Draft EIR/S discloses that short-term exposures to NO₂ above CAAQS and NAAQS can aggravate respiratory diseases (e.g., asthma) or coughing and wheezing. (*Id.* p. 3.3-62.) It further notes that the main health effects of PM exposure above CAAQS and NAAQS are irritation of airways, decreased lung function, irregular heartbeat, nonfatal heart attacks, and premature death. (*Ibid.*) Tables 3.3-15, 3.3-16, 3.3-17, and 3.3-18 of the Draft EIR/S show that the construction of the Morgan Hill and Gilroy Subsection of the Project will cause exposures to NO₂, PM_{2.5}, and PM₁₀ well above CAAQS and NAAQS. (*Id.* pp. 3.3-63 through 3.3-70.) The Draft EIR/S concludes that even with the program EIR/S mitigation measures, the NO₂ and PM emissions would remain significant and unavoidable and that no other mitigation measures are available. (*Id.* p.3.3-71.)

The Draft EIR/S does not disclose that children are more susceptible to NO₂ than adults:

“Infants and children are particularly at risk because they have disproportionately higher exposure to NO₂ than adults due to their greater breathing rate for their body weight and their typically greater outdoor exposure duration. Several studies have shown that long-term NO₂ exposure during childhood, the period of rapid lung growth, can lead to smaller lungs at maturity in children with higher compared to lower levels of exposure. In addition, children with asthma have a greater degree of airway responsiveness compared with adult asthmatics. In adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease.” (<https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health>)

This information should be included in a revised Draft EIR/S that is recirculated for public comment.

1858-699

The air dispersion model (AERMOD) output files and risk calculation files (HARP, Risk Assessment Standalone Tool [RAST]) are requested to be made available to adequately review the HRA. Reviewing the air dispersion model and risk calculation output files is necessary to determine whether receptor locations were modeled near District schools and what parameters were used for the cancer risk calculations. In particular, the Draft EIR/S did not adequately clarify how risks were calculated from construction activities based on annual

1858-695

Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued



1858-699 | output construction emissions, and how the appropriate age sensitivity factors were applied based on the construction schedule and exposure durations.

1858-700 | The Draft EIR/S acknowledges that DPM is a TAC. (*Id.* pp. 3.3-2 and 3.3-7.) The Draft EIR/S includes risk determinations for residential receptors proximate to construction activities and operational emission sources (Draft EIR/S, Section 3.3, Tables 3.3-19 and -20, Tables 3.3-26 and -27). However, the Draft EIR/S does not include health risk values for other sensitive receptors types (e.g., schools, day cares, senior living residences). The Draft EIR/S should include a discussion of how these determined residential health risks relate to risks at other sensitive receptors.

1858-701 | Given that Barrett Elementary School, Central High School, Charter School of Morgan Hill, Lewis Britton Middle School, and San Marin/Gwinn Elementary School are within 1,000 feet of the Project, the Authority must evaluate impact of DPM upon these schools, and if that impact is significant, the Authority must provide mitigation measures to the impacted schools during Project construction.

1858-702 | **Greenhouse Gas Emissions**
As detailed above under *Transportation*, the VMT decrease of 20 percent claimed in the Draft EIR/S is based on outdated and unreliable data. The high utilization by 2040 assumption and associated VMT reductions are not conservative and overexaggerated and, therefore, the associated operational GHG emission reductions are unsubstantiated and should be recalculated.

1858-703 | The BAAQMD recommends the following construction GHG best management practices: 1) using alternative fueled (e.g., biodiesel, electric) construction vehicles/equipment of at least 15 percent of the fleet; 2) using local building materials of at least 10 percent; and 3) recycling or reusing at least 50 percent of construction waste and demolition materials. The Draft EIR/S should be revised to include these measures to the degree feasible.

1858-704 | **Noise and Vibration**
As with other sections of the Draft EIR/S, the noise and vibration section and supporting documents obfuscates project impacts and assumptions. Impacts to nearby sensitive receptors are summarized using small scale figures without aerial background (which would show landmarks) and with few labeled roadways (Figures 3.4-10, 3.4-15, 3.4-18, and 3.4-21 for example). Moderate and severe impacts are represented by an indistinguishable clustering of red and yellow dots. Figures 2-36, 2-53, 2-58, 2-61, and 2-64 in *Alternatives* present few labeled roadways on a grey background, making it difficult for the public to visually understand the location and extent of the proposed project alternatives. For the Morgan Hill and Gilroy Subsection, the Draft EIR/S states, “the closest school is approximately 145 feet from the existing railway line.” (*Id.* p. 3.4-30.). However, it is unclear if this is the Gilroy Preparatory School described in the next paragraph or some other school in Morgan Hill. Furthermore, this statement is incorrect as the Morgan Hill Community Adult School located at 17960 Monterey Road is immediately adjacent to the proposed Alternatives 2 and 4 alignment, and an active outdoor use area is located within 50 feet.

1858-705 | According to the Noise and Vibration Technical Report Table 5-11 (p. 5-44), the Palm Avenue to Tilton Avenue section for Alternative 2 lists the distance to the near HSR track at 722 feet for Category 3 land uses. It is explained on page 5-39 that, “the ranges shown represent a composite of many receptors and are meant to provide the upper and lower limits of these values for each geographic location... The detailed impact tables provide ranges of existing noise levels, predicted future noise levels, and predicted increase in noise levels.” However, since the Noise and Vibration Technical Report and appendices do not include the detailed rail noise calculations (including the existing ambient, the estimated future noise environment, and projected future noise increase) at individual Morgan Hill Unified School District schools, it is not possible for the reader

1858-705 | to understand the projected noise impacts at District schools. It is not clear if accurate distances were used to assess impacts at schools along this segment. For example, along the Palm Avenue to Tilton Avenue section of Alternative 2, Central High School (located at 85 Tilton Avenue) is closer than 722 feet to the proposed rail alignment. It is within 500 feet of the proposed rail alignment. Similarly, Table 5-13 (p. 5-50) reports the distance to the near HSR track as 639 feet for Category 3 land uses along the Palm Avenue to Tilton Avenue section of Alternative 4. However, Central High School is within 500 feet of the proposed rail alignment.

1858-706 | Table 5.11 of the Noise and Vibration Technical Report reports the distance to the near HSR track as 145 feet for Category 3 land uses along the California Avenue to Highland Avenue section of Alternative 2 and identifies one impact to a place of worship. However, since a range of distances is not given, it is not clear if impacts to the San Martin/Gwinn K-8 School (located at 13745 Llagas Avenue), which is located within 600 feet of the proposed rail alignment, were also evaluated. Similarly, Table 5-13 reports the distance to the near HSR track as 227 feet along the California Avenue to Highland Avenue section of Alternative 2. However, since a range of distances is not given, it is not clear if impacts to the San Martin/Gwinn K-8 School, which is located within 600 feet of the proposed rail alignment, were also evaluated.

1858-707 | Table 5.11 of the Noise and Vibration Technical Report reports the distance to the near HSR track as 111 – 586 feet for Category 3 land uses along the Tilton Avenue to Tennant Avenue section of Alternative 2. However, the Morgan Hill Community Adult School is located immediately adjacent and within 50 feet of the proposed railroad alignment.

1858-708 | In Table 5-11 of the Noise and Vibration Technical Report, the Tilton Avenue to Tennant Avenue section shows impacts to one “Micro” and one “Amp;” however, the table notes do not define either term. Impacts to three institutional uses are identified along the Tilton Avenue to Tennant Avenue section, but they are not identified. The Draft EIR/S should identify the specific properties (e.g., the District’s schools) where these numerous significant noise impacts will occur to properly understand the full impacts of the Project.

1858-709 | The Draft EIR/S adopts a significance threshold of 3 dBA increase for roadway vehicle traffic noise (p. 3-4-21). The same threshold should be applied to the predicted rail noise increases, in conjunction with the FRA criteria. Operational transportation noise is operational transportation noise whether it originates from a vehicle on a roadway or a high-speed train. For example, Table 5-10 of the Noise and Vibration Technical Report identifies a 4.7 dBA noise increase along the Burnett Avenue to Tennant Avenue section of Alternative 1 yet reports zero impacts. Had this been a noise increase from roadway vehicle traffic, the Draft EIR/S would find it to be significant. A threshold of 3 dBA should be applied to all permanent transportation noise increases in the project area, not just roadway vehicle traffic. In addition to these relative impact criteria, in order to prevent noise levels from increasing to unacceptable levels over time, absolute criteria should be considered as well. Appropriate absolute criteria for the District’s schools would be the noise and land use compatibility standards for schools shown in Table SSI-1 of the City of Morgan Hill General Plan (City of Morgan Hill 2017). If the ambient noise level changed from one classification to another, regardless of the amount of noise increase, for example, from “Conditionally Acceptable” to “Normally Unacceptable,” this would represent a significant impact.

1858-710 | Ambient noise measurement results collected between 2009 and 2017 are shown in Table 3.4-11 of the Draft EIR/S. None of these measurements were conducted at school locations. They all represent residential locations. Furthermore, it is not clear how measurement results, some collected over 10 years ago, are still valid and reliable. It may be possible that ambient measurements conducted in 2016 and 2017 are still valid, but ambient noise measurements collected in 2013 and prior should be retaken due to growth in the area and increases in roadway traffic volumes. Since the FRA criteria, which were adopted by the Draft EIR/S to assess potential project rail impacts, are dependent on the existing noise environment, the appropriate characterization of the existing ambient is crucial for the public’s understanding of the project’s true impacts.

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1858-711 | The existing ambient noise environment of Barrett Elementary School (located at 895 Barrett Avenue), which is close to US Highway 101, is not represented of any of the EIR/S ambient noise measurements. In fact, none of the Draft EIR/S ambient noise measurement locations are near US Highway 101, where Alternatives 1 and 3 are proposed in this area of the project.

1858-712 | The closest ambient noise measurement location to San Martin/Gwinn K-8 is N113. However, N113 was conducted in 2010, and the results are unreliable and should be retaken.

1858-713 | The closest ambient noise measurement location to the Lewis Britton Middle School (located at 80 W. Central Avenue) is N106. However, N106 was conducted in 2010, and the results are unreliable and should be retaken.

1858-714 | The closest ambient noise measurement location to Central High School is N101. However, N101 was immediately adjacent to the existing UPRR rail line, whereas, Central High School is set back behind two rows of residences. Measurement location N101 is not representative of the Central High School noise environment.

1858-715 | The closest ambient noise measurement location to the Morgan Hill Community Adult School is N106. However, N106 was conducted in 2010, and the results are unreliable and should be retaken.

1858-716 | The Draft EIR/S considers the startle effect of the Project and concludes that because the HSR right-of-way will be fenced off from the public, there would be no significant startle effect. (*Id.* p. 3.4-60.) But the Draft EIR/S did not consider the startle effect on special needs children. In fact, the Draft EIR/S does not consider any noise and vibration sensitivity of special education students being taught in Barrett Elementary School, Charter School of Morgan Hill, Central High School, or San Marin/Gwinn Elementary School.

1858-717 | The small scale of Figures 3.4-35, 3.4-37, and 3.4-41 from the Draft EIR/S make it very difficult for the reader to understand the location and extent of the proposed noise barriers. On Figure 3.4-41, for example, noise barrier labels overlap making it impossible to read certain noise barrier labels.

1858-718 | The Draft EIR/S discloses that construction noise would be harmful to the District students:

"Those schools within 1,000 feet of construction would be exposed to higher levels of construction noise. Most of the affected schools are in the Morgan Hill and Gilroy Subsection. Severe construction noise could temporarily disrupt children's learning ability and lease to increased stress, which could, in turn, affect children's health." (*Id.* p. 3-12-60.)

However, the Draft EIR/S and Noise and Vibration Technical Report provide no project-level analysis and quantification of construction noise levels at specific nearby sensitive receptors, such as District schools. Table 3-4-15 (p. 3.4-39) provides buffer distances to the various thresholds by receptor type. It is not clear how these thresholds (80 dBA Leq (8 hr) for daytime residential, 85 dBA Leq (8 hr) for commercial, and 90 dBA Leq (8 hr) for industrial, for example) were established. It is assumed that they are from the FRA and/or FTA, but this is not stated anywhere in the Draft EIR/S nor in the Noise and Vibration Technical Report. The buffer distances were determined by assuming that "all pieces of equipment would be located at the center of the construction site (p. 5-17 Noise and Vibration Technical Report)" Construction noise levels were determined using reference levels and utilization factor data from FHWA 2006. However, it is not possible to verify the modeling procedures because the calculations are not included in any of the appendices.

1858-719 | The Draft EIR/S employs mitigation measure NV-MM#1: Construction Noise Mitigation Measures which requires the construction contractor to create a noise-monitoring program subject only to Authority approval. (*Id.* p. 3.5-79.) This noise-monitoring program is only required to reduce construction noise to 80 dBA Leq (8 hr) for daytime residential, 85 dBA Leq (8 hr) for commercial, and 90 dBA Leq (8 hr) for industrial land uses. (*Ibid.*) NV-MM#1 is inadequate for schools, especially since it is unclear, if any, threshold of significance was used for school receptors, since none are mentioned. The Draft EIR/S should be revised to assess construction noise impacts at nearby school receptors. The World Health Organization guidelines specify 35 dBA Leq as the maximum background noise level for school classrooms. Appendix A5, Section A5.507.5, of the California Building Code specifies a maximum background noise level of no more than 45 dBA Leq in classrooms. For young children and those experiencing hearing loss and/or Auditory Processing Disorder (APD), a limit of 40 dBA is used (McLaren, SJ, and Page, WH, 2015). Assuming that standard building construction with windows closed would reduce exterior-to-interior noise levels by 25 dBA, a construction noise threshold for project construction activities affecting school classrooms of no more than 60 dBA Leq (1 hr) at the classroom façade should be adopted, and the Draft EIR/S should be revised.

1858-720 | In addition, construction noise due to the project would certainly cause a substantial temporary increase in ambient noise. The Draft EIR/S noise analysis fails to address this substantial temporary increase in ambient noise due to project construction and should be revised. We recommend that 5 to 10 dBA increase would be a reasonable range for significance threshold depending on the sensitive receptor.

1858-721 | The only mitigation proffered are a deferred Construction Management Plan (NV-IAMF#1 and SOCIO-IAMF#1) and a noise-monitoring program (NV-MM#1), that would include noise controls such as temporary noise barriers, "low-noise-emission equipment," combining noisy operations, and limiting the use of public address systems "wherever feasible" (p. 3.4-79). The construction contractor would be given the "flexibility" to reduce noise to their choosing. The Draft EIR/S fails to show how mitigation measures would reduce construction levels and the measures are vague and qualified. There is no indication that it will be feasible to implement this list of measures. The mitigation does not explain or define how the contractor would "monitor construction noise to reduce noise levels to the noise limits" and, in fact, concludes that they would not be able to and is, therefore, significant and unavoidable. NV-MM#1 fails to establish whose responsibility it would be to "reroute construction truck traffic along roadways that would cause the least disturbance to residents." This deferred noise mitigation is impermissible under CEQA and NEPA because it does not commit to employing specific project-level mitigation. It does not identify specifically which sensitive receptors would receive noise mitigation and which measures such as temporary noise barriers, would be used. More importantly, the specified Construction Management Plan in NV-IAMF#1 does not commit to mitigating the significant noise and vibration impacts to less than significant nor does it identify nor quantify what the effectiveness of the noise and vibration mitigation would be and what resulting construction noise levels would be with mitigation. Concrete noise and vibration mitigation measures for the District's schools including, but not limited to, temporary noise barriers and their proposed location and height must be identified in a revised Draft EIR/S and disclose quantified noise and vibration levels after mitigation at nearby District schools.

1858-722 | **RAILROAD SAFETY**

Per Title 5, California Code of Regulations section 14010(d), a school cannot be sited within 1,500 feet of a railroad track easement unless a railroad safety study is conducted that demonstrates that students and staff will be adequately protected. Typically, a railroad safety study (RSS) is required for all District schools that are within 1,500 feet of the Project to determine the actual or potential endangerment to school occupants from an incident (derailment or other accident) that could occur along the rail lines. In addition to an evaluation of accident/derailment rates, an RSS typically includes the need for pedestrian and vehicle

Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued



1858-722

safeguards at railroad crossings and identifying the presence of high-pressure gas lines near the tracks that could rupture in the event of a derailment.

1858-723

The Draft EIR/S includes a discussion of rail accident/incident rates (Draft EIR/S, pp. 3.11-32), identifies schools within a quarter-mile of rail lines (*Id.* Table 3.11-6, p. 3.11-34), and discusses the Project's safety and security hazards to schools along the various alignments and acknowledges that schools could be impacted by train accidents and derailments (*Id.* p. 3.11-74). Project design features are discussed, such as containment parapets, check rails, derailment walls, as well as the positive train control (PTC) system. However, the Draft EIR/S lacks any such analysis to clearly determine if these measures would be placed in proximity to school sites proximate to HSR lines and easements (i.e., Charter School of Morgan Hill, Central High School, and Barrett Elementary School). The Draft EIR/S does not discuss crossing safeguards for pedestrians and vehicles, nor the presence of high-pressure gas pipelines within railroad rights-of-way or crossing tracks. Additionally, the EIR/S should include a discussion of the distance which could be impacted from a high-speed derailment (i.e., distance debris from a derailment could extend from the railroad easement), and how included project design features would reduce these impact distances. As several District schools are within 1,500 feet of HSR easements, including the Morgan Hill Community Adult School, which is 50 feet from the proposed rail alignment in Alternatives 2 and 4, determining the impact distances from derailments/accidents is needed to make significance conclusions. A study conducted by the Los Angeles Unified School District (LAUSD) indicated that debris from a derailment typically extends no more than 128 feet (about 1.5 rail car lengths) from the centerline of the track, which indicates that the Adult School could be damaged in the event of a derailment.¹

1858-724

EMF/EMI & POWER LINES

Per Title 5, California Code of Regulations section 14010(c), a school site must have the following setbacks to power line easements:

- (1) **100 FEET FROM 50-133 KV LINE;**
- (2) **150 FEET FROM A 220-230 KV LINE; AND**
- (3) **350 FEET FROM A 500-550 KV LINE.**

The Draft EIR/S analyzes the Project's Electromagnetic Field (EMF) and Electromotive Interference (EMI) along the various alignments and acknowledges that schools are sensitive receptors to EMF/EMI (*Id.* p. 3.5-1). Although, the Draft EIR/S analysis includes modeling magnetic field strength for several District schools (see *Id.* Table 3.5-11, p. 3.5-26 and p. 3.5-27), none of the locations where EMF measurement were collected include a District school site (see *Id.* Table 3.5-8, p. 3.5-16, Figure 3.5-3, p. 3.5-19.). Additionally, the Draft EIR/S lacks a discussion of potential EMF impacts from tracks or easements to school sites located at distances less than the setback requirements under section 14010(c).

1858-725

The Draft EIR/S should include discussion of how the modeled magnetic field results compare to background levels, and how school sites in close proximity (<350 feet) to the HSR easement are impacted by EMF. For instance, the modeled magnetic field strength at Charter School of Morgan Hill is 82.8 milligauss (mG) for Alternative 4 (see *Id.* Table 3.5-11, p. 3.5-27). This magnetic field value appears to be 7 to 80 times higher than field values measured for other Alternatives near the school, or values measured at other District

¹ Los Angeles Unified School District (LAUSD), 2005. Train Derailment – Preliminary Evaluation of Railcar and Load Debris Encroachment Distances. Prepared by Wilson Geosciences, Inc., Altadena, CA. February 2005.

1858-725

schools. The EMF impacts from the Project for this scenario, and other similar scenarios where schools are proximate to HSR easements, should be further discussed including comparison to background EMF levels in the area.

1858-726

ECONOMIC IMPACTS

Table 3.12-15 of the Draft EIR/S acknowledges that Alternative 2 would greatly affect the Morgan Hill Unified School District's funding as a result of property tax revenue loss from property acquisitions. In fact, the loss to the District of \$1,125,832 is a clear outlier, greatly exceeding the loss to any other district under any other scenario. While this loss is quantified and acknowledged in the Draft EIR/S, it is not accurately reflected in the impact summaries.

Specifically, the Draft EIR/S improperly aggregates economic impacts for the study area as a whole in a way that obfuscates the true impact of Alternative 2 on the Morgan Hill Unified School District. Table 3.12-23 states regarding Alternative 2, "Decrease in property tax revenues from 603 residential displacements and a maximum of 318 student relocations would represent 0.000005% of total annual school funding sources." By representing revenue loss as an aggregate figure, the significant impact to the Morgan Hill Unified School District is ignored.

1858-727

In addition, The Draft EIR/S states on page 3.12-77, "The greatest percentage of total enrollment that would be relocated would be in the Morgan Hill School District in Santa Clara County under Alternative 2, but this would not materially affect school district funding." The District disagrees with this assessment; a loss of \$1,125,832 in property tax revenue would indeed have a material effect on the District's funding, as it represents a 1.7% reduction of the District's Unrestricted General Fund annual operating budget of \$65,394,803.

This concludes our comments on the subject Draft EIR/S.

Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

RESUMES



STEVEN BUSH, PE
Senior Associate

Steve Bush, PE, Senior Associate is member of both the Environmental Sciences and the CEQA teams, Steve's skill set covers a wide range of technical services. He leads our Title 5 risk assessment practice for school construction and modernization projects (Air Toxics/Health Risk, Pipeline Safety, Railroad Safety, EMF), and applies his knowledge and skills to sampling and data analysis for Phase I environmental site assessments (ESA), and site investigations. He has also done extensive work with soil and groundwater sampling, air monitoring, and stormwater analysis and management. As a member of the Environmental Sciences team, Steve has completed numerous Hydrology and Water Quality analyses for a variety of projects, including proposed school sites and commercial properties.

EDUCATION

- » MS, Chemical Engineering, University of California, Los Angeles
- » BS, Chemical Engineering, University of California, Santa Barbara CA

REGISTRATION

- » State of California Professional Engineer No. 83997

HIGHLIGHTS OF EXPERIENCE

ENVIRONMENTAL AND HEALTH RISK ASSESSMENTS

- » Thornton Junior High School Expansion CEQA and Environmental Site Assessment Services, Fremont, CA
- » Measure E Bond Program CEQA and Site Assessment Services, Fremont, CA
- » Napa Valley Unified School District Measure H CEQA Review, Napa CA
- » 4840/4950 Mission Street Mixed Use EIR, San Francisco CA
- » Hayward Unified School District Master CEQA Services, Hayward CA
- » Tennyson High School CEQA Services, Hayward CA
- » Hayward High School CEQA Services, Hayward CA
- » Mount Eden High School CEQA Services, Hayward CA
- » San Mateo-Foster City Charter Square K-5 School CEQA Services, San Mateo CA
- » 2016 CEQA Economic Benefits Study
- » Civita Elementary School EIR Addendum, San Diego CA
- » BART to Livermore Program EIR, Bay Area Rapid Transit District (BART)
- » BART to Livermore Project EIR, Bay Area Rapid Transit District (BART)
- » Vallejo General Plan EIR, Vallejo CA
- » Vacaville General Plan Update EIR, Vacaville CA
- » Measure H Bond Program CEQA Consultant Services for the Napa Unified School District, Napa CA
- » Water Pipeline Safety Hazard Assessment for New Court Community School for the Napa County Office of Education, Napa CA
- » Borello Elementary School EMF Survey and Field Management Plan for the Morgan Hill Unified School District, Morgan Hill, CA
- » Health Risk Assessment and Railroad Safety Study for Martin Luther King Jr Middle School, Hayward CA
- » CEQA and Environmental Site Assessment Services for the Fremont Unified School District, Fremont CA
- » Clayton Valley Charter High School Preliminary Fatal Flaw Analysis, Concord CA
- » Rail Safety Study and Pipeline Safety Hazard Assessment for Pittsburg School Campus, Pittsburg, CA
- » Hydrology- FEMA Zone D Determination for New Elementary School, Gilroy, CA
- » Dam Inundation Study for New Elementary School Site, Gilroy, CA
- » Pipeline Safety Hazard Assessment for Borello Property Proposed K-6 School Site, Morgan Hill, CA

CERTIFICATIONS

- » 40 Hour HAZWOPER
- » CPR and First Aid

Team member since 2007



Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

NICOLE VERMILION
Principal
nvermilion@placeworks.com

warehouse/industrial projects in the City of Industry; 2000 Marina Boulevard Tech Studios- AQ/GHG in San Leandro; Cordes Ranch Annexation Specific Plan in Tracy; Dixon Northeast Quadrant Specific Plan Addendum in Dixon; CenterPoint Properties Warehouse in Richmond

Additional Projects:

- » City of Industry Climate Action Plan | City of Industry CA
- » TIGER II Grant for the San Bernardino International Airport | Highland CA
- » Antelope Valley Area Plan EIR | County of Los Angeles CA
- » Concord Hills Regional Park EIR | East Bay Regional Parks District CA
- » 1700 Dell Avenue Office EIR | Campbell CA
- » Measure E Bond Program CEQA and Site Assessment Services | Fremont

CEQA PROJECTS MANAGED BY NICOLE VERMILION

- » City of Irvine CEQA Manual | Irvine CA
- » General Plan EIRs: Corona, Irvine, Los Alamitos, Ontario, Yucca Valley, Yucaipa
- » Specific Plan EIRs: Brea, Cal State Fullerton/City of Fullerton, Hemet, Yucaipa
- » Residential Project EIRs: Anaheim, Brea, Claremont, Mission Viejo
- » Colton Safety Element MND | Colton CA
- » Agua Mansa Logistics Center Addendum | Colton CA
- » Colton Southwest Regional Operations Center MND | Colton CA
- » Irvine Business Complex EIR and GHG Inventory | Irvine CA

ACTIVITIES

- » Climate Change Committee | California AEP
- » CalEEMod Beta-Tester | South Coast Air Quality Management District

SPEAKING ENGAGEMENTS

- » "All About the Offsets – Mitigating GHG Impacts with GHG Credits" | AEP February 2020 | Irvine CA
- » "CEQA GHG Emissions Thresholds: The Past, Present and Future – Bracing for Climate Change: Strategies for Mitigation and Resiliency" | Air and Waste Management Association December 2019 | Santa Barbara CA
- » "Climate Change and Air Quality Workshop – Linking Project level emissions with Health Impacts: What does the Friant Ranch Case tell us? What is required for a CEQA analysis?" | 2019 AEP CA State Conference | Monterey CA
- » "When is it Defensible to Mitigate CEQA GHG Emissions Impacts with GHG Credits?" | 2019 AEP CA State Conference | Monterey CA
- » "Beyond Newhall and 2020: A Field Guide to New CEQA GHG Thresholds and Climate Action Plan Targets for California" | 2016 AEP CA State Conference | San Diego CA
- » "Post-2020 Reduction Targets in Climate Action Plans," AEP Climate Change Committee | 2015 AEP CA State Conference | Santa Barbara CA
- » "Climate Action Plans That Comply with CEQA" | 2014 AEP CA State Conference
- » "Health Risk Challenges of Siting Housing near High-Volume Roadways" | 2014 AEP California State Conference | Huntington Beach CA

ARTICLES AND PUBLICATIONS**AEP CLIMATE CHANGE COMMITTEE WHITE PAPERS**

- » AEP Climate Change Committee White Papers/Articles/Comment Letters
 - "We Can Model Regional Emissions, But Are the Results Meaningful for CEQA?" Jan. 2020
 - "Comments on CARB's 2017 Draft Climate Change Scoping Plan Update, Jan. 2017
 - "The Proposed Strategy for Achieving California's 2030 GHG Target," Apr. 2017
 - Final White Paper "Beyond 2020 and Newhall: A Field Guide to New CEQA GHG Thresholds and Climate Action Plan Targets for California," Oct. 2016
 - "Beyond 2020: The Challenge of GHG Reduction Planning by Local Governments in California," Mar. 2015
 - "Assessment of SEEC ClearPath California Tool," Nov. 2014
 - "Forecasting Community-Wide GHG Emissions & Setting Reduction Targets," May 2012
- » "Tiering Off Climate Action Plans: Potential Advantages to Jurisdictions under the Proposed CEQA Guidelines," Environmental Monitor (AEP), Fall 2009
- » "Getting Serious on Global Warming," Green Home Builder, October 2007



JOSHUA CARMAN, INCE-USA
Senior Associate, Noise & Vibration

Joshua Carman has 20 years of experience in the field of acoustics and air quality and has participated in the environmental review and monitoring process for a diversity of projects in California, Washington, Nevada, and New York. Joshua prepares noise, air quality/greenhouse gas and community health risk assessments for environmental impact studies (CEQA/NEPA) and technical studies using federal, state, and local guidelines and methodology. His experience includes complex project- and program-level analyses of General Plan updates; Specific Plans; mixed-use development; traffic, transit and rail; vibration-sensitive; industrial; infrastructure, utilities, and telecommunications; long-term and remote construction noise and vibration monitoring; and underwater construction (e.g., pile driving and blasting) projects. He is certified in the use of the FHWA's Traffic Noise Model (TNM) and the US EPA AERMOD air dispersion model.

Joshua's project experience includes conducting the noise modeling, analysis and preparation of the noise assessment for the Prologis warehouse project in Los Angeles, the noise study report for the Mid-County Parkway EIR/EIS, a 16-mile transportation corridor in Riverside County; the air quality and GHG study for the Valco Specific Plan in Cupertino; noise and vibration measurements for the VTA Silicon Valley Rapid Transit Extension; long-term construction noise and vibration monitoring for the EBMUD Summit Reservoir Replacement Project; and the Title 24 acoustical study for the Lincoln at Euclid residential development in Anaheim.

HIGHLIGHTS OF EXPERIENCE

- » San Bernardino Countywide General Plan Update EIR, Noise, San Bernardino County CA
- » Broadway Mixed-Use EIR, Redwood City CA
- » Cardiff Elementary School EIR, Encinitas CA
- » Brookside Drive Industrial Project Noise Technical Report, North Richmond CA
- » Dell Avenue Office Project EIR, Campbell CA
- » Etiwanda Avenue Truck Restriction Ordinance EIR, Jurupa Valley CA
- » Cupertino Village Hotel IS/MND, Cupertino CA
- » Hayward Downtown Specific Plan EIR, Hayward CA
- » Hunt Cancer Center CALGreen Acoustical Study, Torrance CA
- » In N Out Drive-Through Noise Peer Review and EIR, Campbell CA
- » SpaceX Test Tunnel NOE, Hawthorne CA
- » 7-Eleven Car Wash Noise Technical Report, San Jacinto CA

PRIOR EXPERIENCE**NOISE EXPERIENCE**

- » The Block Temporary Residence Project Noise and Community Health Risk Assessments, Santa Rosa CA
- » Dougherty Road Improvement Project Noise Assessment, Dublin CA
- » East Bay Municipal Utility District Summit Reservoir Noise & Vibration Monitoring, Berkeley CA
- » Forestville Town Park Ambient Noise Measurements, Forestville CA
- » Naval Base Kitsap at Bangor, Hydroacoustic and Construction Noise Monitoring, Silverdale WA
- » Route 101/De La Cruz Boulevard/Trimble Road Reconstruction Project Noise

EDUCATION

- » BA, Environmental Studies
University of California, Santa Cruz

CERTIFICATIONS

- » SoundPLAN (2018), Navcon Engineering, Fullerton, CA
- » US EPA AERMOD (2015), Lakes Environmental, Las Vegas, NV
- » FHWA – Traffic Noise Model 2.5 (2011), Bowly & Associates, Inc., Brentwood, TN
- » Noise Control for Buildings, Manufacturing Plants, Equipment and Products (2008), Hoover & Keith, Houston, TX
- » Principles of Acoustics and the Measurement of Sound (2005), Brüel & Kjaer, Los Angeles, CA
- » Principles of Vibration Measurement and Analysis (2005), Brüel & Kjaer, Los Angeles, CA

AFFILIATIONS

- » Association of Environmental Professionals, SF Bay VP of Events (East Bay)
- » Institute of Noise Control Engineering (INCE-USA)

Team member since 2018



Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

JOSHUA CARMAN
Senior Associate
jcarman@placeworks.com

- » Study Report, Santa Clara County CA
- » San Francisco Public Utilities Commission Regional Groundwater Storage and Recovery Project Noise and Air Quality/GHG Assessments, Bay Area CA
- » BART Rock Blanket Vibration Monitoring, Bay Area CA
- » NYCTA No. 7 Line Ambient Vibration Monitoring, New York NY
- » Smith Performing Arts Center Vibration Measurements, Las Vegas NV
- » Conoco Phillips Refinery Noise Testing, Rodeo CA
- » Orange County Municipal Waste District Gravity Sewer Ambient Vibration Measurements, Newport Beach CA
- » New College Construction Vibration Monitoring, San Francisco CA
- » SF Metropolitan Luxury Condos Floor-Ceiling Assembly Testing, San Francisco CA
- » Freepoint Water In-Take Facility Hydroacoustic Monitoring, Freepoint CA
- » Harry Tracy Water Treatment Plant Long-Term Improvements Noise Assessment, San Francisco Public Utilities Commission CA
- » MTA Gold Line Eastside Extension Noise Measurements, Los Angeles CA
- » VTA Silicon Valley Rapid Transit Extension Noise and Vibration Measurements, Bay Area CA
- » Hyatt Hotel Sound Wall Recommendations, Monterey CA
- » BART Earthquake Safety Program Construction Noise and Vibration Monitoring, San Francisco CA
- » Fort Cady Road Quarry Noise Assessment, San Bernardino County CA
- » Fourth Street Bridge Rehabilitation Hydroacoustic Monitoring, San Francisco CA
- » East Bay Municipal Utility District Claremont Tunnel Long-Term Construction Noise Monitoring, Oakland CA
- » Third Street Light Rail Transit Construction Vibration Monitoring, San Francisco CA
- » California High Speed Rail Program EIR, Noise and Vibration, California High Speed Rail Authority CA
- » Hollister Hills State Vehicular Recreation Area Noise Monitoring, San Benito County CA

AQ/GHG/HRA EXPERIENCE

- » Valco Specific Plan Air Quality/GHG Assessment, Cupertino, CA
- » East Palo Alto Arts and Music Center Air Quality/GHG Assessment, East Palo Alto CA
- » East Palo Alto General Plan Update EIR, Air Quality, GHG, East Palo Alto CA
- » Aperture Cellars Winery and Tasting Room GHG Assessment, Healdsburg CA
- » Hattesen Solar Generation Facility Air Quality/GHG Assessment, Kings County CA
- » Kaiser Los Gatos Medical Office Building Air Quality/GHG Assessment, San Rafael CA
- » Lawrence Station Area Plan Air Quality/GHG Assessment, Santa Clara CA
- » Martinez General Plan Update EIR, Air Quality/GHG, Martinez CA
- » Mill District Mixed-Use Project Air Quality/GHG Assessment and Ambient Noise Measurements, Healdsburg CA
- » Modesto General Plan Update EIR, Air Quality/GHG, Modesto CA
- » North Bayshore Precise Plan Air Quality/GHG Assessment, Mountain View CA
- » Saint Mary's College Campus Master Plan Air Quality/GHG Assessment, Moraga CA
- » San Carlos Tierra Linda School Air Quality/GHG Assessment, San Carlos CA
- » Santa Clara County Civic Center Master Plan Air Quality/GHG Assessment, San Jose CA
- » Santa Rosa Junior College Science and Math Replacement Project Community Risk Assessment, Santa Rosa CA
- » Silicon Sage Mixed-Use Project Air Quality/GHG Assessment, Fremont CA
- » So Hay Mixed-Use Project Air Quality/GHG Assessment, Hayward CA
- » Solstice Sonoma Rural Lodging, Recreation and Event Facility GHG Assessment, Sonoma County CA
- » Stonegate Subdivision Air Quality/GHG Assessment, Chico CA
- » Southern Humboldt Park Air Quality/GHG Assessment, Humboldt County CA
- » SVCW Wastewater Treatment Plan Improvements Phase 2 Air Quality Assessment, Redwood City CA
- » Topgolf Entertainment Complex and Hotel Air Quality Assessment, San Jose CA
- » West Sacramento Corporation Yard Air Quality/GHG Assessment, Sacramento CA



ALEXIS MENA, LEED AP
Senior Associate

A team member of PlaceWorks since 2008, Alexis brings valuable experience in both the public and private sectors. As a project manager, she is organized and detail-oriented, works collaboratively with her clients, thinks strategically, and maintains a flexible and responsive work process. She is highly committed to providing high-quality graphic and written products on schedule and on budget.

Alexis' work at PlaceWorks has focused on environmental review and planning for a range of land use, smart growth, urban design, and sustainability projects. She recently served as project manager for the Broadway Plaza EIR for the City of Redwood City; Campbell In-N-Out Burger Project EIR and 1700 Dell Office Development Project EIR for the City of Campbell; Comprehensive Plan Update EIR for the City of Palo Alto; Concord Hill Land Use Plan EIR for the East Bay Regional Park District; and General Plan Update EIR for the City of San Leandro. Alexis is managing the zoning analysis for the Assembly Bill 2923 project for Bay Area Rapid Transit, as a subconsultant to Bard Consulting, and she managed the land use analysis for the Dumbarton Rail Corridor Project for SamTrans/Caltrain/Peninsula Corridor Joint Powers Board, as a subconsultant to Wilbur Smith. She has also served as key staff for the Transfer of Development Rights Feasibility Study for the Southeastern Regional Planning and Development District, the Napa Pipe Site EIR and Napa County Housing Element EIR for Napa County, the Tracy General Plan Amendment and Supplemental EIR and Sustainability Action Plan for the City of Tracy, and the City of Alameda Community-Based Transportation Plan for the Alameda County Congestion Management Agency.

EDUCATION

- » Master of City and Regional Planning, University of California, Berkeley
- » Bachelor of Arts, Vassar College

CERTIFICATIONS

- » Leadership in Energy and Environmental Design Accredited Professional (LEED AP)

AFFILIATIONS

- » American Planning Association

Team member since 2008

HIGHLIGHTS OF EXPERIENCE

COMPREHENSIVE PLANNING

- » Los Gatos Housing Element Update and General Plan 2020 EIR Addendum, Los Gatos CA
- » Buildout projections for the Comprehensive Plan Update and Transportation Impact Fee Nexus Study, Palo Alto CA
- » Tracy General Plan and EIR, Tracy CA
- » Tracy Sustainability Action Plan, Tracy CA
- » Napa Housing Element Update and EIR, Napa County CA
- » Menlo Park Housing Element Assistance, General Plan Update, and Environmental Review, Menlo Park CA

ENVIRONMENTAL REVIEW

- » Campbell In-N-Out Burger Project EIR, Campbell CA
- » 1700 Dell Office Development Project EIR, Campbell CA
- » Broadway Plaza EIR, Redwood City CA
- » Comprehensive Plan Update EIR, Palo Alto CA
- » Concord Hills Land Use Plan EIR for the East Bay Regional Park District, Concord CA
- » 975-1075 Main Street Retail Project IS/MND, Watsonville CA
- » General Plan Update EIR, San Leandro CA
- » General Plan 2020 EIR Addendum for the Affordable Housing Overlay Zone, Los Gatos CA
- » Alviso Park Master Plan Update and IS/MND, San Jose CA



Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

ALEXIS MENA
Senior Associate
amena@placeworks.com

- » Cordes Ranch Specific Plan Review and EIR, Tracy CA
- » Downtown Specific Plan EIR, Lafayette CA
- » Martial Cottle Park State Park General Plan/County Park, Santa Clara County
- » Napa Pipe Site EIR, Napa County CA
- » The Terraces of Lafayette/Homes at Deer Hill EIR, Lafayette CA

TRANSPORTATION PLANNING

- » Assembly Bill 2923 Zoning Analysis for Bay Area Rapid Transit
- » Dumbarton Rail Corridor Project, SamTrans/Caltrain/Peninsula Corridor Joint Powers Board
- » Alameda Community-Based Transportation Plan, Alameda County Congestion Management Agency

TRANSFER OF DEVELOPMENT RIGHTS

- » Transfer of Development Rights Feasibility Study, Southeastern Regional Planning and Economic Development District

PRIOR EXPERIENCE

- » Mineta Transportation Institute, San Jose CA
- » City of Berkeley, Berkeley CA

PUBLICATIONS

- » “Connecting Transportation Decision Making with Responsible Land Use: State and Regional Policies, Programs, and Incentives”, Mineta Transportation Institute, 2008

AWARDS

- » 2011 American Planning Association California Chapter Innovation in Green Community Planning Award, Martial Cottle Park Master Plan, Santa Clara County CA
- » 2011 American Planning Association Northern California Chapter Innovation in Green Community Planning Award, Martial Cottle Park Master Plan, Santa Clara County CA
- » 2007 American Planning Association Honorable Mention, Information Technology Division Student Paper Competition, “Urban Development and Infrastructure For The High-Tech: The Plan for a Wireless Silicon Valley”
- » Department and General Honors, Vassar College, 2005



NICOLE VERMILION
Principal, Air Quality, GHG, and Noise Services

Nicole oversees project staffing and timing for the air quality, greenhouse gas (GHG), and noise technical team’s impact evaluations under CEQA. She is responsible for expanding and fine-tuning the team based on changes in technology, legislation, and client needs and for ensuring that PlaceWorks air quality and GHG studies are defensible and consistent with recent case law. She closely follows the rapid changes in requirements and the latest information on CEQA thresholds and analysis methodology. She has performed numerous GHG emissions inventories for individual projects as well as citywide emissions inventories for general plans.

Nicole frequently presents at conferences, including the California Chapters of both APA and AEP. She participated in the San Joaquin Valley Air Pollution Control District’s CEQA GHG significance thresholds working group for development projects and is a beta tester for the CalEEMod program. As a member of AEP’s Climate Change Committee, Nicole has contributed to white papers addressing GHG emissions inventories for climate action plans and general plans, post-2020 GHG thresholds, and Friant Ranch.

HIGHLIGHTS OF EXPERIENCE

AIR QUALITY AND GHG ANALYSES

- » **General Plan EIRs:** Counties of Contra Costa, Los Angeles, and San Bernardino; and the Cities of Clovis, Cupertino, El Monte, Highland, Industry, La Habra, Long Beach, Menlo Park, Morgan Hill, Newark, Newport Beach, Palm Springs, Palo Alto, Pasadena, Rancho Mirage, San Clemente, San Leandro, San Rafael, Santa Ana, Sierra Madre, Stockton, Temple City, Torrance, Tulare, Vacaville, Vallejo, and Westminster
- » **Corridor, TOD, Station Area Specific Plan EIRs:** Valley Corridor, San Bernardino County; Connect Southwest LA TOD and West Carson TOD, Los Angeles County; Beach Boulevard, Anaheim; Midtown, Long Beach; Millbrae Station, Millbrae
- » **Downtown/Town Center and Civic Center Projects:** Men’s Central Jail (Treatment Center) for LA County, Laguna Niguel Town Center; Orange County Civic Center; Downtown Hayward Specific Plan; Atherton Civic Center; Walnut Creek Downtown Specific Plan; Del Avenue Specific Plan
- » **Hotel Projects:** Hyatt Regency Newport Beach; Courtyard Marriott Glendale; DeAnza and Village Hotels in Cupertino; Hilton Garden Inns in Walnut Creek and San Jose; Anabella Hotel Anaheim
- » **Senior Living and Medical Facility Projects:** Newport Beach Vivante Senior Living; Torrance Memorial New Main Tower Project; Del Amo Senior Village; Kaiser Medical Centers in Irvine and Anaheim; City of Hope Cancer Research Center Expansion in the cities of Duarte & Irwindale; The Springs at Bethsaida Senior Living in Tustin
- » **Retail Centers and Mixed-Use Developments:** Brea Mall, Brea Plaza, Broadway Mixed-Use project in Redwood City; Serramonte Shopping Center Expansion in Daly City; Fresno El Paseo Marketplace in Fresno; Platinum Triangle Marketplace in Highland; San Leandro Shoreline Development; Butcher’s Corner in Sunnyvale;
- » **Industrial Projects:** Proposed Rule 2305 Indirect Source Review – Warehouses Environmental Assessment for SCAQMD; Prologis Warehouse EIR in Los Angeles; CenterPoint Properties Warehouse at Greenleaf Avenue in Santa Fe Springs; Ontario Ranch Specific Plan EIR; Agua Mansa Logistics Center Addendum and Colton Southwest Regional Operations Center IS/MND in Colton; 12+

EDUCATION

- » Master of Urban & Regional Planning, University of California, Irvine
- » BS with Honors, Ecology & Evolutionary Biology, University of California, Santa Cruz
- » BA with Honors, Environmental Studies, University of California, Santa Cruz

AFFILIATIONS

- » American Planning Association (APA)
- » Association of Environmental Professionals (AEP)

Team member since 2004



Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

STEVEN BUSH
Senior Associate
sbush@placeworks.com

- » Health Risk Assessment, Pipeline Safety Hazard Assessment, and Rail Safety Study for Lomita Park Elementary School, Millbrae, CA
- » Pipeline Safety Hazard Assessment for Former Lafayette Library, Lafayette, CA
- » Santa Rosa Charter School for the Arts Improvement Project IS/MND, Santa Rosa CA
- » Tracy Learning Center (Charter School) HRA/Title 5 Review, Tracy CA
- » Wiseburn New High School EIR, Hawthorne CA
- » Health Risk Assessment, Pipeline Safety Hazard Assessment, and Railroad Safety Study for Pioneer High School, Whittier CA
- » Health Risk Assessments for Central Region Elementary School and South Region Span K-8 #1, Los Angeles CA
- » Rail and Pipeline Safety Studies, San Luis Coastal USD
- » Aboveground Water Tank Safety Hazard Assessment, Waterstone Environmental, Inc.
- » Health Risk Assessment for Irvine Technology Center, Irvine CA
- » Pipeline Safety Hazard Assessment, Manteca CA
- » CNG and Propane Risk Assessment for Ramona Elementary, Moreno Valley CA

AIR QUALITY/GHG AND CEQA

- » Valhalla Inn by the Bay Initial Study, Sausalito CA
- » The Landing at Walnut Creek Apartments EIR, Walnut Creek CA
- » Air Quality and Greenhouse Gas Analyses for Ocean Outlets Maintenance Manual, Orange County Flood Control District
- » Air Quality and Greenhouse Gas Analyses for Breuner Marsh Restoration, Richmond CA

SITE INVESTIGATION

- » Environmental Oversight of Remedial Action Plan for LAUSD Central Region Elementary School No. 20, Los Angeles CA
- » Site Remediation for former Sargent Industries Property, Huntington Park CA
- » Phase I Environmental Site Assessments for City Recreation and Parks, Los Angeles CA
- » Fontana USD High School Site No. 5, Fontana CA
- » Alessandro Boulevard and Kitching Street Alternative High School Site, Moreno Valley CA
- » High School No. 5 Alternate Sites EIR, Moreno Valley CA
- » Citrus Heritage Middle School IS/MND, Riverside CA
- » Tri-City Community Day School IS/MND, San Bernardino County Superintendent of Schools
- » AZ Winter Mesa Towing Site Subdivision EIR, Malibu CA
- » Crummer Site Subdivision EIR, Malibu CA

PUBLICATIONS

- » With J. Curren, S. Ha, M. Stenstrom, S. Lau, and I.H. Suffet, "Identification of subwatershed sources for chlorinated pesticides and polychlorinated biphenyls in the Ballona Creek watershed," *Science of The Total Environment* 403, no. 13 (2011): 2525-33
- » With M. Philibert, F. L. Rosario-Ortiz, and I. H. Suffet, "Advances in the characterization of the polarity of DOM under ambient water quality conditions using the polarity rapid assessment method," *Water Science & Technology: Water Supply* 8, no. 6 (2008): 725-733

AWARDS

- » Engineering Honor Society, Tau Beta Pi, 2002



Morgan Hill Unified School District
15600 Concord Circle
Morgan Hill, CA 95037
408-201-6040

SPECIAL EDUCATION DEPARTMENT

RE: High Speed Rail Impact on Special Needs Populations

To Whom it May Concern:

I understand that part of the large scale plan for high speed rail is to use existing lines through Morgan Hill. I am an educational psychologist and Director of Special Education programs in Morgan Hill, California and would like to express my grave concerns regarding the social-emotional, academic, sensory and psychological impact that the additional number and increased vibration and noise would have on specific populations directly affected by this proposal.

In particular I am addressing the needs of learning disabled, moderate to severely handicapped students and students with high intense social emotional and mental health needs at both Central High School (Central) and San Martin Gwinn School (SMG). Central is home to two populations of students. We have a group of students, age 18-22, whose specific needs relate to significant social and cognitive deficits. The second group present with serious and significant social and emotional deficits (ED). SMG has a population of students whose needs are related to a range of cognitive deficits from moderate to severe including intellectual disabilities and autism.

1858-728

The body of evidence demonstrating the negative impact of significant sound and vibrations on student learning is unequivocal, however the impact of a high-speed rail, with more intense, frequent and significant vibration, noise, and potential warning signals such as loud horns; running directly adjacent to schools that house these populations can only yield an exponentially negative impact on student learning for these students, not to mention a very eminent and serious safety hazard. To be specific, when considering all of our special needs populations it is of extreme concern that frequent and sudden noise such as that of a high speed rail has a direct and lasting impact on cognitive functioning (Shield & Dockrell, 2003) and reading ability (Bronzaft & McCarthy, 1975). These effects on all children can only lead to increased challenges in students who are significantly learning handicapped and sensorily compromised. Non-auditory health effects of noise disturbance, exacerbated by acoustical interference of vibrations on children and mental illness are well documented, and include increased agitation and annoyance in those with mental health issues (Stansfeld & Matheson, 2003). Additionally, the World Health Organization specifically notes that children with special learning needs are particularly vulnerable to noise. This vulnerability affects a child's ability to develop coping strategies as well as leading to lifelong impairment of learning and education. Indirect effects can include stress-related somatic effects, muscle spasm, psychological effects, annoyance, mental health and cognitive effects including problems with reading, concentration, memory, attention (WHO, 2016).

Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

1858-729

An additional concern is the impact of the high speed train on our population of students with autism at SMG and Central. Students with autism have a particularly high sensitivity to aural, sensorial, and physiological stimulation. Specific sounds associated with train noise and vibration are known to increase distress for students on the autism spectrum, including sirens, whistles, bells and machinery noise (McLaren & Page, 2015). Children with autism are particularly vulnerable to noise that includes reverberation (Kanakri, Shepley, Varni, & Tassinari, 2017). Teams spend hours finding ways to mitigate the effects of small sensory changes in the environment of these students. Something as simple as the alarm from fire drills that occur a few times per year can take hours of preparation and de-escalation for some students with autism. The effects on learning, anxiety and social emotional functioning that the addition of a significant increase in frequency of unexpected sound, reverberation and alarm for a horn from a high speed rail are both well documented and extremely detrimental at best. Students with autism would potentially be placed in a perpetual sense of heightened stimulation affecting their ability to communicate, learn, and self-regulate.

1858-730

Finally, I have grave concerns for our populations of students with severe and significant emotional needs. These are students that have emotional issues so significant that they cannot be in a mainstream environment on a regular basis. While the effects of noise such as a high speed rail on annoyance in this population (Shield & Dockrell, 2003) are evident, I am additionally concerned about how, in this group, there is an additional safety factor. Students with ED have decreased coping skills and increased likelihood to exhibit a fight or flight reaction when presented with anxiety, annoyance, or increased demands on their internal regulation and sensory protection systems. When this occurs, risk of elopement is increased and a railroad that has significantly increased traffic, noise, and speed presents an increased risk for impact for students in crisis.

In summary, as an educational psychologist, Director of Special education, and doctor of educational leadership, I have grave concerns about the impact and proximity of this high speed rail to our schools. Effects of subsequent noise, vibration, and frequency on the learning, cognition, coping, and safety of our special needs populations puts these students at particular risk because of the proposed location of this project.

Sincerely,



Rebecca O'Brien, Ed.D, M.S
Director, Special Education

References:

- Bronzaft, A. L., & McCarthy, D. P. (1975). The Effect of Elevated Train Noise On Reading Ability. *Environment and Behavior*, 7 4), 517-528. doi:10.1177/001391657500700406
- Kanakri, S. M., Shepley, M., Varni, J. W., & Tassinari, L. G. (2017). Noise and autism spectrum disorder in children: An exploratory survey. *Research in Developmental Disabilities*, 63, 85-94. doi:10.1016/j.ridd.2017.02.004
- McLaren S., Page W. (2015). Noise and implications for children with autism spectrum disorder in mainstream education. *Neurological Disorders and Epilepsy*. 2 1): 1009.
- Shield, B. M., & Dockrell, J. E. (2003). The Effects of Noise on Children at School: A Review. *Building Acoustics*, 10 2), 97-116. doi:10.1260/135101003768965960
- Stansfeld, S. A., & Matheson, M. P. (2003). Noise pollution: Non-auditory effects on health. *British Medical Bulletin*, 68 1), 243-257. doi:10.1093/bmb/ldg033
- WHO (2016). World Health Organization. Training for health care providers: children and noise. Retrieved from:<https://www.who.int/ceh/capacity/noise.pdf?ua=1>

Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued



Certificate Of Completion

Envelope Id: 2F89D7846ECE4DF7AB1F335C21525386 Status: Completed
 Subject: Final Letter regarding High Speed Rail and SPED students with refe...
 Source Envelope:
 Document Pages: 3 Signatures: 1 Envelope Originator:
 Certificate Pages: 1 Initials: 0 Rebecca O'Brien
 AutoNav: Enabled obrienr@mhusd.org
 Enveloped Stamping: Disabled IP Address: 64.207.219.8
 Time Zone: (UTC-08:00) Pacific Time (US & Canada)



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 Morgan Hill, CA 95037
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Signer Events

Signature	Timestamp
Rebecca O'Brien obrienr@mhusd.org	Sent: 6/4/2020 10:31:14 PM Viewed: 6/4/2020 10:32:17 PM Signed: 6/4/2020 10:32:42 PM
Rebecca O'Brien Security Level: Email, Account Authentication (None)	Freeform Signing
Signature Adoption: Pre-selected Style Using IP Address: 216.139.38.205	

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Certified Delivered	Security Checked 6/4/2020 10:32:17 PM
Signing Complete	Security Checked 6/4/2020 10:32:42 PM
Completed	Security Checked 6/4/2020 10:32:42 PM

Payment Events

Status	Timestamps

May 28, 2020

Ms. K. Perez
 Morgan Hill Unified School District
 15000 Concord Circle
 Morgan Hill, California 95037

Dear Ms. Perez,

As you are aware, Charter School of Morgan Hill (CSMH) would be directly affected by the construction and presence of High-Speed Rail. Our site sits on Monterey Road, an extremely busy highway, where cars travel at speeds more than 55 miles per hour. During our morning drop off (7:45 am -8:15 am) and pick up times (2:30-3:20), traffic backs up on the roadway in front of the school with the arrival and dismissal of over 650 students. We see drivers regularly travelling down Monterey at or above the speed limit and suddenly realizing traffic is stopped and having to come to a very quick halt. Leaving the CSMH parking lot and pulling into oncoming traffic on Monterey can also be dangerous. We are, of course, concerned about the increase in traffic and any road closures due to the construction of High-Speed Rail.

Our other concern regarding High Speed Rail is the noise and vibrations from the trains. Learning is already interrupted when trains travel by the school on the current tracks. Having multiple trains going past the school all day long will undoubtedly disrupt the learning environment to an even greater extent.

We request that the negative effects that High-Speed Rail will have on our students and community be taken into consideration and mitigated.

Thank you for taking our concerns seriously and please contact me if you need additional information.

Very truly yours,

Paige Cisewski

Paige Cisewski
 Executive Director

1858-731

1858-732

Response to Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020)

1858-659

The Authority appreciates the Morgan Hill Unified School District's comments on the Draft EIR/EIS and request for additional detail on the analysis of air quality, land use, public services, and traffic and parking. Please see the comment responses to comments 1858-660 through 1858-693 in this chapter of the Final EIR/EIS for responses to the District's specific suggestions regarding impacts to schools.

1858-660

The comment noted that the Draft EIR/EIS does not address or inadequately analyzes impacts on schools, such as impacts on the learning environment and school bus delays from construction and operation of the project. Please refer to Section 3.2, Transportation, and Section 3.12, Socioeconomics and Communities, of the Draft EIR/EIS for this information.

Impact SOCIO#3 in Section 3.12 of the Draft EIR/EIS provides information on school bus delays. Local access programs, such as Safe Routes to Schools, would be maintained or enhanced. Significant impacts on traffic and vehicle delay would be mitigated with measures provided in Section 3.2 of the Draft EIR/EIS.

Impact SOCIO#4 in Section 3.12 of the Draft EIR/EIS describes the applicable IAMFs that the Authority would implement to avoid and minimize impacts on children's learning ability from construction noise. Further, mitigation to reduce significant noise and vibration impacts during construction is discussed in Section 3.4.7, Mitigation Measures, of the Draft EIR/EIS.

1858-661

The comment states that the Draft EIR/EIS defers mitigation measures and must formulate concrete, enforceable mitigation measures to ensure significant impacts will be mitigated to less than significant. In fact, in addition to the enforceable project design features identified to avoid and minimize adverse impacts, the Draft EIR/EIS provides an extensive set of enforceable mitigation measures to address significant impacts. As noted in the comment, many mitigation measures require the contractor to prepare additional management plans prior to construction. Under CEQA, where development of specific mitigation will rely upon information not yet available, an EIR may take a phased approach to the development of specific mitigation, provided that it has analyzed the impact and made a significance determination, commits to mitigation in the form of a mitigation measure for the significant effect, and specifies "performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way" (14 CCR 15126.4(a)(1)(b)). The same is true under NEPA. The EIS must discuss mitigation "in sufficient detail to ensure that environmental consequences have been fairly evaluated," but it is not necessary to formulate and adopt a complete mitigation plan (Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 352 [1989]). The mitigation measures identified in the Draft EIR/EIS meet these requirements.

Response to Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

1858-662

The comment correctly notes that the Draft EIR/EIS identifies school sites as sensitive receptors. Please refer to Section 3.3.5.1, Air Quality, of the Draft EIR/EIS for this information.

With respect to construction-generated VOC, NO_x, and PM₁₀ emissions, the Final EIR/EIS finds that the impact would be less than significant with mitigation measures AQ-MM#2 Offset Project Construction Emissions in the San Francisco Bay Area Air Basin and AQ-MM#3 Offset Project Construction Emissions in the San Joaquin Valley Air Basin, which is the correct determination based on the effects analysis and evidence presented in Impact AQ#1, Impact AQ#2, and Impact AQ#3. Where emissions of VOC, NO_x, or PM₁₀ exceed an air district or de minimis threshold, the Authority will implement these measures to reduce and offset the impacts on air quality resources. Please refer to Section 3.3.9, CEQA Significance Conclusions, of the Final EIR/EIS for this information. Additionally, refinements were made to the particulate matter mass emissions inventory in the Final EIR/EIS to more comprehensively capture emissions reductions that would be achieved through implementation of AQ-IAMF#1: Fugitive Dust Emissions. Mitigation Measure AQ-MM#1 was also added in response to direction from the Bay Area Air Quality Management District. This measure outlines additional onsite controls that will further reduce VOC, NO_x, and PM₁₀ emissions.

1858-663

The comment correctly notes that the Draft EIR/EIS discloses potential health consequences of public exposure to NO₂. Please refer to Section 3.3.5.1, Air Quality, of the Draft EIR/EIS for this information.

With respect to construction-generated localized concentrations of NO₂ and PM, the Final EIR/EIS finds that the impact would be significant and unavoidable, which is the correct determination based on the effects analysis and evidence presented in Impact AQ#5. Project features would minimize air quality impacts (AQ-IAMF#1 through AQ-IAMF#6), although emissions concentrations would still violate the ambient air quality standards and exceed the SIL. Please refer to Section 3.3.9, CEQA Significance Conclusions, of the Final EIR/EIS for this information. Mitigation Measure AQ-MM#1 has been added to the Final EIR/EIS in response to direction from the Bay Area Air Quality Management District. This measure outlines additional onsite controls that will further reduce NO₂, PM_{2.5}, and PM₁₀ emissions.

1858-664

To address this comment, a summary of the requested information on potential NO₂ health consequences has been added to Section 3.3.5.1, Air Quality, of the Final EIR/EIS. The additional information provides further background and context. It does not present new or substantive information warranting recirculation of the Draft EIR/EIS. Also, please note that the Final EIR/EIS finds that NO_x impacts would be less than significant with mitigation measures AQ-MM#2 Offset Project Construction Emissions in the San Francisco Bay Area Air Basin and AQ-MM#3 Offset Project Construction Emissions in the San Joaquin Valley Air Basin. Where emissions of NO_x exceed an air district or de minimis threshold, the Authority will implement these measures to reduce and offset the impacts on air quality resources.

Response to Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

1858-665

The comment noted that the Draft EIR/EIS does not predict the extent or severity of health impacts from significant localized PM and NO₂ emissions. Please refer to Section 3.3.4, Methods for Evaluating Impacts, and Section 3.3.9, CEQA Significance Conclusions, of the Draft EIR/EIS for this information. As disclosed, models that quantify changes in ambient pollution and resultant health effects were developed to support regional planning and policy analysis and have limited sensitivity to small changes in criteria pollutant concentrations induced by individual projects. Accordingly, translating project-generated NO₂ or PM emissions to the locations where specific health effects could occur cannot be estimated with a high degree of accuracy. Nonetheless, the Draft EIR/EIS provides a general order-of-magnitude characterization of potential health consequences associated with project-generated direct PM and precursors to PM (with no secondary formation) using data from the USEPA (as cited in Section 3.3, Air Quality and Greenhouse Gases, of the Draft EIR/EIS). As noted, due to the complex chemistry governing NO₂ and other pollution formation (e.g., ozone), USEPA does not have best practicable technology values for secondary pollutants, such as nitrates from NO₂ emissions, and therefore a correlation of project-generated NO₂ emissions to potential health effects was not performed. Section 3.3.5.1, Air Quality, of the Draft EIR/EIS discloses potential human health and environmental impacts from exposure to NO₂ emissions based on published literature. Table 3.3-33 in Section 3.3. of the Draft EIR/EIS presents the estimated incidence (i.e., cases) of health effects based on construction-generated direct PM_{2.5} and PM_{2.5} precursors (NO_x and SO₂) for Alternative 4, which is the alternative with the highest estimated PM emissions. The potential health consequences are reflective of population-level impacts based on nationally-averaged health impact functions, as developed by USEPA. A specific characterization of health consequences that may present among District students, faculty, staff, or parents from exposure to project-generated construction emissions cannot be developed with any degree of accuracy or certainty. There are large individual differences in the intensity of symptomatic responses to air pollution. These differences are influenced, in part, by the underlying health condition of an individual, which cannot be known for members of the District.

1858-666

The comment on Education Code Section 17213 and definition of DPM as a TAC is noted. This comment does not raise issue with any of the conclusions of the Draft EIR/EIS.

With respect to the comment on modeled DPM concentrations and health risks for school receptors, the Authority modeled all receptors with "residential" exposure parameters. Defining all receptors "residential" is conservative because it combines the longest exposure duration with the highest age-sensitivity factor and associated exposure frequency, yielding a worst-case assessment of potential cancer burden. The influence of these variables on the cancer risk modeled for a residential and school receptor is discussed below.

OEHHA recommends the daily breathing rate for school receptors be based on "95th percentile 8-hour moderate intensity breathing rates", which are slightly greater than residential receptors (based on only 95th percentile values) (for example, within the 2 through 9 age bracket, the applicable daily breathing rate for a "school" receptor is 640 liters/kilogram/day and the rate for a "residential" receptor is 631 liters/kilogram/day). However, the applicable age-sensitivity factor for school-aged children (as early as age 5 for kindergarten) is only 3 (OEHHA age bracket of 2 through 9). In contrast, the age-sensitivity factor for a residential receptor with exposure beginning during the third trimester is 10. This same age-sensitivity factor is also applicable to the 2 years of exposure during ages 0 through 2. The DPM exposure frequency is also higher for a residential receptor, compared to a school receptor. The OEHHA-recommended residential exposure frequency is 350 days per year, which is equivalent to 0.96 (350 days /365 days a year). The recommended school exposure frequency is 180 days per year, which is equivalent to only 0.49 (180 days / 365 days a year). The higher age-sensitivity factor and exposure frequency for "residential" receptors results in a higher calculated cancer risk compared to a school receptor, even accounting for higher daily breathing rate of school-aged children, assuming the same DPM concentration. Accordingly, the cancer risks reported in the Draft EIR/EIS are conservative for schools (i.e., risks to school receptors would be lower than shown in the Draft EIR/EIS).

To address this comment, the Authority has added additional text in Section 3.3.4.3, Methods for Impact Analysis, of the Final EIR/EIS and to the Air Quality and Greenhouse Gases Technical Report (Volume 2, Appendix 3.3-A), Section 6.4.9,

Response to Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

1858-666

Construction Health Risk Assessment. The additional text clarifies that all receptors were modeled with "residential" exposure parameters, which results in a conservative assessment of cancer risk for all other receptor types, including schools. To avoid confusion, the word "residential" has been removed from Appendix E to the Air Quality and Greenhouse Gases Technical Report in Volume 2 of the Final EIR/EIS.

In addition, the Authority conducted a construction health risk assessment for the following schools located within the Morgan Hill and Gilroy Subsection: Barrett Elementary, Central High School, Charter School of Morgan Hill, and the San Martin/Gwinn Elementary School. The exposure analysis followed OEHHA's guidance for school age "student" receptors. The results of the analysis indicate that the highest student incremental cancer risk was 1.3 per million, which is well below the maximum found for the residential receptors as reported in the Draft EIR/EIS, and is also well below the 10 in a million threshold. Technical documentation on the school analysis conducted in response to this comment is available upon request.

1858-667

The Draft EIR/EIS includes an analysis of the impacts of receptor exposure to DPM at the construction fence line within the BAAQMD under Impact AQ#6. The Draft EIR/EIS concludes the impact is less than significant (see Table 3.3-19 in Section 3.3 of the Draft EIR/EIS) based on the effects analysis and evidence. Accordingly, the impact to school receptors (which are further from the construction site than the modeled fence line receptors) would be less than significant and no mitigation measures are required. As described in more detail in the Air Quality and Greenhouse Gases Technical Report (Draft EIR/EIS Volume 2, Appendix 3.3-A), Section 6.4.9.2, Air Dispersion Modeling, DPM concentrations resulting from project construction were modeled along the edge of each subsection within the BAAQMD, with two exceptions: (1) for the trench, an additional 20–30-meter setback distance was allowed based on their limited location, and (2) at the tunnel openings where staging would occur, a 500-foot safety setback distance was used. This modeling approach is conservative because the concentration of DPM decreases dramatically as a function of distance from the source. For example, studies show that DPM concentrations at 1,000 feet from the source can be reduced by more than 65 percent, compared to concentrations directly at the source (CARB 2005, as cited in Section 3.3, Air Quality and Greenhouse Gases, of the Draft EIR/EIS). Consequently, DPM concentrations and thus health risks would be substantially lower than presented in the Draft EIR/EIS at specific receptor locations (including San Marin/Gwinn Elementary School)).

Please also refer to the response to submission SJM-1858, comment 666, which describes how the DPM analysis for the Draft EIR/EIS takes a conservative approach for the health risk assessment and estimated health risks, and how it applies to schools. To confirm the conclusion that risks would be greatest at the construction fence line and lower at all school sites, the Authority conducted a construction health risk assessment for Barrett Elementary, Central High School, Charter School of Morgan Hill, and the San Martin/Gwinn Elementary School. The highest student incremental cancer risks are as follows:

Barrett Elementary: 0.1 per million

Central High School: 0.1 per million

Charter School of Morgan Hill: 0.8 per million

San Martin/Gwinn Elementary School: 1.3 per million

The analysis results confirm that impacts to receptors at the four identified schools would be less than significant and no mitigation measures are required. Technical

Response to Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

1858-667

documentation on the school analysis conducted in response to this comment is available upon request.

1858-668

The comment noted that the Draft EIR/EIS does not address potential air pollution from vehicle rerouting due to closed intersections during train passing. While individuals may elect to take an alternative travel route to avoid a train crossing, it is unknown to what extent motorists will change their personal driving patterns, if at all, and as such, it would be speculative to quantify the impact of potential vehicle rerouting on localized particulate matter emissions. While traffic volumes and thus emissions may increase on parallel routes to those with train crossings, these increases would be temporary and would be primarily from passenger cars. Passenger cars in the County are predominantly gasoline-powered (and therefore do not generate diesel exhaust), with an increasing number becoming electrified by 2040. At the regional level, as discussed in Impact TR#5 in Section 3.2, Transportation, of the Draft EIR/EIS, the project is expected to reduce VMT within Santa Clara County by 230 million vehicle miles on an annual basis in 2040. Even if some individuals elect to take an alternative travel route to avoid a train crossing, the overall net effect on VMT resulting from the project is expected to be a significant decrease within the County. Accordingly, the project would result in a criteria pollutant emissions benefit, as disclosed in Impact AQ#9 in Section 3.3, Air Quality and Greenhouse Gases of the Draft EIR/EIS.

1858-669

With respect to the quality and accuracy of the data used to quantify emissions, both the construction and operational impact analyses rely on project-specific assumptions that were derived using accepted tools and techniques. As discussed in Section 3.3.4.3, Methods for Analysis, construction GHG emissions were quantified using project-specific construction data (e.g., schedule, equipment, on-site and off-site truck volumes) provided by the project engineering team. These data were developed based on an engineering analysis conducted in 2018 and reflect the latest and most accurate assumptions for the project. Operational emissions were quantified based on the level of ridership as presented in the Authority's 2016 Business Plan. While the 2018 Business Plan was adopted in May 2018 and presents slightly different ridership forecasts for the 2029 and 2040 analysis years, the HSR project would ultimately achieve the same benefits as reported in the Final EIR/EIS (refer to Volume 2, Appendix 3.3-C).

1858-670

As stated in Section 3.4.2.3, Regional and Local, of the Draft EIR/EIS, the HSR system is not subject to local general plan policies and ordinances related to noise limits or to locally based criteria concerning noise and vibration for the project alternatives. The project is subject to the FRA noise and vibration impact criteria, and the noise and vibration impact assessments were conducted following FRA methodology and criteria. As shown in Tables 5-10 through 5-13 of Appendix 3.4-A, Noise and Vibration Technical Report (located in Volume 2, Technical Appendices, of the Draft EIR/EIS), the noise model results indicate there would not be noise impacts at schools in Morgan Hill.

Response to Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

1858-671

As stated in Section 3.4.4.5, Method for Determining Significance under CEQA, of the Draft EIR/EIS, only severe noise impacts are considered significant. HSR train operations under Alternative 4 would expose 1,212 sensitive receptors (1,224 with the DDV) to severe noise impacts in 2040 without mitigation. With noise barrier mitigation, the number of sensitive receptors exposed to severe noise impact would be reduced to 293 (305 with the DDV) under Alternative 4. With noise barrier mitigation and implementation of quiet zones by local jurisdictions, the number of sensitive receptors exposed to severe noise impacts under Alternative 4 could be reduced to 194 (207 with the DDV).

The existing noise measurements were conducted at representative locations throughout the project corridor; these sites were chosen to identify the dominant noise sources in the project corridor, which in most locations included existing railways and roadways (including heavily traveled roadways). The noise from these transportation sources does not change substantially over time. All noise measurement results were shown to calibrate to the existing noise model, as documented in Table 5-2 of Appendix 3.4-A, Noise and Vibration Technical Report (located in Volume 2, Technical Appendices, of the Draft EIR/EIS). For these reasons, noise measurements from 2009 through 2017 used in the analysis are valid and do not need to be retaken.

A new appendix, Appendix 3.4-C, Noise Impact Locations (located in Volume 2, Technical Appendices), has been added to the Final EIR/EIS, with new figures showing the location of noise impacts and proposed noise barriers in greater detail. As shown in Tables 5-10 through 5-13 of Appendix 3.4-A, Noise and Vibration Technical Report (located in Volume 2, Technical Appendices, of the Draft EIR/EIS), the noise model results indicate there would not be noise impacts at schools in Morgan Hill.

1858-672

It is not necessary or appropriate for existing noise measurements to be conducted at all noise-sensitive receptors (FRA 2012, as cited in Section 3.4, Noise and Vibration, of the Draft EIR/EIS). The existing noise measurements were conducted at representative locations throughout the project corridor; these sites were chosen to identify the dominant noise sources in the project corridor, which in most locations included existing railways and roadways (including heavily traveled roadways).

It is unclear what the comment means by “direct analysis of noise impacts”; all noise-sensitive receptors for all alternatives were analyzed, including schools. The closest school, Gilroy Preparatory School, is approximately 145 feet from the existing railway line, as noted in the Draft EIR/EIS on page 3.4-30. The noise model results at the District’s Adult Education School indicate the school would not have a noise impact.

1858-673

As stated in Section 3.4.3, Consistency with Plans and Laws, the Authority, as the lead agency proposing to build and operate the HSR system, is required to comply with all federal and state laws and regulations and to secure all applicable federal and state permits prior to initiating construction on the selected alternative. Therefore, there would be no inconsistencies among the project alternatives and these federal and state laws and regulations. The Caltrans Streets and Highway Code noise levels of 55dBA, L10 or 52dBA, Leq, are for noise levels inside the buildings, not in the vicinity of the school.

Response to Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

1858-674

As stated in Section 3.4.3, Consistency with Plans and Laws, the Authority, as the lead agency proposing to build and operate the HSR system, is required to comply with all federal and state laws and regulations and to secure all applicable federal and state permits prior to initiating construction on the selected alternative. Therefore, there would be no inconsistencies among the project alternatives and these federal and state laws and regulations.

The project is not subject to the World Health Organization guidelines.

Section 3.4, Noise and Vibration, of the Draft EIR/EIS discusses the methodology and criteria used for the project, which is established by the Federal Railroad Administration. All noise-sensitive receptors for all alternatives were analyzed, including schools. As shown in Tables 5-10 through 5-13 of Appendix 3.4-A, Noise and Vibration Technical Report (located in Volume 2, Technical Appendices, of the Draft EIR/EIS), the noise model results indicate there would not be noise impacts at schools in Morgan Hill.

1858-675

Impacts on all noise-sensitive receptors for all alternatives were analyzed, including schools. Noise impact due to startle is not predicted at any school, as summarized under Impact NV#5 in Section 3.4, Noise and Vibration, of the Draft EIR/EIS. The noise assessment results indicate there would not be noise impacts, including from train horns, at Barrett Elementary School, Charter School of Morgan Hill, Central High School, or San Marin/Gwinn Elementary School under any project alternative.

1858-676

The Authority conducted a detailed noise and vibration analysis for all sensitive receptors, including all schools, within the project screening distances for all four project alternatives. This analysis is adequate to meet CEQA and NEPA requirements. There would not be any noise impacts at schools in Morgan Hill. HSR trains would only sound horns under Alternative 4 while approaching at-grade crossings (unless quiet zones are established) and at passenger stations. No revisions to the EIR/EIS related to noise and vibration impacts on schools in Morgan Hill are required.

1858-677

As shown in Tables 5-10 through 5-13 of Appendix 3.4-A, Noise and Vibration Technical Report (located in Volume 2, Technical Appendices, of the Draft EIR/EIS), the noise model results indicate there would not be noise impacts at schools in Morgan Hill.

1858-678

As shown in Tables 5-10 through 5-13 of Appendix 3.4-A, Noise and Vibration Technical Report (located in Volume 2, Technical Appendices, of the Draft EIR/EIS), the noise model results indicate there would not be noise impacts at schools in Morgan Hill. Therefore, mitigation is not required for these sensitive receptors.

Mitigation Measure NV-MM#3 in Section 3.4, Noise and Vibration, of the Draft EIR/EIS states that noise barriers are the primary noise mitigation measure. Where noise barriers are not proposed, building sound insulation would be considered as a potential mitigation measure. If substantial noise reduction cannot be completed through installation of noise barriers or installing sound insulation, the Authority would consider acquiring a noise easement.

1858-679

The Authority conducted a detailed noise and vibration analysis for all sensitive receptors, including all schools, within the project screening distances for all four project alternatives. As shown in Tables 5-10 through 5-13 of Appendix 3.4-A, Noise and Vibration Technical Report (located in Volume 2, Technical Appendices, of the Draft EIR/EIS), the noise model results indicate there would not be noise impacts at schools in Morgan Hill.

Response to Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

1858-680

The commenter references NV-IAMF#1 and SOCIO-IAMF#1 as mitigation measures, but in fact IAMFs are considered part of the project rather than mitigation measures. As stated in the Draft EIR/EIS on Page 3.12-60, mitigation to reduce noise and vibration during construction is discussed in Section 3.4.7, Mitigation Measures, of the Draft EIR/EIS. The mitigation measures would also apply to schools, identified by the FRA as Land Use Category 3 (see Table 3.4-5 in Section 3.4, Noise and Vibration, of the Draft EIR/EIS). See Appendix 3.4-C, Noise Impact Locations (located in Volume 2, Technical Appendices, of the Final EIR/EIS), for more detailed maps of impacts on sensitive receptors and proposed mitigation. As part of NV-MM#1, the contractor would prepare a noise-monitoring program that would reduce noise levels to the noise limits (an 8-hour Leq of 80 dBA during the day and 70 dBA at night for residential land use, 85 dBA for both day and night for commercial land use, and 90 dBA for both day and night for industrial land use) where a noise-sensitive receptor is present. While the specific noise control methods will be left to the discretion of the contractor, examples of the types of noise control methods that may be implemented are listed in NV-MM#1 and include installation of temporary construction site noise barriers, locating stationary construction equipment far from noise-sensitive sites, and avoiding nighttime construction in residential neighborhoods. Consistent with CEQA requirements, this measure identifies performance standards and types of actions that would ensure effectiveness; this would require the mitigation to meet certain standards. Additionally, under NV-MM#2, the contractor would develop and implement vibration-reduction methods whenever impact pile-driving or other high-vibration-producing activity would occur within 50 feet of any building to meet the FRA criteria. Prior to starting pile driving and other high-vibration activity, the contractor would conduct pre-construction surveys within 50 feet of the activity to document the existing condition of buildings in case damage is reported during or after construction. The contractor would arrange for the repair of damaged buildings or would pay compensation to the property owner. These measures would avoid or offset vibration impacts from construction.

1858-681

Refer to Standard Response SJM-Response-TR-2: Construction Traffic and Parking Management Details.

As described in Section 3.2, Transportation, of the Draft EIR/EIS, a series of IAMFs would apply to construction to provide access, including TR-IAMF#2, TR-IAMF#4, and TR-IAMF#5, among others. Per TR-IAMF#4 and TR-IAMF#5, the contractor would prepare specific construction management plans to address maintenance of pedestrian and bicycle access during the construction period where feasible (i.e., meeting design, safety, and ADA requirements). Overall, with the implementation of these IAMFs, project construction would maintain safe routes to schools during construction.

1858-682

With respect to Impact AQ#1, the Final EIR/EIS finds that the impact would be less than significant with mitigation, which is the correct determination based on the effects analysis and evidence presented. BAAQMD's CEQA Air Quality Guidelines consider dust impacts to be less than significant if BAAQMD's construction BMPs are employed to reduce these emissions. AQ-IAMF#1 is consistent with BAAQMD's basic and enhanced fugitive dust control measures. As disclosed in the Air Quality and Greenhouse Gases Technical Report (Draft EIR/EIS Volume 2, Appendix 3.3-A), Section 6.4.7, Project Design Features, implementation of AQ-IAMF#1 is expected to reduce fugitive dust from ground disturbance (i.e., scraping and grading activities), unpaved vehicle travel, and demolition by 61 percent, 55 percent, and 36 percent, respectively. Consistent with BAAQMD guidance, with implementation of AQ-IAMF#1, impacts related to fugitive dust emissions are less than significant.

Response to Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

1858-683

This statement was not meant to imply impacts on children were not considered or evaluated, just that there is no separate CEQA threshold specifically for impacts on children as a separate group in the population. However, impacts on schools as well as other places where children congregate, such as parks, were considered in the Draft EIR/EIS in the following sections: Section 3.2, Transportation; Section 3.3, Air Quality and Greenhouse Gases; Section 3.4, Noise and Vibration; Section 3.5, Electromagnetic Fields and Electromagnetic Interference; Section 3.10, Hazardous Materials and Waste; Section 3.11, Safety and Security; Section 3.12, Socioeconomics and Communities; and Section 3.15, Parks, Recreation, and Open Space. Project design features and mitigation measures are identified in each of these sections of the Draft EIR/EIS to avoid or reduce project effects on the places children are anticipated to congregate in order to protect children's health and safety.

1858-684

The comment notes that police and fire services are key to school safety, asserts the project could significantly affect safety if these services are impeded, and asks about consultation between the Authority and the Police Department. The Authority consulted with both the Morgan Hill Police Department and the Morgan Hill Fire Department during preparation of the Draft EIR/EIS. The Morgan Hill Police Department indicated that the rail system, highway system, and roadways are part of all hazards planning. The Morgan Hill Police Department would work in conjunction with partnering agencies in times of a major passenger safety incident including but not limited to: CHP, Morgan Hill Fire, the Santa Clara County Sheriff's Office, UPRR, and Amtrak. The security and law enforcement services in areas planned for HSR service, stations, parking areas, and facilities would be the same as the city as a whole. Law enforcement patrol officers would patrol those areas as regularly as other areas of the city. Morgan Hill Police Department patrol officers would respond to calls for service within those areas as needed. The appropriate response would align with the priority assigned to individual calls (City of Morgan Hill 2016, as cited in Section 3.11, Safety and Security, of the Draft EIR/EIS). The EIR/EIS does analyze potential delays for emergency vehicle response times due to increased gate-down times at the at-grade crossings, including in Morgan Hill (see discussion in Impact S&S#4 in section 3.11, Safety & Security).

1858-685

Refer to Standard Response SJM-Response-SS-2: Emergency Vehicle Response Times.

As presented in Chapter 9, Public and Agency Involvement, of the Draft EIR/EIS, the Authority met with the City of Morgan Hill 18 times during preparation of the Draft EIR/EIS, and the City and the Fire Department had the opportunity to comment on the Notice of Preparation and the Draft EIR/EIS. As indicated in Chapter 12, References, of the Draft EIR/EIS, the preparers of the Draft EIR/EIS also reviewed the Morgan Hill 2017 Public Safety Master Plan, the 2018 Emergency Operations Plan, the Fire Suppression/EMS Response Standards Fact Sheet, and 2016 information from the Morgan Hill Police Department concerning police service information. This information was considered adequate to support the analysis of safety and security impacts.

The Morgan Hill Police Department indicated that the rail system, highway system, and roadways are part of all hazards planning. The Morgan Hill Police Department would work in conjunction with partnering agencies in times of a major passenger safety incident including but not limited to: CHP, Morgan Hill Fire, the Santa Clara County Sheriff's Office, Union Pacific, and Amtrak. The security and law enforcement services in areas planned for HSR service, stations, parking areas, and facilities would be the same as the city as a whole. Law enforcement patrol officers would patrol those areas as regularly as other areas of the city. Morgan Hill Police Department patrol officers would respond to calls for service within those areas as needed. The appropriate response would align with the priority assigned to individual calls (City of Morgan Hill 2016, as cited in Section 3.11, Safety and Security, of the Draft EIR/EIS).

The City of Morgan Hill is signatory to the California Civil Disaster Mutual Aid Agreement in California. As such, the Morgan Hill Fire Department works closely with the State and other fire departments in the county on issues of mutual aid and through the Santa Clara County Fire Chiefs are involved in the creation and updating of policy and operational procedures as well as operational training and drill exercises with the other fire departments in the county.

The Draft EIR/EIS analyzes potential impacts related to fire and safety using the thresholds described in Section 3.11.4.5, Method for Determining Significance under

Response to Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

1858-685

CEQA, and specifically analyzed safety hazards, fire hazards, and whether there would be adverse physical environmental impacts related to construction of new government facilities required in order to maintain acceptable service ratios or times. As explained in Section 3.11, Safety and Security, of the Draft EIR/EIS, the only significant safety and security impacts identified concerned emergency vehicle access and response times. Temporary impacts on emergency access and response times would be reduced to a less-than-significant impact without the construction of additional response or fire department facilities but would include constructing access roadways and installing emergency vehicle detection. Operational impacts on emergency vehicle response times would be significant in Morgan Hill prior to mitigation. Mitigation Measure SS-MM#3 includes emergency vehicle signal detection. Mitigation Measure SS-MM#4 includes a wide range of measures, including the potential construction of additional fire and response facilities.

1858-686

The cited regulation (California Code of Regulations, Title 5, Section 14010(d)) refers to criteria for selecting sites for new schools. In Section 3.11.6, Environmental Consequences, of the Draft EIR/EIS, the Authority identified schools within 0.25 mile of the proposed project and evaluated potential safety impacts from derailment events and other potential safety impacts. The project design includes several components that minimize the potential for derailment events and the potential safety risks from derailment events, including risks from seismic events. These include a train control system with earthquake early warning detection systems; operational responses to notification of a seismic event including stopping or slowing of trains and inspection of infrastructure; infrastructure design that would prevent structural collapse in the event of a significant seismic event; and rolling stock and infrastructure design elements that keep trains upright and in line in the event of a derailment, such as containment parapets and guard rails, on each side of the trackway. These types of project features would prevent HSR trains from leaving the HSR right-of-way in the rare event of derailment and minimize safety risks to schools (Authority 2014; Railway-Technology.com 2011). Therefore, the Draft EIR/EIS did not identify a significant impact with respect to continuous permanent safety hazards to schools (Impact S&S#15) and did not identify related mitigation.

During the project final design phase, the HSR contractor would conduct a supplemental PHA and a TVA to identify potential collision hazards and other facility hazards and vulnerabilities that then could either be eliminated or minimized by the HSR design (SS-IAMF#3). This analysis would include assessment of potential facility hazards and vulnerabilities and potential safety impacts related to derailment events, including the application of design features (e.g., barriers) to minimize the potential for a derailed train to leave the guideway and affect school structures or individuals outside of the right-of-way. A hazard detection system would be applied throughout the system where supported by hazard analyses that would be conducted prior to commencement of operations (SS-IAMF#3). The hazard detection system would also include systems for detection of vehicle or rail car intrusion, and trespassers where supported by hazard analyses (Authority 2013b, as cited in Section 3.11, Safety and Security, of the Draft EIR/EIS).

During the project final design phase, the HSR contractor would conduct a supplemental

Response to Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

1858-686

PHA and a TVA to identify potential collision hazards and other facility hazards and vulnerabilities, that then could either be eliminated or minimized by the HSR design (SS-IAMF#3). This analysis would include assessment of potential facility hazards and vulnerabilities and potential safety impacts related to derailment events. A hazard detection system would be applied throughout the system where supported by hazard analyses that would be conducted prior to commencement of operations (SS-IAMF#3). The hazard detection system would also include systems for detection of vehicle or rail car intrusion, and trespassers where supported by hazard analyses (Authority 2013b, as cited in Section 3.11, Safety and Security, of the Draft EIR/EIS).

1858-687

See response to submission SJM-1858, comment 686 regarding the commenters suggestion to prepare a railroad safety study, evaluate potential safety impacts to schools near the railroad right-of-way, and the need for mitigation. As documented in the response to submission SJM-1858, comment 687, the Draft EIR/EIS does not identify a significant impact related to Impact S&S#15, and therefore, the Draft EIR/EIS does not identify a need for mitigation for safety impacts related to schools. The commenter has provided no evidence that any of the proposed alternatives would result in a significant safety hazard to schools, therefore there is no need for revision and recirculation of the Draft EIR/EIS.

1858-688

EMI survey sites were selected per Technical Memorandum TM 3.4.11 (Authority 2010a, as cited by Section 3.5, Electromagnetic Fields and Electromagnetic Interference, of the Draft EIR/EIS), with the goal of providing balanced coverage of the geographic extent of the project and characterizing the full range of high- and low-emission locations. When identifying survey sites, none of the District schools met the TM 3.4.11 site selection guidelines.

The Draft EIR/EIS does not compare modeled magnetic field strength and the setback requirements of CCR 14010(c) because the setback requirements of CCR 14010(c) are based on electric (not magnetic) field strength. CCR 14010(c) applies specifically to high-voltage transmission lines (50 kV and above) and not to MV distribution lines or the 25 kV HSR traction power system. The distance from the closest HV transmission line to each of the four schools ranges from 2,200 to 7,900 feet (well outside the CCR 14010(c) setbacks), and the lines are outside the HSR RSA and are not being relocated.

1858-689

Refer to Standard Response SJM-Response-OUT-2: Consultation with Local Agencies and Consistency with Local Regulations.

Consistent with CEQA and NEPA requirements, the project's consistency with local general plans and zoning regulations is provided in Appendix 2-J, Regional and Local Plans and Policies, and Appendix 2-K, Policy Consistency Analysis (located in Volume 2, Technical Appendices, of the Draft EIR/EIS). Further discussion of the Authority's effort to design the project so that it is compatible with local land use and zoning regulations is available in Section 3.13 of the Draft EIR/EIS. In addition, as discussed in response to comment 688, above, the potential for the project to generate EMI that would effect an existing school is evaluated in Impact EMF/EMI#6 in the Draft EIR/EIS.

Response to Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

1858-690

Refer to Standard Response SJM-Response-TR-1: Site-Specific Mitigation for Traffic Impacts.

The comment stated that the Draft EIR/EIS should evaluate the delay caused by the project on bus and automobile access to Morgan Hill schools, including an assessment of the safety-related consequences of increased delays. Please refer to Figures 22 through 29 of Appendix 3.2-A, Transportation Data on Roadways, Freeways, and Intersections (located in Volume 2, Technical Appendices, of the Draft EIR/EIS), for a summary of the LOS and impact analysis for roadway facilities within the communities of Morgan Hill and San Martin. Table 3.2-15 in Section 3.2, Transportation, of the Draft EIR/EIS and Tables 12, 14, and 16 of Appendix 3.2-A (located in Volume 2 of the Draft EIR/EIS), detail changes to intersection LOS and vehicular delays associated with the project in the Existing, 2029, and 2040 analysis scenarios. As described by the comment, vehicular delay is not considered to be an impact under CEQA; however, NEPA effects were identified at a number of intersections within Morgan Hill. Mitigation for these effects is described in Mitigation Measure TR-MM#1 in Section 3.2 of the Final EIR/EIS. In response to comments, the Authority conducted further analysis and developed site-specific mitigation measures for consideration that could reduce identified adverse traffic effects identified in the EIR/EIS. The site-specific mitigation measures include locations within the District's boundaries that would reduce the project's effects on vehicle delay within the area.

Please refer to Section 3.11, Safety and Security, of the Draft EIR/EIS for a discussion of the identified safety-related impacts and mitigation measures. Potential increases in traffic delay on school bus routes associated with the project were not identified as resulting in a safety-related impact.

1858-691

The comment stated that the Draft EIR/EIS should evaluate the delay caused by the project on the safety and adequacy of access and pickups/drop-offs at the Charter School of Morgan Hill. As the proposed Downtown Gilroy Station is approximately 17 miles to the south, and the San Jose Diridon Station is roughly 13 miles to the north, little station-related traffic is forecast to use Monterey Road in the vicinity of the school. Alternatives 1, 3, and 4 would not alter Monterey Road or access to the school in this area. Alternative 2 would modify and replace the school's access roadway and pickup and drop-off area. The Authority has clarified the project's approach to this replacement facility, and an additional concept drawing has been prepared to address this change. With the provision of this replacement access roadway and pickup and drop-off area, the project would not have an impact on access or safety at the Charter School of Morgan Hill.

1858-692

This comment asserts that the VMT modelling is based on data that is over 15 years old and is no longer reliable and therefore needs to be updated. See response to Submission 1858, Comment #695 which addresses all of these issues. No changes to the EIR/EIS are required in response to this comment.

Response to Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

1858-693

The commenter notes that the Draft EIR/EIS discloses that the impact on the Morgan Hill Unified School District's property taxes would amount to \$1,125,832 under Alternative 2 and compares this to the district's annual operating budget to estimate an annual loss of 1.7 percent. Funding for school districts is determined as a percentage of total property tax revenue. Table 3.12-15 estimates property tax revenue losses from acquisitions under Alternative 2 to be \$1,125,832; the effect on school district funding for Morgan Hill Unified School District is estimated to be \$258,941. Compared to funding for Morgan Hill Unified School District in school year 2015-2016, which is reported in Table 3.12-4 to be \$84,611,621, the loss of school district funding due to property acquisitions would be 0.3 percent of the district's annual funding. This is consistent with the statement in the Draft EIR/EIS that the impact on the district's property taxes would be less than 1 percent loss. It is acknowledged that loss of property tax revenue could affect the District's operating budget and preclude or delay some programs and improvements. However, the basis for the analysis is not the School District's operating budget and, as noted, is based on the percentage of property tax revenue that would be lost due to property acquisitions. This analysis is the basis for the Authority's conclusion that this change would not materially affect school district funding.

1858-694

The Authority appreciates your comments on the Draft EIR/EIS. This comment is a conclusion statement of a larger comment letter. In prior individual comments, the commenter provided specific suggestions regarding impacts on schools. Each of these specific comments has been addressed individually. Please refer to responses to submission SJM-1858, comments 659 through 693.

1858-695

This comment asserts that key assumptions regarding VMT analysis is "obfuscated", that the VMT decrease is based on an "outdated report" that relies on "a lot of data from 2005". The comment also asserts that the VMT reductions are not conservative and overexaggerated because traffic models are not weighted to vacation or peak travels and are weighted on home to work and retail trips.

To start with, the basic premise of the comment, that there may be imperfections in the calculation of VMT reductions, has no practical significance on the CEQA conclusion. That is because the threshold for a CEQA VMT impact is whether or not the project would add to total state-wide VMT. In other words, the fact that a project reduces state-wide VMT by any amount suffices to conclude that its VMT impacts are less-than-significant. Since HSR will certainly reduce state-wide VMT to some extent, a fact that the commenter does not dispute, the question of whether the calculated reduction may be a bit high or low is moot.

The comment asserts that key assumptions regarding VMT analysis are obfuscated and asserts that the number of people using HSR on an average day is not provided, nor their other travel behavior (e.g., "whether these riders drive or fly without HSR"). This is incorrect. The ridership for the HSR system overall is clearly described in the 2020 Business Plan and the supporting Ridership and Revenue Model Report, which the commenter cited specifically. The 2029 and 2040 Project Section ridership related to San Jose and Gilroy Stations is shown in Table 3.2.2 in Section 3.2, Transportation.

Regarding the model's output of daily ridership rates and potential overcounting because weekends and holidays would have less ridership than weekdays, as discussed in the 2020 Ridership and Revenue Model Report, the BPM-V3 model followed best modeling practices for producing forecasts on an annual basis. This focusses modeling efforts on careful calculation of ridership on a typical weekday. Factors are then applied to adjust this result to reflect different levels of ridership that occur on weekends, holidays, and during different seasons of the year. The result is then used to produce the forecast of annual ridership. Consequently, the VMT estimates, which are derived from the travel demand modelling are appropriately accounting for annual variations in travel activity.

Response to Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

1858-695

As to “whether these riders drive or fly without HSR”, this is part of the system VMT analysis, which is described in detail in Appendix 3.2-B. Appendix 3.2-B Tables 2.3 and 2.5 shows 2029 and 2040 trips without HSR by mode, respectively. Tables 2.4 and 2.6 shows 2029 and 2040 trips with HSR by mode, respectively. Appendix 3.2-B has a table of avoided air trips (Table 2.9), which shows specifically diverted air trips in 2029 and 2040. In regard to people that don’t “travel at all”, travel demand modelling is focused on the people that travel and their modes, not the people who don’t travel; simply put, identifying the number of people who don’t travel is not relevant to any analysis needed for the environmental review in the EIR/EIS.

The comment references the description of the 2016 ridership and revenue model (BPM-V3), but the comment fails to reference or consider Appendix 3.2-B, which is clearly referenced in Section 3.2, Transportation, as providing specific detail about the VMT modelling. Appendix 3.2-B provides a detailed 29-page technical memorandum describing how the VMT modelling for this project was actually done.

The comment’s assertion that the ridership relies on “a lot of data from 2005” is incorrect. As described in Appendix 3.2-B, the initial development of the ridership and revenue forecasting (Version 1 model) for the HSR Program overall in 2007 utilized a revealed preference/stated preference (RP/SP) survey conducted 2005. As described in Appendix 3.2-B, BPM has been updated twice leading to BPM-V3 (the “V3” indicates Version 3). The 2005 RP/SP survey data is the only referenced 2005 data source mentioned. Furthermore, as explained in the 2020 Business Plan Ridership and Revenue Model report cited in this comment (Authority 2016a), a second RP/SP survey data was conducted in 2013-2014. The BPM-V3 incorporates recent RP/SP survey data and does not solely rely on 2005 data, as suggested by the commenter. Also, as described in the ridership and revenue report, the RP/SP data is not the only survey data used in the BPM-V3, but other sources, such as the California Household Travel Survey Data, Harris On-line Panel Long-Distance Survey, and U.S. census data (these data sources referenced are from 2010 to 2013).

The comment’s assertion that BPM-V3 is “outdated” is unsupported by any actual description of insufficiency of the model or any reference to assumptions or inputs that are not reasonably representative of ridership behavior or conditions. As described

1858-695

above, the BPM has been updated twice already to take in new data when it is available.

The comment also asserts that the HSR EIR/EIS used “outdated” modelling from Caltrain Peninsula Corridor Electrification Project (PCEP) EIR), but also provides no substantiation as to why that model does not produce representative results. The only references to the use of data from the PCEP EIR in Section 3.2 of the HSR EIR/EIS are as follows: 1) a description of freight car heights and overhead clearances, which have not changed since the PCEP EIR, and 2) freight activity data in Table 3.2-22, which was updated in the Final EIR/EIS for the HSR project to use the most recent representative freight dispatch data. The PCEP EIR was an appropriate source of data for these items.

No changes to the EIR/EIS are required in response to this comment.

1858-696

With respect to the quality and accuracy of the data used to quantify emissions, both the construction and operations impact analyses rely on project-specific assumptions that were derived using accepted tools and techniques. As discussed in Section 3.3.4.3, Methods for Impact Analysis, of the Draft EIR/EIS, construction GHG emissions were quantified using project-specific construction data (e.g., schedule, equipment, on-site and off-site truck volumes) provided by the project engineering team. These data were developed based on an engineering analysis conducted in 2018 and reflect the latest and most accurate assumptions for the project. Operational emissions were quantified based on the level of ridership as presented in the Authority’s 2016 Business Plan (Authority 2016, as cited in Section 3.3, Air Quality and Greenhouse Gases, of the Draft EIR/EIS). While the 2018 Business Plan (Authority 2018, as cited in Section 3.3 of the Draft EIR/EIS) was adopted in May 2018 and presents slightly different ridership forecasts for the 2029 and 2040 analysis years, the HSR project would ultimately achieve the same benefits as reported in the Final EIR/EIS (refer to Volume 2, Appendix 3.3-C, Changes to Project Benefits Based on 2018 Business Plan).

1858-697

Please refer to the response to submission SJM-1858, comment 662.

Response to Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

1858-698

Please refer to the response to submission SJM-1858, comment 663, and the response to submission SJM-1858, comment 664.

1858-699

AERMOD and HARP files for the Draft EIR/EIS health risk assessment and localized ambient air quality analysis are available for public review upon written request to the Authority. Technical documentation for the school specific analysis that was conducted in response public comment is available upon request.

With respect to the method used to quantify cancer risk and a summary of the school specific assessment results; please refer to the response to submission SJM-1858, comment 667.

1858-700

Please refer to the response to submission SJM-1858, comment 666.

1858-701

Please refer to the response to submission SJM-1858, comment 667.

1858-702

Please refer to the response to submission SJM-1858, comment 696.

1858-703

As discussed under Impact AQ#17 in the Final EIR/EIS, construction of all alternatives would result in a less than significant GHG impact because emission reductions during operations from reduced auto and aircraft trips would offset the short-term construction-related contribution to increased GHG emissions. Accordingly, mitigation to reduce construction-generated GHG emissions is not required. Nevertheless, AQ-IAMF#3 requires construction contractors to use renewable diesel fuel in all heavy-duty off-road diesel-fueled construction equipment and on-road diesel trucks, which will reduce associated GHG emissions. Construction of the project is also subject to the Authority's Sustainability Policy. The policy includes five sustainability priorities, including conservation of natural resources. Through the policy, the Authority requires recycling 100 percent of the steel and concrete from construction and demolition and diverting at least 75 percent of all other construction and demolition waste from landfills, unless local regulations specify a higher diversion rate. The Authority is also committed to sustainable and local procurement.

Refer to Appendix 2-E, Project Impact Avoidance and Minimization Features, of the Final EIR/EIS. The 2020 Sustainability Report is available online here: https://hsr.ca.gov/docs/programs/green_practices/sustainability/Sustainability_Report_2020.pdf

1858-704

A new appendix, Appendix 3.4-C, Noise Impact Locations (located in Volume 2, Technical Appendices), has been added to the Final EIR/EIS, with new figures showing the location of noise impacts and proposed noise barriers in greater detail.

The closest school, Gilroy Preparatory School, is approximately 145 feet from the existing railway line, as noted in the Draft EIR/EIS on page 3.4-30. There would not be noise impact at the Adult Education School. Active outdoor land uses are not considered noise sensitive by the FRA criteria used for this project.

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1858-705

As shown in Tables 5-10 through 5-13 of Appendix 3.4-A, Noise and Vibration Technical Report (located in Volume 2, Technical Appendices, of the Draft EIR/EIS), the noise model results indicate there would not be noise impacts at schools in Morgan Hill.

The Central High School building is approximately 722 feet from the Alternative 2 HSR tracks and approximately 639 feet from the Alternative 4 HSR tracks. The noise criteria apply to the building facades near doors and windows, as discussed on page 4-7 of Appendix 3.4-A, Noise and Vibration Technical Report (located in Volume 2, Technical Appendices, of the Draft EIR/EIS).

It is not standard or required to include all noise calculations at all sensitive receptors. The level of detail included in the document is standard for this phase of a transportation project.

1858-706

The distances listed in Appendix 3.4-A, Noise and Vibration Technical Report (located in Volume 2, Technical Appendices, of the Draft EIR/EIS), Tables 5-10 through 5-13 are representative of the impacted receptors in each section. In sections without noise impacts, the distances are for the nearest nonimpacted sensitive receptor. Under Alternative 2, in the section from California Avenue to Highland Avenue, there was only one noise-impacted receptor, a place of worship that is 145 feet from the HSR tracks, which is why there is only one distance listed. The San Martin/Gwinn K-8 School does not have a noise impact. Under Alternative 4, the closest nonimpacted receptor is located 227 feet from the HSR tracks in this section. All noise sensitive receptors within the project screening distances were analyzed, including all schools.

1858-707

The Morgan Hill Community Adult School is not listed in Table 5-11 of Appendix 3.4-A, Noise and Vibration Technical Report (located in Volume 2, Technical Appendices, of the Draft EIR/EIS) because it does not have a noise impact under Alternative 2. Table 5-11 lists distances of impacted receptors under Alternative 2 in the section from Tilton Avenue to Tennant Avenue; under Alternative 2, no schools have noise impacts in this section.

1858-708

The definitions of the abbreviations "Micro" and "Amp" have been added to Table 5-11 of Appendix 3.4-A, Noise and Vibration Technical Report (located in Volume 2, Technical Appendices, of the Final EIR/EIS). They stand for amphitheater and microelectronic facility. The three institutional uses along the Tilton Avenue to Tennant Avenue section with moderate noise impacts under Alternative 2 are the Villa Mira Monte historical building and two courthouses. A new appendix, Appendix 3.4-C, Noise Impact Locations (located in Volume 2), has been added to the Final EIR/EIS, with new figures showing the location of noise impacts and proposed noise barriers in greater detail.

1858-709

The threshold of 3 dBA increase due to project rail noise does not apply to the project. Please refer to Section 3.4, Noise and Vibration, of the Draft EIR/EIS for the methodology and criteria used to identify noise and vibration impacts for the project. The project is subject to the FRA noise and vibration impact criteria, and the noise and vibration impact assessments were conducted following FRA methodology and criteria. As shown in Tables 5-10 through 5-13 of Appendix 3.4-A, Noise and Vibration Technical Report (located in Volume 2, Technical Appendices, of the Draft EIR/EIS), the noise model results indicate there would not be noise impacts at schools in Morgan Hill.

1858-710

It is not necessary or appropriate for existing noise measurements to be conducted at all noise-sensitive receptors (FRA 2012, as cited in Section 3.4, Noise and Vibration, of the Draft EIR/EIS). The existing noise measurements were conducted at representative locations throughout the project corridor; these sites were chosen to identify the dominant noise sources in the project corridor, which in most locations included existing railways and roadways (including heavily traveled roadways). The noise from these transportation sources does not change substantially over time. All noise measurement results were shown to calibrate to the existing noise model, as documented in Table 5-2 of Appendix 3.4-A, Noise and Vibration Technical Report (located in Volume 2, Technical Appendices, of the Draft EIR/EIS). For these reasons, ambient noise measurements collected from 2009 through 2017 are valid and reliable and do not need to be retaken.

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1858-711

The closest noise measurement site to Barrett Elementary School is N107 at 877 English Walnut Court, Morgan Hill, which is also directly adjacent to US 101; therefore, the measurement site is consistent with existing noise at this school. Table 5-1 of Appendix 3.4-A, Noise and Vibration Technical Report (located in Volume 2, Technical Appendices, of the Draft EIR/EIS), lists all of the noise measurement sites along US 101 through Morgan Hill.

1858-712

The existing noise measurements were conducted at representative locations throughout the project corridor; these sites were chosen to identify the dominant noise sources in the project corridor, which in most locations included existing railways and roadways (including heavily traveled roadways). The noise from these transportation sources does not change substantially over time. All noise measurement results were shown to calibrate to the existing noise model, as documented in Table 5-2 of Appendix 3.4-A, Noise and Vibration Technical Report (located in Volume 2, Technical Appendices, of the Draft EIR/EIS). For these reasons, the noise measurement data is reliable and does not need to be retaken.

1858-713

Please refer to response to submission SJM-1858, comment 712.

1858-714

The ambient noise measurements were conducted at representative locations throughout the project corridor; these sites were chosen to identify the dominant noise sources in the project corridor, which in most locations included existing railways and roadways (including heavily traveled roadways). The measured noise levels at N101 were not used directly at Central High School but were used to calculate the existing noise levels at the school, consistent with standard FRA methodology.

1858-715

Please refer to response to submission SJM-1858, comment 712.

1858-716

Please refer to response to submission SJM-1858, comment 675.

1858-717

A new appendix, Appendix 3.4-C, Noise Impact Locations (located in Volume 2, Technical Appendices), has been added to the Final EIR/EIS, with new figures showing the location of noise impacts and proposed noise barriers in greater detail.

1858-718

The construction noise analysis follows the methodology established by the FRA, and the level of detail is standard for this phase of a transportation project.

Please refer to Appendix 3.4-A, Noise and Vibration Technical Report (located in Volume 2, Technical Appendices, of the Draft EIR/EIS) for detail on the construction noise analysis. In Appendix 3.4-A, Section 4.1.3.1, Table 4-2 states the FRA construction noise assessment criteria, Section 4.1.5.1 explains the construction noise analysis prediction methods, Section 5.1.2.1 explains the construction noise analysis methods and how the buffer distances were calculated, Table 5-3 lists the construction equipment noise emission levels, and Table 5-4 lists the construction activity noise levels and includes the calculated buffer distances to where impact would occur.

Response to Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

1858-719

Section 3.4.4.3, Methods for Impact Analysis, of the Draft EIR/EIS summarizes the thresholds to assess potential noise impacts on schools and the prediction methods used to assess potential impact. The noise model results indicate there would not be noise impacts at schools in Morgan Hill; therefore, mitigation measures would not be required. No revisions to the EIR/EIS are required.

World Health Organization guidelines, California Building Code, and other references do not apply to the project.

As stated in Section 3.4.3, Consistency with Plans and Laws, the Authority, as the lead agency proposing to build and operate the HSR system, is required to comply with all federal and state laws and regulations and to secure all applicable federal and state permits prior to initiating construction on the selected alternative. Therefore, there would be no inconsistencies among the project alternatives and these federal and state laws and regulations.

1858-720

Section 3.4, Noise and Vibration, Table 3.4-4 of the Draft EIR/EIS states the construction noise impact criteria for the project. The construction noise analysis follows the methodology established by the FRA, and the level of detail is standard for this phase of a transportation project. No revisions to the EIR/EIS are required.

1858-721

The construction noise analysis follows the methodology established by the FRA, and the level of detail is standard for this phase of a transportation project.

As stated in Section 3.4.8.1, Construction Noise, of the Draft EIR/EIS, the Authority and its contractors would comply with FRA guidelines for minimizing noise impacts at sensitive receptors; however, some construction noise impacts would remain. This would require the contractor to conduct the construction noise monitoring program as discussed in NV-MM#1. The contractor would be responsible for routing construction truck traffic and implementing construction noise mitigation measures and for preparing a noise control plan prior to construction in order to ensure that construction of the project would comply with FRA construction noise limits where feasible through the use of mitigation measures.

The noise model results indicate there would not be noise impacts at schools in Morgan Hill; therefore, mitigation measures would not be required.

No revisions to the EIR/EIS are required.

Response to Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

1858-722

Refer to Standard Response SJM-Response-SS-1: At-Grade Crossing Safety.

See response to submission SJM-1858, comment 687 regarding the commenters suggestion to prepare a railroad safety study, evaluate potential safety impacts to schools near the railroad right-of-way, and the need for mitigation. Section 3.11, Safety and Security, of the Draft EIR/EIS identifies and evaluates potential impacts on schools within the 0.25 mile RSA. During the subsequent project design phase, the HSR contractor would conduct a supplemental PHA and a TVA to identify potential collision hazards and other facility hazards and vulnerabilities, that then can either be eliminated or minimized by the HSR design (SS-IAMF#3).

Major utilities, including high-pressure natural gas lines, that cross or run parallel to the HSR tracks would need to be relocated or protected in place during project construction and are identified in Appendix 3.6-A, Public Utilities and Energy Facilities. Impacts related to public utilities are described in Impact PUE#1, Impact PUE#3, and Impact PUE. The Authority has a Program Safety and Security Management Plan, which is described in more detail in Section 3.11.2 of Section 3.11, Safety and Security. This plan includes the use of HSR trainsets and fixed infrastructure that would employ the latest safety features and designs to enable the trains to stay upright and in-line in the event of a derailment. It also includes fire and life safety features to manage adjacent hazards, such as natural gas pipelines.

1858-723

Refer to Standard Response SJM-Response-SS-1: At-Grade Crossing Safety.

The comment expresses concerns about at-grade crossing safety for pedestrians and vehicles, risks to nearby schools due to potential derailment, whether design features to control safety would be placed in proximity to school facilities, and the presence of gas pipelines.

See response to submission SJM-1858, comment 686 regarding the commenters concerns about at-grade crossing safety, potential safety impacts on schools near the railroad right-of-way due to potential derailment, and the need for mitigation. Concerning where safety improvements would be placed, they would be placed within the identified operational right-of-way identified in the preliminary engineering design drawings contained in Volume 3, Preliminary Engineering for Project Design Record, of the Draft EIR/EIS.

Regarding the potential presence of gas pipelines, please refer to Impact S&S#11, which discusses construction in areas with oil and natural gas pipelines (and other high-risk facilities), and to Impact S&S#13, which discusses operational effects in areas with oil and natural gas pipelines (and other high risk facilities).

1858-724

EMF survey sites were selected per Technical Memorandum TM 3.4.11 (Authority 2010a, as cited by Section 3.5, Electromagnetic Fields and Electromagnetic Interference, of the Draft EIR/EIS), with the goal of providing balanced coverage of the geographic extent of the project and characterizing the full range of high- and low-emission locations. When identifying survey sites, none of the District schools met the TM 3.4.11 site selection guidelines. The setback requirements of CCR 14010(c) do not apply to the HSR OCS. The applicable limit for electric fields (5 kV/m) is specified in Table 3.5-5 in Section 3.5 of the Draft EIR/EIS. The highest-strength electric field for a District school (Charter School of Morgan Hill) is approximately 0.1 kV/m, or roughly the same as a 115 kV transmission line at a distance of 100 feet.

Response to Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

1858-725

The comment notes that the Draft EIR/EIS should include discussion of how the modeled magnetic field strengths compare to observed ambient levels and how school sites in close proximity to the HSR easement are impacted by EMF.

Typical measured magnetic field strengths range from 0.01 mG in very isolated areas, to between 0.1 and 1 mG in most suburban settings, and up to 40 mG in areas with nearby electrical distribution infrastructure, such as substations or transmission lines. Predicted HSR-generated levels at the 62 sensitive-receptor sites identified in the study, including schools, ranged from 0.01 to 150 mG, with an average level of 20 mG. More generally, the magnetic field strength rapidly decreases with increasing lateral distance from the HSR track. The worst-case predicted level (standing at the right-of-way fence line) is 150 mG. At 50 feet away, the level is 20 mG; at 100 feet, the level is 7 mG; and at 200 feet from the fence, the level is 2 mG. At the RSA boundary for this study (500 feet from the project centerline), the predicted level is 0.5 mG.

The predicted magnetic field strength (82 mG) for the viaduct option at Charter School of Morgan Hill is the result of the track being only 40 feet from the school property line. While this level is higher than it is at other locations, it is still far below the MPE limit of 9,040 mG. The other District schools are farther from the HSR alignment and have correspondingly lower exposures (in the range of 1–2 mG). Therefore, the Draft EIR/EIS adequately addresses the modeled EMF generation of the HSR and correctly compares these values to the applicable threshold.

A clarification comparing the predicted magnetic field strengths with measured ambient levels has been added to Section 3.5.5.3, Project Impacts, of the Final EIR/EIS.

The predicted magnetic field strength (82 mG) for the viaduct option at Charter School of Morgan Hill is the result of the track being only 40 feet from the school property line. While this level is higher than it is at other locations, it is still far below the MPE limit of 9,040 mG. The other District schools are farther from the HSR alignment and have correspondingly lower exposures (in the range of 1–2 mG). Therefore, the Draft EIR/EIS adequately addresses the modeled EMF generation of the HSR and correctly compares these values to the applicable threshold.

1858-725

A clarification comparing the predicted magnetic field strengths with measured ambient levels has been added to Section 3.5.6.3, Project Impacts, of the Final EIR/EIS.

1858-726

As described in the response to comment 1858-693, the loss of school district funding due to property acquisitions would be 0.3 percent of the Morgan Hill Unified School District's annual funding under Alternative 2. The effects on school district funding are disclosed in Table 3.12-15 and page 3.12-77 and acknowledge that the greatest displacement of students relative to total enrollment would occur in the Morgan Hill School District under Alternative 2. The analysis of impacts on the Morgan Hill School District is not ignored. Table 3.12-23 is intended to provide a high-level summary comparing impacts of the project alternatives in relation to NEPA requirements; it is not intended to reiterate the same level of detail provided under Impact SOCIO#11.

1858-727

Please refer to the response to comment 1858-693.

1858-728

Noise impact due to startle is not predicted at any school, as summarized under Impact NV#5 in Section 3.4, Noise and Vibration, of the Draft EIR/EIS. As shown in Tables 5-10 through 5-13 of Appendix 3.4-A, Noise and Vibration Technical Report (located in Volume 2, Technical Appendices, of the Draft EIR/EIS), the noise model results indicate there would not be noise impacts, including from train horns, at schools in Morgan Hill.

The project is subject to the FRA noise and vibration impact criteria, and the noise and vibration impact assessments were conducted following FRA methodology and criteria. WHO guidelines and other referenced criteria do not apply to the project.

1858-729

Please refer to response to submission SJM-1858, comment 728.

1858-730

Please refer to response to submission SJM-1858, comment 728.

Response to Submission 1858 (Allison Murray, Morgan Hill Unified School District, June 22, 2020) - Continued

1858-731

Refer to Standard Response SJM-Response-TR-2: Construction Traffic and Parking Management Details.

The comment noted that the Draft EIR/EIS should evaluate the delay caused by the project on the safety and adequacy of access and pickups/drop-offs at the Charter School of Morgan Hill. As the proposed Downtown Gilroy Station is approximately 17 miles to the south, and the San Jose Diridon Station is roughly 13 miles to the north, little station-related traffic is forecast to use Monterey Road in the vicinity of the school. Alternatives 1, 3, and 4 would not alter Monterey Road or access to the school in this area. Alternative 2 would modify and replace the school's access roadway and pickup and drop-off area. The Authority has clarified the project's approach to this replacement facility, and an additional concept drawing has been prepared to address this change. With the provision of this replacement access roadway and pickup and drop-off area, the project would not have an impact on access or safety at the Charter School of Morgan Hill.

Regarding the potential effects of project construction on school activities, please refer to Standard Response SJM-Response-TR-2: Construction Traffic and Parking Management. Please refer to Impact TR#1, Impact TR#2, Impact TR#10, and Impact TR#17 in Section 3.2, Transportation, of the Draft EIR/EIS for a discussion of the project's effects on vehicles, transit, pedestrians, and bicycles during construction. Please also refer to TR-IAMF#2, TR-IAMF#4, TR-IAMF#5, TR-IAMF#6, TR-IAMF#7, TR-IAMF#11 and TR-IAMF#12 in Section 3.2 of the Draft EIR/EIS for a description of the contractor's requirements to provide safe and adequate vehicle, transit, and nonmotorized access during construction. To maintain pedestrian and bicycle access, project construction phasing would include specifications for vehicle lanes, passenger loading zones, sidewalks, crosswalks, bike lanes, trails, bus stops, parking, detours, and intersection controls. These features would address how pedestrian and bicycle accessibility would be provided and maintained across the HSR corridor, to and from stations, and on station property for the duration of construction.

1858-732

The noise analysis includes the future train schedules for all trains that would operate in the project corridor, including HSR, Caltrain, other passenger trains, and freight trains. As shown in Tables 5-10 through 5-13 of Appendix 3.4-A, Noise and Vibration Technical Report (located in Volume 2, Technical Appendices, of the Draft EIR/EIS), the noise model results indicate there would not be noise impacts at schools in Morgan Hill.

Submission 1743 (Ana Flores, Pajaro Rivershed Flood Prevention Authority, June 23, 2020)



P.O. Box 2453, Seaside, CA 93955 Phone: 831.883.3750 FAX: 831.883.3755 www.pajaroriverwatershed.org

June 23, 2020

Attn: Draft San Jose to Merced Project Section EIR/EIS
100 Paseo de San Antonio, Suite 300
San Jose, CA 95113

Submitted via e-mail to san.jose_merced@hsr.ca.gov

Thank you for this opportunity to comment on the Draft Environmental Impact Report/ Environmental Impact Statement (EIR/EIS) for the San Jose to Merced Project Section of the California High-Speed Rail (HSR) Project on behalf of the Pajaro River Watershed Flood Prevention Authority (FPA).

The levee system on the Pajaro River ("mainstem") and its tributaries was constructed in 1949 by the U.S. Army Corps of Engineers (USACE). Since construction of the levees, there have been four major floods and at least two associated deaths, with the first flood occurring in 1955, just 6 years after construction. This led to a new USACE project authorization by the Flood Control Act of 1966 to modify the existing Pajaro River flood risk management project.

The Pajaro River watershed encompasses a 1,310 square mile region terminating in the Monterey Bay and is made up of four counties. The two upper watershed counties (Santa Clara and San Benito) make up the majority of the land area in the watershed but the most significant flooding occurs in the two lower watershed counties (Santa Cruz and Monterey). This geographical nature of the watershed made it critical that a Joint Powers Authority representing the entire watershed work together to develop a sustainable flood protection strategy for the lower watershed. Thus, the FPA was established by the California State Legislature in 2000 to "identify, evaluate, fund and implement flood prevention and control strategies in the Pajaro River Watershed on an intergovernmental basis." The FPA is made up of the four counties and flood management agencies in the watershed, including:

- | | |
|-----------------------|---|
| County of Santa Clara | Santa Clara Valley Water District |
| County of San Benito | San Benito County Water District |
| County of Santa Cruz | Santa Cruz County Zone 7 Flood Control District |
| County of Monterey | Monterey County Water Resources Agency |

Immediately following its formation, the FPA began studying the flooding issues. The FPA completed a four phased study including stream flow modeling, development of flood protection alternatives, selection of a recommended alternative and CEQA analysis, and implementation of the recommended flood protection strategy. The FPA recommended project was the Soap Lake Floodplain Preservation Project that, when paired with the USACE downstream flood risk

reduction project, would provide a watershed based and sustainable flood protection strategy for the Lower Pajaro River communities.

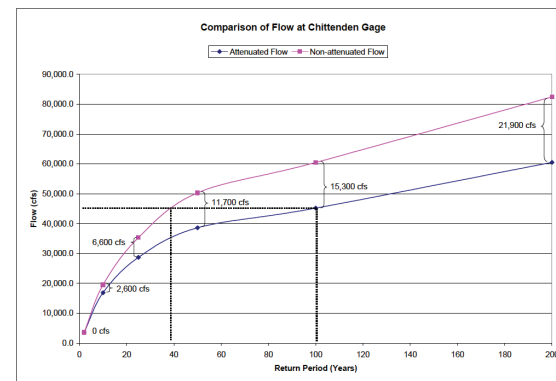
Soap Lake is a natural detention basin, storing water and reducing peak flows that would otherwise increase flooding in the lower Pajaro River. Soap Lake acts as a detention basin that fills during large flow events and slowly recedes after the flood wave has passed. The effect on flooding downstream of the basin is a reduction in the flood magnitude due to attenuation of the peak flows. The FPA modeling shows that the flood storage and attenuation within Soap Lake leads to a significant decrease in downstream peak flows. As can be seen in the table below, attenuation in Soap Lake increases with event magnitude. (RMC Water and Environment, 2005. Pajaro River Watershed Study: Phase 3 and 4A. Pajaro River Watershed Flood Prevention Authority.)

Peak flows at Chittenden with and without Soap Lake

Return Period (Yrs)	Flow with Soap Lake (cfs)	Flow without Soap Lake (cfs)	Peak Difference (cfs)
2	3,600	3,600	0
10	16,900	19,500	2,600
25	28,700	35,300	6,600
50	38,600	50,300	11,700
100	45,200	60,500	15,300
200	60,500	82,400	21,900

The figure below shows the data of the above table in a graphical format. One of the details that becomes apparent is the reduction in level of protection for the downstream areas if Soap Lake attenuation is removed. Existing or future flood protection projects assume that current storage levels are available. The 100-year flood flow at Chittenden is currently believed to be about 45,000 cfs. Without the Soap Lake storage and attenuation, a 45,000 cfs flood flow would occur about every 37 years, instead of every 100 years.

Effects of Attenuation on Peak Flows at Chittenden



Submission 1743 (Ana Flores, Pajaro Rivershed Flood Prevention Authority, June 23, 2020) - Continued

Should Soap Lake be changed so that the floodplains no longer effectively attenuate peak flows or the floodplains are filled, the downstream Lower Pajaro Project would be seriously impacted. The USACE project is based on the assumption that flood attenuation provided in the upper watershed is maintained. A rough estimate of impacts was completed with the help of the USACE (2005 dollars). Raising the levees to accommodate the higher peak flows would have the following effects:

- **Additional levee cost:** The levees would cost approximately \$60 million more than their current estimate of \$112 million.
- **Additional land required:** As the levees are increased in height, their footprint is proportionally increased to maintain safe side slopes. Along the length of the levees, approximately 44 additional acres would need to be taken from the levee’s neighboring land uses, agricultural and urban development.
- **Bridge modification:** The cost and land requirement increases do not account for impacts to bridges. The bridge and approach for Main Street in Watsonville would need to be rebuilt and the Highway 1 bridge and approach might need to be rebuilt. The railroad bridge would need to be significantly modified or abandoned to accommodate the additional levee height. Modification or rebuilding any of the bridges would be a significant additional cost and public nuisance.

In an effort to permanently preserve the floodplain benefits, the FPA is implementing the Soap Lake Floodplain Preservation Project (Soap Lake Project). The Soap Lake Project will preserve the current floodplain attenuation benefits provided by the Soap Lake area in the upper Pajaro River watershed by preserving land in agricultural or open space through fee title acquisition and flood and conservation easements. The Soap Lake Project is designed to ultimately protect approximately 9,100 acres of agricultural lands in the upper Pajaro River Watershed, the approximate area inundated by the 100-year flood flows. The project would maintain the current hydrologic and hydraulic conditions at the existing project site and adjacent properties.

The FPA encouraged the floodplain acquisitions by providing grant funds to agencies and organizations pursuing acquisitions within the Soap Lake floodplain. The funds were made available through a \$4.1 million Proposition 50 Integrated Regional Water Management Grant from the Department of Water Resources (DWR). The FPA used grant funds to support land and easement acquisitions in the Soap Lake Floodplain through the award of grants to reimburse acquisition costs incurred by the participating agencies and organizations. There were three acquisitions completed under the grant agreement totaling almost 400 acres. Additionally, other acquisitions in the floodplain have led to the conservation of 4,564 acres, or 50 percent of the floodplain (see attached Soap Lake Floodplain Conservation Easements). All of these properties have been encumbered with conservation easements consistent with the Soap Lake Project objectives of preserving the floodplain attenuation benefits.

1743-623

As documented in the EIR/EIS, all four alternatives would cross the Soap Lake floodplain with the track on a combination of embankment and viaduct profiles. As shown on the attached map (Soap Lake Floodplain Conservation Easements & HSR Route), the northern alignment will cross eight

1743-623

parcels with existing conservation easements and the southern alignment will cross two parcels with existing conservations easements (parcels listed below). Both embankment and viaduct track profiles would require the placement of fill in the floodplain for either ballast or viaduct piers. In addition, both the South and East Gilroy MOWFs, as well as roadways and electrical utility improvements, would be in the Soap Lake floodplain. These structures and modifications will result in permanent impacts on floodplain hydraulics and may conflict with the terms of the conservation easements.

Easements Intersected by HSR Routes

APN	COUNTY
013-01-0-0320	SAN BENITO COUNTY
013-01-0-0290	SAN BENITO COUNTY
013-01-0-0210	SAN BENITO COUNTY
013-02-0-0170	SAN BENITO COUNTY
013-02-0-0210	SAN BENITO COUNTY
013-02-0-0100	SAN BENITO COUNTY
013-02-0-0090	SAN BENITO COUNTY
013-02-0-0080	SAN BENITO COUNTY
84140010	SANTA CLARA COUNTY
84140011	SANTA CLARA COUNTY
84126032	SANTA CLARA COUNTY
84140008	SANTA CLARA COUNTY

1743-624

On Page 3.8-104, the Authority claims to have performed preliminary hydraulic analyses to quantify impacts from new or modified hydraulic structures for floodplains with existing hydraulic models. The Authority identifies the availability of hydraulic models for seven waterbodies and their associated floodplains in the Resource Study Area (RSA) that have the potential to be permanently affected by the project. The hydraulic model for the Pajaro River and Soap Lake floodplain, while identified in the Appendix 3.8-B, appears to be omitted from some of the presentation in Section 3.8 on Hydrology and Water Resources (for example, the Soap Lake model does not appear in Table 3.8-14).

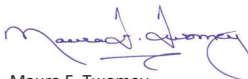
1743-625

More importantly, the EIR lists the significance criteria under CEQA as one that would “substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would...”, among other things, “substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site” (Section 3.8.4.5, page 3.8-17 of the draft EIR/EIS). There also exists an implicit significance criterion in the draft EIR of an increase in the water surface elevations of the 100-yr recurrence interval floodplain of more than 1 foot. It is clear from the descriptions above that Soap Lake plays a large hydraulic role in modulating the flood wave downstream of Soap Lake. So while the Authority’s hydraulic modeling of the Soap Lake floodplain post-project for each alternative, as shown in figures 3.8-18 through 3.8-21, suggests that water surface elevations within the Soap Lake model domain remain within these

Submission 1743 (Ana Flores, Pajaro Rivershed Flood Prevention Authority, June 23, 2020) - Continued

- 1743-625 | criteria limits, the results do not speak to the hydraulic effects on the flood wave moving downstream out of Soap Lake, through Chittenden Gap on the Pajaro River, and into the lower Pajaro Valley in Santa Cruz and Monterey Counties. Figures 3-8.18 through 3-8.21 show modest increases that could potentially be amplified through hydraulic constriction lower in the Pajaro River. Increases in the 100-year flow from the Soap Lake area could increase peak flows downstream and the planned USACE levee reconstruction project may be inadequate to convey the discharge.
- 1743-626 | For the lower Pajaro River system with an existing 8-year level of protection, any increase in discharge is significant. The existing levee system along the lower Pajaro River provides flood risk management benefits to over 10,000 acres of mixed-use land with a current population estimated at 26,400 residents located in the floodplain (in both of the Disadvantaged Communities of the Town Pajaro and the City of Watsonville) and an estimated \$1.2 billion in damageable property. It is imperative that the Authority model, at the very least, the expected change to inflow hydrographs at Chittenden Gap and downstream under the various alternative scenarios, to be consistent with the requirements of CEQA in assessing both on-site as well as off-site changes in runoff. After assessing the off-site changes in runoff along the Pajaro River, the potential effects of the project alternatives on the minority and low-income populations in the Pajaro Valley need to be considered in Chapter 5 Environmental Justice. The Environmental Justice analysis should consider the disproportionately high and adverse flood impacts on the Town of Pajaro and the City of Watsonville communities. These communities have experienced economically devastating floods and an increase in peak flows in the Pajaro River increases the risk for loss of life, property and employment.
- 1743-627 |
- 1743-628 | The FPA support for a sustainable Pajaro River flood protection strategy is unwavering; we request the Authority (1) consider and mitigate the potential conflict with the terms of Soap Lake conservation easements directly impacted by the HSR, (2) analyze and mitigate any increases to downstream flows that could lead to higher risks of flooding in the Lower Pajaro River, and (3) consider and mitigate the disproportionately high and adverse flood impacts on the minority and low-income communities in the Pajaro Valley.

Sincerely,



Maura F. Twomey
Executive Coordinator

Response to Submission 1743 (Ana Flores, Pajaro Rivershed Flood Prevention Authority, June 23, 2020)

1743-623

The Authority would acquire parcels or portions of parcels necessary to construct the project. The Authority understands that some of the parcels that would be acquired to construct the railbed and associated infrastructure may contain existing conservation easements that were established to preserve the floodwater storage capacity of the Soap Lake floodplain. However, construction of the project would require the acquisition of these parcels, some of which may contain conservation easements owned by the Pajaro River Watershed Flood Prevention Authority, and developing them into a transportation corridor. During development of the preliminary design that is presented in the Roll Plots in Volume 3 of the Draft EIR/EIS, the Authority performed extensive hydraulic modeling of the Soap Lake floodplain to identify potential impacts and incorporate features into the project to avoid or minimize those impacts. Accordingly, the project has been designed to preserve the functioning of the Soap Lake floodplain and avoid substantial permanent impacts on floodplain hydraulics assuming that the all lands within the permanent HSR right-of-way in the Soap Lake floodplain would be converted into a transportation corridor.

However, some of the parcels specifically mentioned in the comment contain Important Farmland; these parcels are 013-01-0-0320 SAN BENITO COUNTY, 013-01-0-0210 SAN BENITO COUNTY, 013-02-0-0170 SAN BENITO COUNTY, 013-02-0-0210 SAN BENITO COUNTY, 013-02-0-0100 SAN BENITO COUNTY, 84140010 SANTA CLARA COUNTY, 84140011 SANTA CLARA COUNTY, and 84126032 SANTA CLARA COUNTY. Any conversion of Important Farmland would be accounted for through Impact AG#2 and Impact AG#3. Any impacts related to conversion of Important Farmland would be mitigated through AG-MM#1. This mitigation requires the Authority to purchase agricultural conservation easements from willing sellers within the same agricultural regions as the impacts occur. Mitigation would be at a minimum ratio of 1:1 for direct conversion and at a minimum ratio of 0.5:1 for indirect conversion as a result of creation of remnant or severed parcels. Although the replacement conservation easements would be located within the same agricultural region, there is no guarantee that they would be located within the Soap Lake floodplain to prohibit future development of the floodplain. Please refer to Section 3.14.6, Environmental Consequences, and Section 3.14.7, Mitigation Measures, respectively, for more information on impacts and mitigation proposed for Important Farmland.

1743-624

Thank you for the comment. During development of the preliminary design that is presented in the Volume 3 Roll Plots, the Authority performed extensive hydraulic modeling of the Soap Lake floodplain to identify potential impacts and incorporate features into the project to avoid or minimize those impacts. Due to the highly technical nature of this modeling, much of the detailed technical information about the model that may not be easily comprehended by the general public was intentionally omitted from the Draft EIR/EIS. Instead, that detailed modeling information was compiled in Appendix 3.8-B, Summary of Hydraulic Modeling for Existing and Proposed Conditions of the Draft EIR/EIS; please refer to this technical appendix for additional information about the modeling that was performed for the Soap Lake floodplain and for the entire project alignment. Table 3.8-14 in the Final EIR/EIS was revised to include existing information for Pajaro River at several key locations within the RSA.

1743-625

As stated in the Draft EIR/EIS and in response to previous comments from the Pajaro River Watershed Flood Prevention Authority, the Authority performed extensive hydrologic and hydraulic modeling as part of preparing the preliminary design and evaluating impacts of constructing the project. As part of that effort, both changes in 100-year water surface elevations and peak 100-year flow rates of the Soap Lake floodplain were evaluated. The results of this hydrologic and hydraulic modeling showed that the project would be consistent with FEMA's criteria to limit changes in 100-year water surface elevations to no more than 1 foot in floodplains and 0.1 foot in floodways both within the Soap Lake floodplain and downstream. Additionally, the analysis revealed that there would be minimal changes in 100-year peak flow rates at Chittenden Gap; this analysis was presented in the Hydrology and Water Resources Technical Report. While Alternatives 1-3 would not increase peak flow rates at Chittenden Gap, Alternative 4 would have a minimal increase (increase of 110 cfs, or 0.25% of the existing 100-year peak flow rate). Impact HYD#15 in Section 3.8, Hydrology and Water Resources, of the Final EIR/EIS was revised to include this information.

Response to Submission 1743 (Ana Flores, Pajaro Rivershed Flood Prevention Authority, June 23, 2020) - Continued

1743-626

As stated in the Draft EIR/EIS and in response to previous comments from the Pajaro River Watershed Flood Prevention Authority, the Authority performed extensive hydrologic and hydraulic modeling as part of preparing the preliminary design and evaluating impacts of constructing the project. As part of that effort, changes in 100-year peak flow rates at Chittenden Gap were evaluated and disclosed in the Hydrology and Water Resources Technical Report. The analysis revealed that Alternatives 1-3 would not increase peak flow rates at Chittenden Gap, and Alternative 4 would have a minimal increase (increase of 110 cfs, or 0.25% of the existing 100-year peak flow rate). Additionally, the Authority performed additional hydraulic analysis for downstream areas that are outside of the RSA as part of responding to this comment, and this analysis indicated there would be negligible impacts on downstream floodplains and floodways (increase of less than 0.05 foot in the 100-year water surface elevation at Sargent Pass, a FEMA floodway) as a result of the minimal increase in peak flow rates under Alternative 4. Impact HYD#15 in Section 3.8, Hydrology and Water Resources, of the Final EIR/EIS was revised to include this information.

1743-627

As described in Draft EIR/EIS Section 3.8, Hydrology and Water Resources, the project would result in an increase in impervious surfaces and fill inside floodplains that could result in temporary and permanent effects on drainage patterns and flow characteristics. However, project-related flooding impacts would be avoided or minimized through the implementation of design features, regulatory requirements, or mitigation measures. Draft EIR/EIS Chapter 5, Environmental Justice, explains that no detailed analysis was conducted for resource topics determined to have no adverse effects, adverse effects that would not affect minority populations and low-income populations, or resource topics for which mitigation measures were applied equally and effectively addressed community concerns. Topics included in this category include floodplain impacts. While operation of the project would adversely affect floodplains associated with Los Gatos Creek under Alternative 4 and Canoas Creek/Guadalupe River under all four alternatives, these impacts would be less than significant with mitigation, and minority populations or low-income populations located within the Environmental Justice RSA would not be adversely affected by temporary and permanent changes to floodplains.

1743-628

The Authority thanks the Pajaro River Watershed Flood Prevention Authority for the thorough review of the project's impacts on the Soap Lake floodplain. The project has been designed in full awareness of the sensitivity of the Soap Lake floodplain to development and how that project could affect floodplain hydraulics both within Soap Lake and in downstream areas along Pajaro River. The Authority performed hydrologic and hydraulic modeling to ensure the project would be designed to avoid substantial impacts on the floodplain and downstream impacts. As stated in the response to SJM-1743, comment 623, the project would conflict with terms of existing conservation easements by acquiring the easements or portions of the easements and converting them into a transportation corridor. However, hydraulic modeling indicates that developing these easements into the HSR corridor would not substantially affect the hydrology or hydraulics of Soap Lake. Additionally, the response to SJM-1743, comment 625 describes that while there would be increases in downstream flows under Alternative 4, this increase would not result in a substantial impacts on downstream floodplains. Furthermore, the responses to both SJM-1743, comment 625 and SJM-1743, comment 626 describe how additional mitigation for downstream flooding impacts is not required under CEQA for the project alternatives.

Submission 1730 (Sharla Yang, San Joaquin Valley Air Pollution Control District, June 23, 2020)



District Reference No. 20200410

Page 2

June 23, 2020

California High Speed Rail Authority
Attn: San Jose to Merced Project Section: Draft EIR/EIS
100 Paseo de San Antonio, Suite 300
San Jose, CA 95113

Project: Draft Environmental Impact Report/Environmental Impact Statement for the California High Speed Rail – San Jose to Merced Project Section

District CEQA Reference No: 20200410

To Whom It May Concern:

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) for the San Jose to Merced Project Section. The Draft EIR/EIS analyzed an approximately 90-mile portion of the 145-mile long Project Section from the San Jose station to the Merced station (Project). The Project would begin at Scott Boulevard just north of the San Jose Diridon Station in Santa Clara County and end at Carlucci Road in Merced County. Per the Draft EIR/EIS, four Project alternatives (Alternatives 1, 2, 3, and 4) were analyzed and Alternative 4 has been identified as the preferred alternative. The District offers the following comments:

1. Voluntary Emissions Reduction Agreement (VERA)

Air Quality Mitigation Measure #3 (AQ-MM#3) of the Draft EIR/EIS indicates that the High-Speed Rail Authority (HSRA) has entered into a Memorandum of Understanding (MOU) with the District by offsetting to net zero the Project's actual construction emissions of VOC, NOx, PM10, and PM2.5.

On June 19, 2014, the District and HSRA entered into an MOU, which establishes the framework for fully mitigating to net zero construction emissions of NOx, VOC, PM10, and PM2.5 for the entire High-Speed Train Project throughout the San Joaquin Valley Air Basin. To date, the District and HSRA have worked closely to ensure construction air quality emissions of NOx, VOC, PM10, and PM2.5 are mitigated in accordance with the MOU. This MOU requires the HSRA to enter into a VERA with the District for any segment, or portion located in the San Joaquin Valley Air Basin that has been approved for construction by the HSRA, or any other applicable state or federal entity.

Samir Shelkh
Executive Director/Air Pollution Control Officer

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www.valleyair.org www.healthyairliving.com

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The MOU applies to the above referenced Project. Therefore, the District recommends that the HSRA enter in a VERA with the District to fully mitigate to net zero Project construction emissions.

For reference, the District has attached a copy of the MOU to this letter.

2. Health Risk Assessment / Ambient Air Quality Analysis

The District recommends the Health Risk Assessment (HRA) / Ambient Air Quality Analysis (AAQA) be revised and/or clarification be provided based on the following comments.

- A. The Draft EIR/EIS concludes the Project would not exceed applicable thresholds for cancer risk and for acute and chronic non-cancer health impacts. Upon the District's review of Appendix 3.3-A Air Quality and Global Climate Change Technical Report of the Draft EIR/EIS specifically Table 7-37, the District is unable to verify how the health impacts values were derived. The District recommends that the Draft EIR/EIS include precise references and, if necessary, calculation methodologies for deriving all calculated values. This includes, but is not limited to listing all assumptions used and providing sample calculations. For example, the District evaluated the AERMOD modeling run for A1-4_Aerial2, which produced a maximum modeled annual average concentration of 0.0084 µg/m3. In the 'HSR_JM_annual_DPM_conc_and_Cancer_Risk.Updates' spreadsheet, the A1-4 tab has a DPM annual concentration of 0.0034 µg/m3 was used for determining the cancer risk. The District recommends the lead agency clarify this discrepancy.
- B. The air dispersion model used to perform the HRA and AAQA was AERMOD Version 18081. The District recommends the lead agency verify that the latest version of AERMOD was used at the time of the analysis prepared.
- C. The Project AAQA only evaluated SO₂ emissions for the 1-hour and 24-hour averaging periods. When evaluating SO₂ emissions for all AAQAs, the District requires the 1-hour, 3-hour, 24-hour and annual averaging periods to be evaluated against their respective standards.
- D. The air dispersion modeling run associated with the 'San Joaquin Valley (I-5 to Carlucci Road)' subsection (A1-5_Large2) was not submitted to the District for review. Therefore, District is unable to determine whether the health impacts associated with this subsection were evaluated appropriately.

1730-1351

1730-1352

1730-1353

1730-1354

1730-1355

Submission 1730 (Sharla Yang, San Joaquin Valley Air Pollution Control District, June 23, 2020) - Continued

District Reference No. 20200410

Page 3

1730-1356

3. District Rule 9510 (Indirect Source Review)

The proposed Project is subject to Rule 9510 Indirect Source Review (ISR) and requires the submittal of an Air Impact Assessment (AIA) application.

The purpose of District Rule 9510 is to reduce the growth in both NOx and PM10 emissions associated with development and transportation projects from mobile and area sources associated with construction and operation of development projects. The rule encourages clean air design elements to be incorporated into development projects. In case the proposed development project clean air design elements are insufficient to meet the targeted emission reductions, the rule requires developers to pay a fee used to fund projects to achieve off-site emissions reductions.

District Rule 9510 applies to any transportation or transit development projects where construction exhaust emissions equal or exceed two (2.0) tons of NOx or two (2.0) tons of PM10. Therefore, the Project is subject to District Rule 9510 and an Air Impact Assessment (AIA) application is required to be submitted to the District. Note, the AIA must be approved by the District prior to the Project generating any emissions, such as starting ground disturbance for construction.

Information about how to comply with District Rule 9510 can be found online at: <http://www.valleyair.org/ISR/ISRHome.htm>.

The AIA application form can be found online at: <http://www.valleyair.org/ISR/ISRFormsAndApplications.htm>.

4. District Rules and Regulations

This Project may also be subject to other District rules and regulations.

1730-1357

A. This Project may be subject to District Rule 2010 (Permits Required) and Rule 2201 (New and Modified Stationary Source Review) and may require District permits. For further information or assistance, the project proponent may contact the District's Small Business Assistance (SBA) Office at (209) 557-6446.

1730-1358

B. The Project may also be subject to District rules and regulations, including: Regulation VIII (Fugitive PM10 Prohibitions), Rule 4102 (Nuisance), and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). In the event an existing building will be renovated, partially demolished or removed, the Project may be subject to District Rule 4002 (National Emission Standards for Hazardous Air Pollutants).

1730-1359

C. The Project may be subject to District Rule 9410 (Employer Based Trip Reduction) if the Project would result in employment of 100 or more "eligible" employees. District Rule 9410 requires employers with 100 or more "eligible" employees at a worksite to establish an Employer Trip Reduction Implementation Plan (eTRIP)

District Reference No. 20200410

Page 4

1730-1359

that encourages employees to reduce single-occupancy vehicle trips, thus reducing pollutant emissions associated with work commutes. Under an eTRIP plan, employers have the flexibility to select the options that work best for their worksites and their employees.

Information about how District Rule 9410 can be found online at: www.valleyair.org/tripreduction.htm.

For additional information, you can contact the District by phone at 559-230-6000 or by e-mail at etrip@valleyair.org.

1730-1360

D. The above list of rules is neither exhaustive nor exclusive. To identify other District rules or regulations that apply to this Project or to obtain information about District permit requirements, the applicant is strongly encouraged to contact the District's Small Business Assistance (SBA) Office at (209) 557-6446.

Current District rules can be found online at: www.valleyair.org/rules/1ruleslist.htm.

The District appreciates the HSRA ongoing commitment to working with the District and appreciates the opportunity to aid the HSRA in identifying and mitigating impacts on air quality. If you have any questions or require further information, please contact Sharla Yang by e-mail at Sharla.Yang@valleyair.org or by phone at (559) 230-5934.

Sincerely,



For: Arnaud Marjollet
Director of Permit Services

AM: sy

Enclosure: Memorandum of Understanding between District and HSRA

Submission 1730 (Sharla Yang, San Joaquin Valley Air Pollution Control District, June 23, 2020) - Continued

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding ("MOU") is entered into by the California High-Speed Rail Authority ("Authority") and the San Joaquin Valley Unified Air Pollution Control District ("District"). Authority and District are collectively referred to herein as the "Parties" with each being a "Party".

RECITALS

WHEREAS, District is an air pollution control district formed by the counties of Fresno, Kings, Madera, Merced, San Joaquin, Stanislaus and Tulare, and the Valley portion of Kern, pursuant to California Health and Safety Code section 40150, et seq.; and

WHEREAS, District is responsible for developing and implementing air quality control measures within the District Boundaries as depicted in Exhibit A ("District Boundaries" or "San Joaquin Valley Air Basin") attached hereto and incorporated herein, including air quality control measures for stationary sources, transportation sources, and indirect sources; and

WHEREAS, despite the best efforts of District, air quality within District Boundaries remains impaired such that the San Joaquin Valley Air Basin is not in attainment of federal Clean Air Act standards for ozone and its precursors NOx and VOCs (extreme nonattainment) and PM2.5 and is in Attainment/Maintenance status for PM10 (NOx, VOC, PM10 and PM2.5 collectively, "Criteria Pollutants"); and

WHEREAS, emissions of Criteria Pollutants from the Authority's planned high-speed rail construction within District Boundaries would exacerbate that non-attainment status and could threaten that Attainment/Maintenance status; and

WHEREAS, the San Joaquin Valley Air Basin is unique meteorologically in that it is surrounded on three sides by mountain ranges, including to the west which significantly limits the ability of ocean weather patterns and winds to refresh air in the basin; and

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Fresno, CA 93726
(559) 230-6000

WHEREAS, the Authority, in partnership with the Federal Railroad Administration ("FRA"), is developing a high-speed train system ("HST System"), which includes construction of guide-way segments, and ancillary facilities such as a Heavy Maintenance Facility, stations, and overpasses for California pursuant to the California High-Speed Rail Act (Public Utilities Code section 18500 et seq.) ("Rail Act") and the Safe, Reliable High-Speed Passenger Train Bond Act for the 21st Century (codified at Streets and Highways Code section 2704 et seq.) ("Bond Act") that would serve the San Francisco Bay Area, Sacramento, Central Valley, Los Angeles and San Diego through various station-to-station segments ("Segments") (as depicted in Exhibit B); and

WHEREAS, the HST System includes segments or portions thereof that will be constructed, if and when funding can be secured, within the boundaries of the San Joaquin Valley ("SJV") including the following: Merced to San Jose (portion), Merced to Fresno (all), Fresno to Bakersfield (all), Bakersfield to Palmdale (portion), and Sacramento to Merced (portion), collectively referred to as "HST SJV District Portion"; and

WHEREAS, the Authority completed Program-level Environmental Impact Statements/Reports ("EIS/EIR") in 2005, 2008, 2010 and 2012 pursuant to the National Environmental Policy Act ("NEPA") and California Environmental Quality Act ("CEQA") evaluating impacts of the HST System, and selecting preferred route corridors; and

WHEREAS, a project level Final EIS/EIR ("MF FEIR") for the Merced to Fresno Segment ("MF Segment") was approved and certified via Resolution 12-19 ("MF FEIR Resolution") and the MF Segment approved and CEQA findings made via Resolution 12-20 ("MF Segment Resolution") by the Authority's Board of Directors in May 2012 and FRA's associated Record of Decision ("ROD") issued on September 2012; and

WHEREAS, construction of a portion of the MF Segment (from approximately Madera to downtown Fresno) is anticipated to commence in 2014 with connections to the San Francisco Bay Area and Los Angeles Basin expected after year 2028; and

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Submission 1730 (Sharla Yang, San Joaquin Valley Air Pollution Control District, June 23, 2020) - Continued

1 WHEREAS, the Authority found in the MF FEIR and MF FEIR Resolution that
2 construction of the MF Segment would cause significant air quality impacts from
3 construction emissions of Criteria Pollutants because the San Joaquin Valley Air Basin
4 is in non-attainment for Criteria Pollutants; and

5 WHEREAS, the Authority has included in the MF Segment Resolution, and in
6 the Draft EIR/EIS for the Fresno-Bakersfield Segment (and anticipates so including in
7 the draft environmental documents for other Segments of the HST SJV District Portion)
8 various requirements and mitigation measures to reduce significant construction
9 emissions associated with the HST SJV District Portion (such as using the cleanest
10 construction and hauling fleet as reasonably practicable, as detailed in MF FEIR AQ-
11 MM#1 and #2); and

12 WHEREAS, nevertheless, Criteria Pollutant(s) emitted during HST construction
13 within the District Boundaries would still exacerbate and/or threaten the existing non-
14 attainment and maintenance status for Criteria Pollutants within the District Boundaries;
15 and

16 WHEREAS, during the public process leading up to the MF FEIR, the District
17 recommended in writing that the Authority enter into a Voluntary Emission Reduction
18 Agreement ("VERA") with the District as an additional mitigation measure (because of
19 the emissions offsets VERA implementation would achieve) for construction emission
20 impacts the MF FEIR concluded would occur in the MF Segment; and

21 WHEREAS, the MF Segment Resolution committed the Authority to entering
22 into a VERA with the District for the MF Segment as a mitigation measure to
23 accomplish net-zero MF Segment construction emissions of Criteria Pollutants
24 because of the San Joaquin Air Basin's difficult air quality challenge (i.e., its non-
25 attainment status), which VERA now has been drafted for the funded Madera-to-
26 Fresno portion of the MF Segment and is near ready for execution ("Madera-to-Fresno
27 VERA"); and
28

1 WHEREAS, the Authority understands that any significant HST construction
2 emissions air quality impacts from Criteria Pollutants within the District Boundaries
3 could be mitigated through various measures, including emissions offsets to net zero
4 through entry into VERAs, which approach would address the District's view that any
5 net HST construction emissions of Criteria Pollutants within the District Boundaries are
6 impacts that must be fully mitigated; and

7 WHEREAS, the District has developed Incentive Programs around several core
8 principles, including cost-effectiveness, integrity, effective program administration,
9 excellent customer service, the efficient use of District resources, fiscal transparency
10 and public accountability; and

11 WHEREAS, the District's Incentive Programs involve the District using monies
12 (such as grant funds and project-proponent-provided monies via a VERA) to fund
13 (usually on a percentage basis) the purchase and use by third parties of newer
14 equipment that emits fewer Criteria Pollutants to replace older, less-clean-burning
15 equipment (such as farm tractors), which the District administers through Individual
16 Incentive Program Funding Agreements ("IIPFAs"); and

17 WHEREAS, the District's IIPFAs require the user of the new equipment to use
18 the new equipment for a minimum number of hours (based on the user's historical use
19 of the replaced equipment) over a specified number of years, and require permanent
20 destruction of the replaced equipment; and

21 WHEREAS, the IIPFAs, because of their requirements, result in reductions of
22 Criteria Pollutants that get assigned to the project proponent providing the funding to
23 offset emissions by that project proponent ("Criteria Pollutant VERA Offsets"); and

24 WHEREAS, the Criteria Pollutant VERA Offsets, because of the requirements of
25 and protections in the IIPFAs, are secured and certified to the Authority by the District
26 ("Secured Criteria Pollutant VERA Offsets") upon execution of each IIPFA; and

27 WHEREAS, the District's Incentive Programs are regularly audited by
28 independent outside agencies including professional accountancy corporations on

Submission 1730 (Sharla Yang, San Joaquin Valley Air Pollution Control District, June 23, 2020) - Continued

1 behalf of the federal government, the California Air Resources Board ("ARB"), the
2 California Department of Finance and the California Bureau of State Audits; and
3 **WHEREAS**, the District has determined that with appropriate funding from
4 Authority, the District can source, secure and certify Criteria Pollutant VERA Offsets as
5 necessary for construction of the HST SJV District Portion.

6 AGREEMENT

7 **NOW THEREFORE**, the Authority and the District hereby agree as follows:

8 1. Offset of Construction Emissions of Criteria Pollutants

9 (i) The Authority shall fully offset all HST SJV District Portion-related HST
10 construction emissions from Criteria Pollutants by achieving surplus, quantifiable and
11 enforceable emissions reductions of Criteria Pollutants.

12 (ii) For the purpose of this MOU, "fully offset" or "net zero" means that the
13 total amount of all Criteria Pollutants emission reductions secured by the offset
14 reduction measures is equal to, or greater than, the total amount of actual Criteria
15 Pollutant HST construction emissions within the HST SJV District Portion, minus the
16 projected emissions of Criteria Pollutants that would have occurred in the locations of
17 the HST District Portion construction in the absence of HST construction as may be
18 feasible and technically calculable for specific facilities HST might replace (as individual
19 VERAs may include). "Surplus" emission reductions are reductions that are not
20 otherwise required by existing laws or regulations.

21 (iii) In order to fully offset such construction-related air emissions from the
22 HST SJV District Portion, upon each Segment in the HST SJV District Portion having
23 been approved for construction by the Authority and any applicable state or federal
24 entity, having secured funding for construction, and having approved or certified
25 associated environmental review reports and/or statements as required by applicable
26 law ("Certified Environmental Document"), the Authority and District shall enter into a
27 VERA substantially in the form of the Madera-to-Fresno VERA to cover the portion of
28 the Segment approved and funded for construction within District Boundaries prior to

1 the commencement of construction of said portion. Notwithstanding the above, nothing
2 in this MOU shall prevent the Authority from commencing any construction if, despite
3 the Authority's best efforts, timely entry into the associated VERA did not occur; in such
4 event, the Parties shall work cooperatively to accomplish entry into the VERA in time
5 for emissions offsets to occur in a timely manner to satisfy applicable law such as
6 contemporaneous offset timing requirements established by the U.S. Environmental
7 Protection Agency for general conformity.

8 2. VERA Implementation

9 (i) Upon entering into a VERA, the Authority shall provide the District with a
10 meaningful amount of Air Quality Mitigation Funds (as a deposit) as may be specified in
11 each VERA, which the District shall place in a District trust or escrow account until
12 committed in an executed and Authority-approved IIPFA. Such Funds are intended to
13 fund equipment replacement and/or retrofit to achieve Criteria Pollutant VERA Offsets
14 and to fund the District's administrative expenses to implement the VERA, as may be
15 specified in each VERA. The Authority acknowledges that the District will require
16 availability of a meaningful amount of such Funds prior to soliciting and negotiating
17 IIPFAs to accomplish Criteria Pollutant VERA Offsets on the Authority's behalf as part
18 of any individual VERA. The District acknowledges that construction of the HST SJV
19 District Portion is not fully funded, and future funding sources and availability can affect
20 how individual VERAs get funded and the provisions and terms in such VERAs. The
21 total estimated amount of Air Quality Mitigation Funds necessary for each VERA are
22 based on (a) the total tonnage of Criteria Pollutants estimated to be emitted during the
23 HST construction covered by each VERA, as estimated within a Certified
24 Environmental Document or some subsequent estimate based on more then-up-to-
25 date construction information and (b) District's cost per ton per the then-applicable rate
26 contained in District Rule 9510 as set forth in each VERA.

27 (ii) Upon receipt of a meaningful amount of such Funds as relates to an
28 individual VERA and upon the Authority's written notice to proceed from its Contract

Submission 1730 (Sharla Yang, San Joaquin Valley Air Pollution Control District, June 23, 2020) - Continued

1 Manager to the District based on relative certainty of a likely construction start date for
2 the HST construction covered by the relevant VERA, the District will commence
3 negotiating and executing (after Authority limited review and approval) and funding
4 (from the Funds in trust/escrow) IIPFAs to achieve Secured Criteria Pollutant VERA
5 Offsets on behalf of the Authority in a timely manner to satisfy applicable law or
6 general conformity regulations requiring emission reductions to be achieved
7 contemporaneous to the actual emissions to be offset. The Authority will continue to
8 fund the trust/escrow account, and District will continue to negotiate and execute
9 additional IIPFAs to create additional Secured Criteria Pollutant VERA Offsets until
10 sufficient Secured Criteria Pollutant VERA Offsets have been funded to accomplish full
11 offset to net zero for that VERA.

12 (iii) Upon execution of each IIPFA, District shall issue to the Authority a Secured
13 Criteria Pollutant VERA Offsets Receipt, by which the District ensures to the Authority
14 that such associated offsets listed in the Receipt have been secured with no further
15 involvement or funding by the Authority.

16 (iv) Through periodic reporting to each other, the Authority will monitor the actual
17 emissions resulting from construction and the District will monitor and match such
18 actual emissions to the total offsets stated in Secured Criteria Pollutant VERA Offsets
19 Receipts issued to date. The District shall certify in writing to the Authority when the
20 total Secured Criteria Pollutant VERA Offsets listed in all Receipts issued fully offset
21 the actual construction emissions of Criteria Pollutant(s) from the HST Segment portion
22 covered by the associated VERA.

23 **3. Refunds**

24 When total offsets stated in Secured Criteria Pollutant VERA Offsets Receipts
25 equal or exceed total actual construction emissions of Criteria Pollutants for the HST
26 construction covered in a VERA, the District shall, upon Authority written request,
27 refund the Authority any remaining Air Quality Mitigation Funds which are not
28

1 encumbered through IIPFAs. The District shall have a reasonable period of time to
2 refund the unencumbered Air Quality Mitigation Funds.

3 **4. Transfer of Segment Excess Emission Reductions**

4 If total offsets stated in Secured Criteria Pollutant VERA Offsets Receipts
5 exceed total construction emissions of Criteria Pollutants for the HST construction
6 covered in a VERA, the Authority shall be credited with such excess emission ("VERA
7 Excess Emission Reduction" or "Excess"). Such VERA Excess Emission Reductions
8 shall be transferred to any other then-existing or future Authority-District VERA. If there
9 is no existing VERA and likely will not be a future VERA in time for the Authority to get
10 value for the Excess, the Authority may transfer the Excess to a third-party developer.

11 **5. District Rule 9510-Indirect Source Review**

12 Authority acknowledges that it is required to comply with all applicable laws that
13 may be in effect as the HST SJV District Portion is implemented, such as the District's
14 current Rule 9510 (including its requirement to submit an Air Impact Assessment
15 Application). The Authority acknowledges that it is subject to all applicable provisions
16 of District Rule 9510 that are in effect at the time of submitting an Air Impact
17 Assessment Application, but the District anticipates that Criteria Pollutant Offsets to be
18 accomplished through VERAs as contemplated by this MOU will satisfy the emissions
19 reductions requirements of current Rule 9510.

20 **6. Term of MOU**

21 This MOU shall be effective upon the date it is signed. The Parties acknowledge
22 that construction of the HST SJV District Portion could span one or more decades. The
23 Parties agree to work cooperatively together over that time period to evaluate any
24 amendments necessary to this MOU to reflect any relevant circumstances that may
25 change, including but not limited to changing state and federal law requirements
26 related to air quality, changes (positive or negative) in the Clean Air Act attainment
27 status of the San Joaquin Air Basin for Criteria Pollutants or other pollutants, changing
28 and evolving HST funding, and changing state and federal law requirements related to

Submission 1730 (Sharla Yang, San Joaquin Valley Air Pollution Control District, June 23, 2020)
 - Continued


1 the HST System. This MOU shall be terminated by its terms when total offsets stated in
 2 Secured Criteria Pollutant VERA Offsets Receipts equal or exceed total actual
 3 construction emissions of Criteria Pollutants for the HST SJV District Portion.

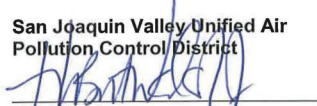
4 7. **Exhibits.** The Exhibits to this MOU are fully incorporated and are a part
 5 of this MOU, and are:

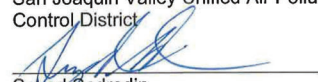
- 6 A. District Boundaries Map
- 7 B. HST System and Segment Map

8 8. **Miscellaneous.** The Recitals set forth above are hereby incorporated into
 9 the terms of this MOU. Counterpart and facsimile/computer image signatures shall be
 10 treated as originals. Notices under this MOU shall be given in writing to the persons
 11 and addresses listed in the then-most-current VERA. This MOU contains all
 12 understandings between the Parties as to the matters covered herein and incorporates,
 13 integrates and supersedes any different or other oral or written understandings
 14 between the Parties as to the matters covered herein. This MOU was prepared equally
 15 by both Parties.


16 IN WITNESS WHEREOF, the Authority and District have executed this MOU
 17 and agree that it shall be effective as of the date first written above.

18 **AUTHORITY**
 19 **High Speed Rail Authority**
 20 
 21 Jeff Morales
 22 Chief Executive Officer

18 **DISTRICT**
 19 **San Joaquin Valley Unified Air**
 20 **Pollution Control District**
 21 
 22 Hub Walsh
 23 Governing Board Chair

24 **Recommended for approval:**
 25 San Joaquin Valley Unified Air Pollution
 26 Control District
 27 
 28 Seyed Sadredin
 Executive Director/APCO

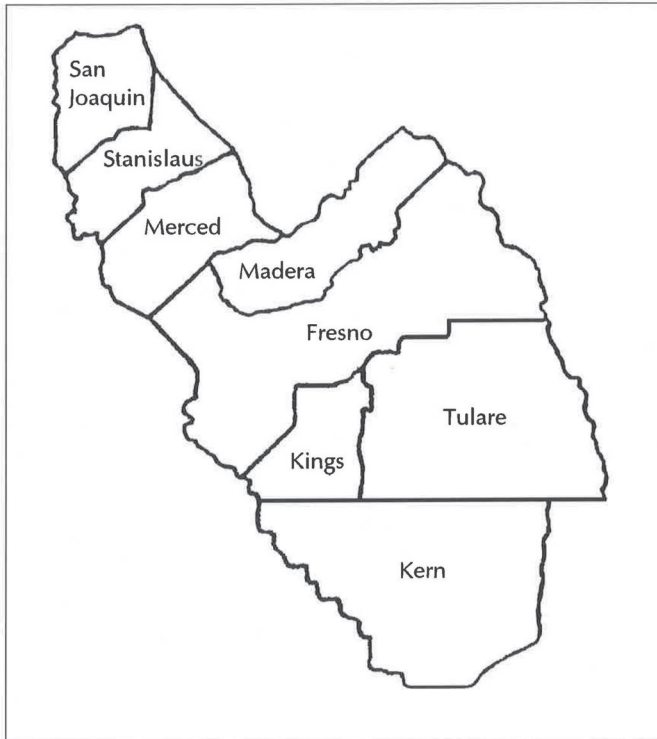
Approved as to legal form:

San Joaquin Valley Unified Air Pollution
 Control District

 Annette Ballatore-Williamson
 Interim District Counsel

Submission 1730 (Sharla Yang, San Joaquin Valley Air Pollution Control District, June 23, 2020)
 - Continued

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EXHIBIT A: District Boundaries/San Joaquin Valley Air Basin



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EXHIBIT B: Segments/Corridors of the HST System



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Response to Submission 1730 (Sharla Yang, San Joaquin Valley Air Pollution Control District, June 23, 2020)

1730-1351

The comment is noted and does not indicate any specific concern regarding any of the conclusions in the Draft EIR/EIS. Pursuant to the MOU and AQ-MM#3 in the Draft EIR/EIS, the Authority and the SJVAPCD would enter into a VERA to cover the portion of the project approved and funded for construction within the SJVAB.

1730-1352

Air Quality and Greenhouse Gases Technical Report (Draft EIR/EIS Volume 2, Appendix 3.3-A), Section 6.4.9, Construction Health Risk Assessment, provides extensive detail on how the construction health risk assessment was performed in each of the three air districts covered by this subsection of the HSR. Section 6.4.9.1, Particulate Matter Emissions Inventory, identifies the different guidance used in each air district for completing the analysis. Section 6.4.9.2, Air Dispersion Modeling, provides information on the air dispersion modeling and meteorological data sets used in the assessment, source parameters on how different construction areas were modeled within the air dispersion model for each air district, and the different types of construction activity in each subsection and how the receptors were placed in each air district. Section 6.4.9.3, Risk Calculations, provides details on how the cancer risk calculations were made in the analysis.

For the example the District modeled, A1-4_Aerial 2, we are providing both the input and output file from the model run, which shows the highest 5-year average DPM concentration of 0.0034 ug/m3. The construction emissions only occur on weekdays during the 8-hour workday, which may explain the SJVAPCD higher modeled concentrations. The analysis was also conducted using San Martin meteorological data, which is the closest station with the BAAQMD.

1730-1353

AERMOD version 18081 was the latest version of AERMOD available at the time the analysis was conducted.

1730-1354

The comment noted that the Draft EIR/EIS should include an analysis of SO₂ over the 3-hour averaging period. The Draft EIR/EIS conducted an analysis of SO₂ concentrations under the 1-hour and 24-hour averaging periods, which is sufficient for two reasons: (1) the 3-hour SO₂ NAAQS is a secondary standard designed to protect visibility and damage to crops, vegetation, buildings (i.e., it is not a primary human health standard) and (2) California has a 1-hour SO₂ standard of 250 ppb never to be exceeded, and the analysis presented in Section 3.3, Air Quality and Greenhouse Gases, of the Draft EIR/EIS demonstrates that this will never occur during construction. Because the NAAQS 3-hour SO₂ standard is 500 ppb, it would be impossible to average a 500 ppb concentration for a 3-hour period if the highest 1-hour concentration never hit 250 ppb. Therefore, it is not necessary to show compliance with the 3-hour SO₂ standard because it is already achieved based on the analyses as shown.

1730-1355

The San Joaquin Valley (I-5 to Carlucci Road)' subsection is represented by the A1-5_annual_DPM_cutfill file. The subsection named A1-5_Large2 was changed to A1-5_annual_DPM_cutfill to be consistent with the naming terminology used in other subsections. The district is referred to the A1-5_annual_DPM_cutfill file for the San Joaquin Valley (I-5 to Carlucci Road)' subsection, which has been submitted to the district.

1730-1356

The comment noted that the project is subject to Rule 9510. Please refer to Section 3.3.2.3, Regional and Local, of the Draft EIR/EIS for a statement on air district rules applicable to the project. This section of the Draft EIR/EIS refers readers to the Air Quality and Greenhouse Gases Technical Report (Draft EIR/EIS Volume 2, Appendix 3.3-A). Section 3.3.1.3, San Joaquin Valley Air Pollution Control District, of the Air Quality and Greenhouse Gases Technical Report discloses that the project would be subject to Rule 9510 and that projects subject to Rule 9510 must submit an Air Impact Assessment applicant to SJVAPCD prior to construction.

Response to Submission 1730 (Sharla Yang, San Joaquin Valley Air Pollution Control District, June 23, 2020) - Continued

1730-1357

The comment noted that the project may be subject to Rules 2010 and 2201. Please refer to Section 3.3.2.3, Regional and Local, of the Draft EIR/EIS for a statement on air district rules applicable to the project. This section of the Draft EIR/EIS refers readers to the Air Quality and Greenhouse Gases Technical Report (Draft EIR/EIS Volume 2, Appendix 3.3-A). Section 3.3.1.3, San Joaquin Valley Air Pollution Control District, of the Air Quality and Greenhouse Gases Technical Report discloses that the project would be subject to these and other District rules.

1730-1358

The comment noted that the project may be subject to Regulation VIII and Rules 4102, 4641, and 4002. Please refer to Section 3.3.2.3, Regional and Local, of the Draft EIR/EIS for a statement on air district rules applicable to the project. This section of the Draft EIR/EIS refers readers to the Air Quality and Greenhouse Gases Technical Report (Draft EIR/EIS Volume 2, Appendix 3.3-A). Section 3.3.1.3, San Joaquin Valley Air Pollution Control District, of the Air Quality and Greenhouse Gases Technical Report discloses that the project would be subject to these and other District rules.

1730-1359

The project does not propose any new stations in the SJVAPCD. The Los Banos MOWS would require six employees per day. Construction activities within the SJVAPCD would likely require more than 100 employees, but these employees would be spread among various worksites and employed by multiple construction contractors. Therefore, the Authority does not believe the project would be subject to Rule 9410.

1730-1360

Comment noted. Thank you.

Submission 1394 (Chris Morrisey, San Jose Arena Authority, June 18, 2020)



90207
SAN JOSE CA 95109 3207
FAX 408 977 784
TEL 408 977 4780
TY 408 977 779

California High-Speed Rail Authority
Attn: San Jose to Merced Draft Environmental Impact Report/
Environmental Impact Statement (EIR/EIS)
June 5,
Page

June 15, 2020

California High-Speed Rail Authority
Attn: San Jose to Merced Draft Environmental Impact Report/
Environmental Impact Statement (EIR/EIS)
770 L Street, Suite 620
Sacramento, CA 95814

To Members of the California High-Speed Rail Authority:

This letter is in response to the issuing of the California High-Speed Rail Authority's San Jose to Merced Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS). Please note that the points contained in this letter specifically relate to the High-Speed Rail service and the operations of SAP Center at San Jose and the San Jose Diridon Station.

Recognizing the significance of this extraordinary statewide rail project planned for San Jose, please consider the following points:

1394-1929

Creating Oversight Committee

That the California High-Speed Rail Authority (CHSRA), working in conjunction with the City of San Jose, establishes a standing High-Speed Rail community oversight committee to monitor the progression of the planning, design, construction and operation associated with the new rail line. It is imperative to establish this oversight committee prior to any significant milestones reached in relation to the design and construction of the rail line in San Jose. Representation on the community oversight committee could include the appropriate City departments, the Santa Clara Valley Transportation Authority, the San Jose Arena Authority, the San Jose Downtown Association, the Silicon Valley Organization, Sharks Sports & Entertainment (the operator of SAP Center at San Jose), The Alameda Business Association, Caltrain, the Bay Area Rapid Transit (BART), area commercial and residential neighborhood associations and other prominent area stakeholders impacted by the planning, construction and operation of the High-Speed Rail line in San Jose.

1394-1930

Collaborative Engagement

That the CHSRA works cooperatively with the City of San Jose, the Santa Clara Valley Transportation Authority and the Bay Area Rapid Transit as the City, VTA and BART work cooperatively in completing the new BART rail line through Downtown San Jose and north to the city of Santa Clara. As you know, the introduction of both BART and High-Speed Rail into the western section of Downtown San Jose will have significant, generational impacts from construction to completion and operation of these two new forms of transit in the South Bay. Efforts to work cooperatively will aid in mitigating the significant impacts of these two transformative urban transit projects.

1394-1931

Parking and Operational Elements

That through dialogue with the City and SAP Center Management, the on-site and off-site parking inventories in and around SAP Center at San Jose are not negatively impacted by the preparation, construction or the operation of the High-Speed Rail. Thoughtful discussion among all parties will need to occur to ensure that parking inventories for SAP Center at San Jose fully support the day-to-day operation of the facility. Please note that the City is obligated to make available agreed-upon parking levels to ensure the successful operation of the Center.

1394-1932

Transit Movement Efforts

That the CHSRA works in concert with the City, the VTA and SAP Center Management to establish comprehensive, agreed-upon plans for vehicular and public transit movements in the vicinity of the SAP Center at San Jose. This plan would include all vicinity streets as it relates to vehicular and public transit movements, including uninterrupted access to SAP Center at San Jose (including access to parking lots and pedestrian routes), construction detours, construction equipment staging areas, street closures, heavy equipment routes, residential and commercial street access, and maintaining the integrity of the area neighborhoods and Downtown San Jose.

1394-1933

Other Rail Services

That the CHSRA continues to clarify plans with the current rail line operators that regularly utilize the San Jose Diridon Station. Besides the rail operators, the CHSRA is advised to consult with the VTA on the VTA's extensive bus operations that use the San Jose Diridon Station as an essential hub for public transit. Additionally, the engagement of the CHSRA with the City of San Jose, Caltrain, and SAP Center Management is critical in the future operation of the electrified Caltrain rail line that is planned for the rail corridor from San Jose to San Francisco.

1394-1934

San Jose Diridon Rail Station Development

That an inclusive, collaborative effort be undertaken to address the anticipated transformation of the San Jose Diridon Station area. This may be the most important element in the preparation of the arrival of High-Speed Rail to San Jose, as the San Jose Diridon Station will eventually be refigured from a regional transit destination into a world-renowned, multimodal transit center. Once again, with a dedicated team of essential stakeholders and expert station designers involved in the planning, design, construction and function of the new San Jose Diridon Station, the results could truly be transformative. San Jose could be widely recognized with a 21st century transit centerpiece that beautifully complements Downtown San Jose and the adjacent residential and commercial neighborhoods.

Submission 1394 (Chris Morrisey, San Jose Arena Authority, June 18, 2020) - Continued

California High-Speed Rail Authority
Attn: San Jose to Merced Draft Environmental Impact Report
Environmental Impact Statement (EIR/EIS)
June 15, 2020
Page 3

1394-1935

Community-Based Collaboration

That the CHSRA establishes a regular community meeting schedule in an effort to keep San Jose City officials, residents, and businesses apprised of regular activity on the High-Speed Rail project. These community meetings should begin as soon as practical - long before project construction commences near the Downtown core - and should continue on a regular basis after the CHSRA has introduced rail operations in San Jose.

In closing the Arena Authority appreciates commenting on the California High-Speed Rail Authority's San Jose to Merced Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) and looks forward to ongoing active civic engagement with this transformative statewide rail project. Please feel free to contact me with any comments through email or by calling 408-977-4783.

Sincerely,



Chris Morrisey
Executive Director

c: Members of the Arena Authority Board of Directors
Members of the Arena Events Operations Committee
Bill Ekern, City of San Jose, Office of Economic Development
Jim Goddard, SAP Center Management
Nanci Klein, City of San Jose, Office of Economic Development

Response to Submission 1394 (Chris Morrisey, San Jose Arena Authority, June 18, 2020)

1394-1929

The Authority has conducted extensive community and agency outreach, which is documented in Chapter 9, Public and Agency Involvement, of the Draft EIR/EIS. The Authority conducted outreach to public transit agencies and held or participated in many meetings with transit agencies. As shown in Draft EIR/EIS Table 9-4, the Authority held 5 meetings with BART, 24 meetings with Caltrain, and 12 meetings with the Santa Clara Valley Transportation Authority. Many meetings were held with representatives from the cities along the corridor, including City of Gilroy, City of Los Banos, City of Morgan Hill, City of San Jose, and the community of San Martin. The Authority also met with neighborhood associations and community organizations along the alignment as well as groups from the Silicon Valley and the SAP Center. The Authority is committed to continuing this engagement with the agencies and communities in the project area, and development of an oversight committee is not required or necessary.

1394-1930

As described in Draft EIR/EIS Section 1.3, Relationship to Other Agency Plans, Policies, and Programs, and Section 1.4, Relationship to Other Transportation Projects in the Study Area, the objectives of the California HSR System include providing an interface between the HSR system and major commercial airports, mass transit, and the highway network. Other key plans and projects have been considered in the planning and development of the San Jose to Merced Project Section and station location alternatives. The Authority has engaged with the City of San Jose, VTA, and BART regularly throughout the planning process and will continue to coordinate as the project progresses.

1394-1931

Please refer to Section 3.2.5.3, San Jose Diridon Station and SAP Center Parking, of the Draft EIR/EIS for a discussion of parking in this area. Since the EIR/EIS does not find a significant impact related to parking, there is no need to identify mitigation. The project's commitments to replace temporary or permanently displaced parking on a 1:1 basis is clearly identified in the EIR/EIS and would be implemented by the Authority. The location of the permanent replacement parking is shown in the EIR/EIS and supporting exhibits.

1394-1932

Refer to Standard Response SJM-Response-TR-2: Construction Traffic and Parking Management Details.

The comment states that the Draft EIR/EIS should include provisions for vehicular, transit, pedestrian, and bicycle access to the SAP Center during construction, working with the City of San Jose, VTA, and SAP Center Management. Please refer to Impact TR#1, Impact TR#2, Impact TR#10, and Impact TR#17 in Section 3.2, Transportation, of the Draft EIR/EIS for a discussion of the project's effects on vehicles, transit, pedestrians, and bicycles during construction. Please also refer to TR-IAMF#2, TR-IAMF#4, TR-IAMF#5, TR-IAMF#6, TR-IAMF#7, TR-IAMF#8, and TR-IAMF#11 in Section 3.2 of the Draft EIR/EIS for a description of the contractor's requirements to provide safe and adequate vehicle, transit, and nonmotorized access during construction. TR-IAMF#8 requires the contractor to provide a mechanism to prevent roadway construction activities from reducing roadway capacity during major athletic events or other special events that substantially (10 percent or more) increase traffic on roadways affected by project construction. Mechanisms include the presence of police officers directing traffic, special-event parking, use of within-the-curb parking, or shoulder lanes for through-traffic and traffic cones. This measure is also required to be addressed in the Construction Transportation Plan required in TR-IAMF#2. TR-IAMF#2 requires that the contractor work in close coordination with the local jurisdiction having authority over the site where work is being performed. For construction work in proximity to the SAP center, the contractor is required to engage with and obtain the approval of the City of San Jose for all work occurring within the City's right-of-way, including the roadways, sidewalks, and other transportation infrastructure providing special event access.

Response to Submission 1394 (Chris Morrisey, San Jose Arena Authority, June 18, 2020) - Continued

1394-1933

The comment noted that the Draft EIR/EIS should include provisions for vehicular, transit, pedestrian, and bicycle access to the SAP Center during construction, working with the City of San Jose, VTA, and SAP Center Management. Please refer to Impact TR#1, Impact TR#2, Impact TR#10, and Impact TR#17 in Section 3.2, Transportation, of the Draft EIR/EIS for a discussion of the project's effects on vehicles, transit, pedestrians, and bicycles during construction. Please also refer to TR-IAMF#2, TR-IAMF#4, TR-IAMF#5, TR-IAMF#6, TR-IAMF#7, TR-IAMF#8, and TR-IAMF#11 in Section 3.2 of the Draft EIR/EIS for a description of the contractor's requirements to provide safe and adequate vehicle, transit, and nonmotorized access during construction. TR-IAMF#8 requires the contractor to provide a mechanism to prevent roadway construction activities from reducing roadway capacity during major athletic events or other special events that substantially (10 percent or more) increase traffic on roadways affected by project construction. Mechanisms include the presence of police officers directing traffic, special-event parking, use of within-the-curb parking, or shoulder lanes for through-traffic and traffic cones. This measure is also required to be addressed in the Construction Transportation Plan required in TR-IAMF#2.

1394-1934

Refer to Standard Response SJM-Response-GEN-2: Consideration of Diridon Integrated Station Concept and the Google Development at the San Jose Diridon Station.

The comment is noted but does not pertain to any specific content or conclusion within the environmental document.

1394-1935

As described in Draft EIR/EIS Section 9.4.4, Community Working Group (CWG) Meetings, the Authority held a series of CWG meetings during development of the Draft EIR/EIS. This included a San Jose CWG. The Authority also held technical working group meetings between 2016 and 2019, during which participants could share information, express concerns or preferences, and relay important updates. As shown in Draft EIR/EIS Table 9-4, the Authority held 15 CWG meetings and 8 technical working group meetings with the City of San Jose. The Authority is committed to continuing engagement with the City as the project progresses.

Submission 1290 (Gerry Haas, Santa Clara Valley Habitat Agency, May 19, 2020)

San Jose - Merced - RECORD #1290 DETAIL

Status : Action Pending
Record Date : 5/19/2020
Submission Date : 5/19/2020
Interest As : Business and/or Organization
First Name : Gerry
Last Name : Haas

Stakeholder Comments/Issues :

To Whom it May Concern,

1290-101

The Santa Clara Valley Habitat Agency (Habitat Agency) respectfully requests an extension of time for the public comment period of the California High-Speed Rail Project - San Jose to Merced Project Section Draft EIR/EIS. As posted, the DEIR/DEIS is available for public review for 45 days, ending on June 8, 2020. The Habitat Agency, like many other public agencies, organizations and private individuals throughout California, has had to endure disrupted work schedules and other complications from the current Statewide stay-at-home order at a time when we are normally very busy. We believe we are not the only entity seeking to extend the public comment period for this Project Section because so many of us have been under duress for several weeks.

The Habitat Agency's primary interest is in Section 3.7 - Biological and Aquatic Resources. But at 250 pages long and with several supporting technical reports, we have not been able to allocate sufficient staff time for an exhaustive review. In addition, several other sections of Chapter 3, as well as Chapters 1, 2, 7, 8 and 9 will require our review for full disclosure and to provide meaningful comment.

The Habitat Agency formally requests that the public comment period for the San Jose to Merced Project Section DEIR/DEIS be extended by a minimum of two weeks and would strongly recommend that the HSR Authority extend the period for a full 30 days beyond this initial 45-day comment period.

Thank you very much for your consideration.

Gerry Haas

Conservation Planner
Santa Clara Valley Habitat Agency
669-253-6127
www.scv-habitatagency.org<<http://www.scv-habitatagency.org/>>

Response to Submission 1290 (Gerry Haas, Santa Clara Valley Habitat Agency, May 19, 2020)

1290-101

Refer to Standard Response SJM-Response-OUT-1: Public Outreach.

Submission 1691 (Gerry Haas, Santa Clara Valley Habitat Agency, June 23, 2020)

High Speed Rail DEIR

Comments by Santa Clara Valley Habitat Agency and Pathways for Wildlife



Contents:

A. Comments on Wildlife Movement (pg 110 Page | 3.7-110)

Comment 1. Conclusion under the No Project Alternative

B. Comments on Construction Effects (pg 111 Page | 3.7-111)

Comment 2. Impact BIO#42: Temporary Disruption of Wildlife Movement

Comment 3. Impact BIO#43: Permanent Impacts on Wildlife Movement

C. Comments on Operations Impacts (pg 113 Page | 3.7-113)

Comments 4-8. Impact BIO#44 & BIO#80: Intermittent Noise Disturbance of Wildlife Using Corridors during Operations

Comments 9-13. Impact BIO#45: Intermittent Vibration Disturbance of Wildlife Using Corridors during Operations

Comments 14-18. Impact BIO#47: Intermittent and Permanent Lighting Disturbance of Wildlife Using Corridors during Operations

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Comments 19-25. Impact BIO#53: Conflict with Santa Clara Valley Habitat

Comments 26 & 27. 3.7.7.9 Habitat Conservation Plans

E. Comments on Mitigation Measures (pg 129 Page | 3.7-129)

Comment 28. BIO-MM#55: Provide Compensatory Mitigation for Loss nesting Trees and Habitat

Comment 29-31. BIO-MM#10: Prepare and Implement a Compensatory Mitigation Plan for Species and Species Habitat

Comment 32. BIO-MM#31: Provide Compensatory Mitigation for Impacts on California Tiger Salamander Habitat

Comment 33. BIO-MM#46: Implement Avoidance and Minimization Measures for Burrowing Owl

Comment 33. BIO-MM#47: Provide Compensatory Mitigation for Loss of Active Burrowing Owl Burrows and Habitat

Comment 34. BIO-MM#61: Provide Compensatory Mitigation for Impacts on San Joaquin Kit Fox Habitat

Comments 35 & 36. BIO-MM#72: Provide Compensatory Mitigation for Permanent Impacts on Riparian Habitat

Comment 37. BIO-MM#76: Minimize Impacts on Wildlife Movement during Construction

Comment 38-43. BIO-MM#78: Establish Wildlife Crossings at Embankment in West Slope of Pacheco Pass

Comment 44. BIO-MM#79: Provide Wildlife Movement between the Santa Cruz Mountains and Diablo Range

F. Comments on Special-Status Species & CEQA Significance Conclusions (pg 190 Page | 3.7-190)

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Comments 48-50. Mountain lion

Comment 51. Western monarch

G. Comments on Conservation Areas (pg 198 page Page | 3.7-198)

Comments 52 & 53.

H. Adaptive Ungulates Movement Guide (pg 164 Page | 6-24)

Comment 54. Black tailed deer

I. Very High Openness Fauna Movement Guild (pg 166 Page | 6-26)

Comment 55, 56. Tule elk

J. 7.2.2 Dedicated Wildlife Underpasses (pg 190 Page | 7-6)

Comment 57. Culvert design effectiveness

K. TR-04 Biological and Aquatic Resources Technical Report Appendix C

Comment 58 – 63

Comments on Appendix I – Habitat Conservation Plan Impacts Analysis

Submission 1691 (Gerry Haas, Santa Clara Valley Habitat Agency, June 23, 2020) - Continued

Exhibits:

A – Pacheco Pass Wildlife Permeability Study

B – Fraser Shilling Letter

C – Mountain Lion 2018-2020

Summary

1691-1766

A) 3.7.7.7 Wildlife Movement (pg 110 Page | 3.7-110)

In addition to addressing impacts on known or mapped wildlife corridors, this analysis more broadly addresses impacts on wildlife movement throughout the project extent. Similarly, although the primary focus of the analysis concerns wildlife movement, some of the nonphysical impact mechanisms that can interfere with movement (e.g., noise, visual disturbance, lighting) pertain equally to disturbance of resident individuals or populations (e.g., breeding, nesting, and foraging waterbirds). Because mapped corridors and other undeveloped areas are more hospitable to wildlife, such areas are likelier than more developed areas to support wildlife movement as well as resident individuals and species. Accordingly, this analysis addresses these impacts for both resident and transient wildlife.

Under the No Project Alternative, recent development trends are anticipated to continue, leading to impacts on biological and aquatic resources and wetlands. Future changes in land use or allowable density of development, as well as ground disturbance associated with future infrastructure improvements such as highway expansions to accommodate population growth, would have impacts on wildlife movement similar to those that have resulted from past development, such as impediments to wildlife movement along established corridors.

Comment 1: Land within Coyote Valley linkage is being preserved by POST and OSA in working with the City of San Jose. The Habitat Agency and Pathways for Wildlife are working with Caltrans in making SR-152 in the area of Pacheco Pass more permeable for wildlife to safely cross under the highway. The Pajaro River in Soap Lake is also currently being restored for wildlife connectivity by TNC and OSA, with adjunct lands being protected. While development under the No Project Alternative will continue to challenge wildlife movement in these areas, it is currently being mitigated to some degree by the work of these entities to protect and enhance known corridors of movement. As stated in this section of the DEIR, Alternatives 1, 2 and 4 may result in less than significant impacts to Coyote Valley and Soap Lake with regard to wildlife movement. However, the same cannot be said for the western reach of the project in Pacheco Pass extending from the western end of the tunnel to Casa de Fruta. This reach is a critical aquatic and terrestrial wildlife linkage noted in the SCVHP. Nearly two miles of stream have been acquired by the SCVHA for conservation in the vicinity of the tunnel entrance. Known as the Pacheco Creek Reserve, protection of this land ensures development impacts will not further impede wildlife movement. In addition, all adjacent properties are zoned for ranchland and can only allow for very few large-lot single-family residences. Since services are not readily available on the south side of Pacheco Creek in this area, further development would be sparse and intermittent. Therefore, the greatest possible impacts to result from the No Project Alternative in the west Pacheco Pass area would be a new ranch home adjacent to the Pacheco Creek Reserve. In contrast, all other project Alternatives propose a tunnel, a viaduct section of track and 24-hour operation of a rail network over and alongside the Pacheco Creek Reserve. Further west of the Reserve, a 2.5 mile raised berm cut-and-fill stretch of the track will be a clear impediment to wildlife that does not currently exist.

As currently proposed, the No Project Alternative is the environmentally superior Alternative. Without significant changes to project design in the Pacheco Pass area extending from Casa de Fruta eastward to the Pacheco Creek Reserve, changes that would ensure the project will not impede the conservation and restoration efforts of the SCVHA at the Pacheco Creek Reserve, **impacts to wildlife movement in this area would be significant and unavoidable.**

Submission 1691 (Gerry Haas, Santa Clara Valley Habitat Agency, June 23, 2020) - Continued

1691-1767

B. Construction Impacts (pg 111 Page | 3.7-111)

Impact BIO#42: Temporary Disruption of Wildlife Movement (pg111 Page | 3.7-111)

Construction of the HSR track and systems in all subsections would temporarily affect wildlife movement in several ways. Construction fencing and dewatering would create temporary barriers to movement, precluding the normal movement of animals. Noise, vibration and visual disturbance from construction vehicles and pile driving may alter or delay movement of individuals as they attempt to avoid the construction area. Nighttime construction or security lighting could cause animals to delay or alter movement patterns because they may avoid lit areas.

The Authority has incorporated BIO-IAMF#1, BIO-IAMF#3, BIO-IAMF#5, and BIO-IAMF#8 (described in Impact BIO#1) into project design to avoid and minimize impacts on wildlife movement. In addition, during construction, the contractor would minimize noise disturbance of wildlife by implementing such measures as construction of noise barriers, careful routing of truck traffic, construction of walled enclosures, scheduling noisy operations into the same period, and phased construction (NV-IAMF#1). Although the extent and location of construction activities would be broadly similar among the project alternatives, the severity of impacts of the alternatives would be, in descending order, Alternative 3, Alternative 1, Alternative 2, and Alternative 4 for the following reasons:

Alternatives 1, 2, and 4 would cross less land that is protected to conserve wildlife movement in the Soap Lake floodplain than Alternative 3.

Alternatives 1, 2, and 4 would cross less of the Santa Cruz Mountains to Diablo Range modeled linkage (Penrod et al. 2013) than Alternative 3.

Alternatives 1, 2, and 4 would follow a highly developed transportation corridor in downtown Gilroy rather than crossing the undeveloped agricultural areas east of Gilroy where Alternative 3 would be constructed. These agricultural areas support wildlife movement.

Comment 2: The Pacheco Pass is a well-documented wildlife linkage recognized by several agencies including CDFW and the stakeholders that were involved in the Wildlife Connectivity Analysis conducted by HSRA. Please see *Wildlife Permeability and Hazards across Highway 152 Pacheco Pass 2018-2019 conducted by Pathways for Wildlife* (Exhibit 1), an excerpt from which is below, documenting the wildlife use of the Pacheco Pass linkage. The data from this report was consistently shared throughout the stakeholder process. The project area is also identified as a priority for connectivity by the California State Wildlife Action Plan (CDFW 2015) and the draft Santa Clara County Regional Conservation Investment Strategy (RCIS). Construction effects in this rural and remote location require mitigation beyond what is proposed for Coyote Valley and Soap Lake, where ambient light and noise impacts are already elevated. **Please provide a specific discussion about the effects of construction on wildlife movement in the west Pacheco Pass area. The SCVHA believes additional mitigation in this area is necessary to achieve a less-than-significant determination.**

Wildlife Permeability and Hazards across Highway 152 Pacheco Pass: Establishing a Baseline to Inform Infrastructure and Restoration

2.0 Introduction

2.1 Background & Purpose

Project background

SR-152 Pacheco Pass bisects one of the Bay Area Critical Linkages, the Diablo Range to the Inner Coast Linkage (Figure 1). The Bay Area Critical Linkage project was a comprehensive modeling effort to identify important habitat linkages that connect large landscape features such as mountain ranges (Penrod et al. 2012). The project area is also identified as a priority for connectivity by the California State Wildlife Action Plan (CDFW 2015) and the draft Santa Clara County Regional Conservation Investment Strategy.

Focal species used to create the Bay Area Critical Linkage Diablo Range to the Inner Coast Linkage Design included mountain lion (*Puma concolor*), bobcat (*Lynx rufus*), American badger (*Taxidea taxus*), San Joaquin kit fox (*Vulpes macrotis mutica*), tule elk (*Cervus canadensis nannodes*), black-tailed deer (sp.), ringtail (*Bassariscus astutus*), and California quail (*Callipepla californica*).

The SWAP identifies connectivity among communities and ecosystems as a key ecological attribute for the Central California Coast Ranges region and identifies land acquisition and restoration as a conservation strategy (CDFW 2015). The Santa Clara Valley Habitat Conservation Plan/Natural Community Conservation Plan (NCCP) recognizes the importance of landscape linkages, and specifically identifies Pacheco Pass on SR-152 as a focal area in the Biological Goals and Objectives, Reserve System design, and long-term monitoring (Santa Clara Valley Habitat Plan 2012) (Figure 2).

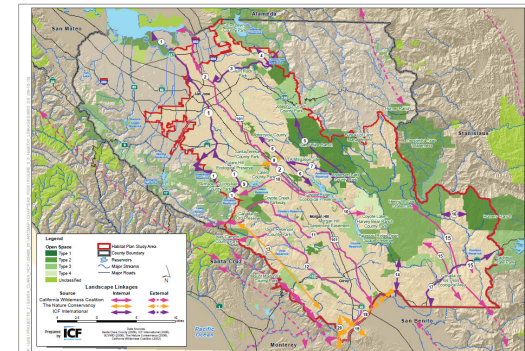


Figure 2. The Santa Clara Valley Habitat Conservation Plan Landscape Linkages.

Submission 1691 (Gerry Haas, Santa Clara Valley Habitat Agency, June 23, 2020) - Continued

1.0 Executive summary

SR-152 Pacheco Pass bisects the Diablo Range-Inner Coast Linkage as identified by the Bay Area Critical Linkages Project. Pathways for Wildlife, in collaboration with the Santa Clara Valley Habitat Agency (Habitat Agency), conducted the Wildlife Permeability and Hazards across SR-152 Pacheco Pass Project (Project), which was funded by the California Department of Fish and Wildlife (CDFW) Local Assistant Grant (LAG) and the Habitat Agency.

The purpose of the study was to identify bridges and culverts that wildlife are using to cross under SR-152 within the study area, and to make wildlife connectivity enhancement recommendations that would improve existing highway infrastructure for wildlife safe passage. The project involved 1) monitoring three bridges and two 5-foot-tall dual box culverts for wildlife passage, and 2) conducting routine roadkill surveys along SR-152 Pacheco Pass within the study area for a twelve-month monitoring period from August 1, 2018 to July 31, 2019.

Within the twelve month monitoring period, multiple species including, deer (*Odocoileus hemionus*), American badger (*Taxidea taxus*), coyote (*Canis latrans*), bobcat (*Lynx rufus*), gray fox (*Urocyon cinereoargenteus*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), and opossum (*Didelphis virginiana*) were recorded consistently traveling under each of the three bridges. Numerous medium-sized mammals such as coyote, bobcat, gray fox, raccoon, opossum, and skunk, were also consistently traveling through the cement box culverts. A total of 3,125 animals were recorded traveling under the bridges and through the culverts throughout the duration of the study.

Impact BIO#43: Permanent Impacts on Wildlife Movement (pg 113 Page | 3.7-113)

While all alternatives would include wildlife undercrossings in locations known to be important for wildlife movement in Coyote Valley, eastern Pacheco Pass, and the Central Valley, these actions would not entirely preclude interference with existing wildlife movement across the alignment. This is particularly true in the locations between wildlife undercrossings of fenced at-grade and embankment portions of the rail where permeability would be further reduced below existing constrained conditions.

Comment 3: The proposed culverts in west Pacheco Pass mentioned in MM#78 are not in locations known to be important for wildlife movement. These locations were selected based on geographic and topographical constraints to facilitate track construction, not on biological purpose or need. There is no data to support if the culverts will be functional in facilitating wildlife movement in these locations.

The culverts are also too long for focal species like mountain lions, Tule Elk, deer and badgers to use (Beckmann, J.P et al. 2010; Forman 2000; Determining Wildlife Use of Wildlife Crossing Structures under Different Scenarios Cramer, P 2002; Caltrans Wildlife Crossing Guidance Manual Meese et al. 2009; Beier, P. 1995; Safe Passages. Ruediger B. 2007; Beier, P. 1993; Corridor Ecology 2006; Clevenger, A.P & M.P. Huijser 2011; Penrod K. 2006; Critical Linkages 2013; Dickson B. et al. 2005; Forman, R. T. 2010; Wilmers, C. et al. 2013; Road Ecology: Science and Solutions 2003).

While the SCVHA appreciates the Authority's inclusion of culverts with the intention of facilitating wildlife movement, a redesign of the culverts to convert them to short spans of bridge and locating

1691-1768

them where wildlife is more inclined to travel may ensure that the Authority's efforts will not be in vain. The construction of long stretches of fenced at-grade track will form a wildlife barrier that will force foraging and migrating terrestrial species to the entrances of a few long and dark tunnels that studies have shown many species simply will not use. The entire reach of raised track may then become a solid barrier for many species. The operational effects of this barrier would indefinitely present a challenge to wildlife movement in the area.

The proposed mitigation measure will not reduce impacts to a less than significant level. The selection of culvert locations is not based on ecology and the extensive lengths of the culverts will prove to be a deterrent to the very wildlife species they are intended to help.

The FEIR must provide additional analysis of the culvert locations and the mitigation measures must provide an alternative to the culvert designs which are shown in the referenced and published literature to be too long for conventional wildlife movement.

C. Operations Impacts (pg 113 Page | 3.7-113)

Behavioral changes could result when the presence of the rail line causes animals to alter or cease their movements in response to rail operations. Behavioral changes can be triggered by noise, vibration, artificial light, or increased activity (e.g., increased human presence at stations or in parking lots, maintenance activities). Behavioral changes may also result when the presence of HSR facilities introduces a resource that can be used by birds and bats. Examples of specific operations impacts include disturbance from noise and vibration, habitat avoidance, habitat loss, and habitat fragmentation.

Impact BIO#44: Intermittent Noise Disturbance of Wildlife Using Corridors during Operations (pg. 113 Page | 3.7-113)

CEQA Conclusion

The impact under CEQA would be significant for all four alternatives because the project would interfere substantially with established wildlife movement corridors. Specifically, noise created by train operations would cause direct intermittent impacts on large congregations of wintering waterbirds in the GEA IBA and on birds in the UPR IBA by interrupting normal movement patterns associated with foraging and causing birds to fly away from approaching trains or avoid habitat along the railway. The loss in food energy gain from these disturbances could have population-level impacts because food availability for wintering birds is a key factor limiting their size (CVJV 2006). Mitigation measures to address this impact are identified in Section 3.7.10, CEQA Significance Conclusions. Section 3.7.8, Mitigation Measures, describes these measures in detail.

Impact BIO#44: Intermittent Noise Disturbance of Wildlife Using Corridors during Operations	Significant for all alternatives: noise of passing trains would cause direct impacts on large congregations of wintering waterbirds in the GEA IBA.	BIO-MM#58: Provide Compensatory Mitigation for Impacts on Waterfowl, Shorebird, and Sandhill Crane Habitat BIO-MM#80: Minimize Permanent Intermittent Noise, Visual, and Train Strike Impacts on Wildlife Movement	Less than Significant
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1691-1768

Submission 1691 (Gerry Haas, Santa Clara Valley Habitat Agency, June 23, 2020) - Continued

BIO-MM#80: Minimize Permanent Intermittent Noise, Visual, and Train Strike Impacts on Wildlife Movement

To address the permanent intermittent impact of noise, visual disturbance, and train strike on wildlife movement in the UPR and GEA IBAs, the Authority would build additional structures in these areas to minimize or avoid such impacts. Structures would be designed with the goal of reducing or eliminating the visual presence of the moving train and exceedance of the established quantitative noise thresholds (as measured at the outer edges of the HSR right-of-way), as described in the WCA:

- Permanent hearing damage: 140 dBA or greater
- Temporary hearing damage: 93 dBA or greater but less than 140 dBA
- Masking: 84 dBA or greater but less than 93 dBA
- Arousal: 77 dBA or greater but less than 84 dBA

The Authority would build opaque noise barriers to cover or obscure some or all of the train, including the OCS, if feasible, and the following locations:

- In the GEA IBA near Volta, between Stations B4550+00 and B4630+00 (all alternatives)
- In the UPR IBA (corresponding to the 10-year Pajaro River floodplain), between Stations B1932+00 and B2164+00 (Alternatives 1, 2, and 4)
- In the UPR IBA between Stations B1870+00 and B2097+00 (Alternative 3)

The noise barriers would be a minimum height of 17 feet and would be designed to provide a minimum of 10 dBA attenuation of sound generated by HSR operations, as measured be built in conjunction with the and would be completed before HSR train operations begin.

The Authority would consult with CDFW, USFWS, Grasslands Water District, the owner(s) of private properties affected by the 3.4-mile HSR project footprint, and other stakeholders as part of final design of the guideway enclosure.

1691-1769

Comment 4: Please see comment letter from Fraser Shilling- UC Davis Road Ecology Department, for his expert opinion on the effects and mitigation measures from noise impacts to wildlife movement (Exhibit 2). He stated that it is unlikely that most wildlife species will approach the rail alignment because of the noise, light and ground vibration. This means that the impacts described in the DEIR will not be mitigated by the measures proposed. For example, BIO-MM#77: Design Wildlife Crossings to Facilitate Wildlife Movement; BIO-MM#78: Establish Wildlife Crossings at Embankment in West Slope of Pacheco Pass; BIO-MM#79: Provide Wildlife Movement between the Santa Cruz Mountains and Diablo Range describe constructed wildlife crossings as suitable and adequate mitigation for impacts to wildlife movement.

Because train noise and light intensities are greatest at the approaches and opening of the structures, it is unlikely that sensitive species will approach or use these crossing structures at a frequency sufficient to reduce genetic, population and ecosystem impacts from this barrier effect. **How will HSR develop proper mitigation for these negative effects of the train's operational effects of noise?**

1691-1770

Comment 5: Please address Fraser Shillings comments in the attached comment letter:
Re: Noise & Vibration Effects of High-Speed Rail through the Pacheco Pass and Coyote Valley.

1691-1771

Comment 6. What is the compensatory mitigation that is referenced in Bio-MM#58 for impacts to waterfowl habitat on the Pacheco Creek Reserve and downstream properties in the wester Pacheco Pass reach all the way to Soap Lake?

1691-1772

Comment 7. BIO-MM#80 includes setting up noise barriers that would in effect be a barrier to wildlife movement. How will this be compensated for?

1691-1773

Comment 8. Will HSR be coordinating on the noise barrier designs with the Habitat Agency and stakeholder groups at the Pacheco Pass, the Pajaro, and Coyote Valley?

1691-1774

Impact BIO#45: Intermittent Vibration Disturbance of Wildlife Using Corridors during Operations (pg. 116 Page | 3.7-116)

CEQA Conclusion

The impact under CEQA would be less than significant for all four alternatives. While reptiles, amphibians, and burrowing rodents may perceive ground vibrations caused by passing trains, such vibrations have low potential to affect wildlife movement because they would be of short duration and would occur primarily during the day when most vibration-sensitive wildlife species are inactive. Therefore, CEQA does not require mitigation.

Comment 9: We disagree that CEQA does not require mitigation for the effects of intermittent noise and vibration on wildlife using corridors. There are several keystone species that are considered corridor dwellers as they dig or use burrows within corridors as they are traveling through them (Quinn J. & Diamond T. 2008; Critical Linkages 2013, Penrod 2006). The species include American badgers, California Tiger Salamander, and burrowing owl. The American badger and burrowing owl in particular are very sensitive to human disturbance around burrows and can be easily displaced. Badgers are known to occupy habitat in the Pacheco Pass alignment (Wildlife Permeability and Hazards across Highway 152 Pacheco Pass 2018-2019 conducted by Pathways for Wildlife for the Habitat Agency; Peninsula Open Space Trust (POST), Pathways for Wildlife, SCL Ecological. In progress (unpublished data). Southern Santa Cruz Mountains Wildlife Connectivity Study).

Snakes hear through their jaws, and a study has shown that these reptiles can perceive vibrations from cars passing 50 m away. These vibrations may confuse the snake or may cause it to avoid the area within 50 m of a road.

Within the Wildlife Connectivity Analysis Technical Report C:

Introduction Page | 1-1: In addition, construction and operations of transportation facilities can create noise, light, and vibration that may also negatively affect wildlife and movement behavior (van der Ree et al. 2015).

6.1.1.1 *Terrestrial Species Movement Guilds:* Vibration (pg 144 Page | 6-4)

Amphibians are also highly sensitive to vibration, using ground vibration for communication and, in the case of the spadefoot found in parts of the study area, responding to vibration caused by raindrops hitting the ground as a trigger for ground emergence (Dimmitt and Ruibal 1980). The latter study is particularly revealing, as it showed that the toads will respond similarly if the vibration is caused by

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machinery rather than rainfall. Amphibians have vibration sensitivity far greater than that of humans, as much as 60 dB at 100 Hz, a sensitivity 1,000 times greater than that of humans (Gridi-Papp and Narins 2010). Amphibians principally use vibration for communication, especially in the process of mate selection; thus, vibration generated by project construction at the time of amphibian breeding has the potential to affect the success of amphibian breeding activities and thereby to affect their population status. However, such a result does not appear to have been previously documented. Amphibians will also commonly “freeze” (completely cease movement) in response to vibration (Mazerolle et al. 2005), a response that renders them vulnerable to roadkill and may expose them to predators. In summary, vibration has the potential to affect amphibian communications associated with breeding, emergence from burrows, or behavior. These effects would be greatest near the construction site and would occur during use of machinery at the construction site. These vibration effects could have a considerable effect on special-status amphibian species near the construction site.

For smaller burrowing mammals, an effective deterrent widely used is stakes that vibrate in the ground. Intermittent noise could also detour wildlife from using the wildlife crossings as well, especially sensitive species such as American badgers, gray fox, and mountain lions (Quinn J. & Diamond T, Wilmers et al. 2013). 1.

1691-1775 | **Comment 10:** Is there no possible mitigation for intermittent vibration on burrowing animals when it will be an impact, as outlined above from the WCA Technical Report C on Page 6-4?

1691-1776 | **Comment 11:** How will HSR revise the mitigation to be adequate in the FEIR?

1691-1777 | **Comment 12:** Will the EIR be revised to conclude that noise and vibration will significantly impact special-status species and wildlife movement and develop adequate mitigation for these impacts?

1691-1778 | **Comment 13:** Also in Technical Report C (Terrestrial Species Movement Guides – Page 6-3), the following citation is made: “Construction activities would occur primarily during the day, while most wildlife movement occurs at night (Clevenger and Hujiser 2011). However, there is an abundance of data, including mountain lion telemetry data from the UCSC Puma Project and data collected by Pathways for Wildlife, that wildlife movement occurs frequently throughout the day and is not limited to night. **Because there are no mitigation measures proposed to reduce the effects of noise and vibration on wildlife movement, this impact remains significant and unavoidable.**

1691-1779 | **Impact BIO#47: Intermittent and Permanent Lighting Disturbance of Wildlife Using Corridors during Operations (117 Page | 3.7-117)**

CEQA Conclusion

The impact under CEQA would be less than significant for all four alternatives. While artificial light from passing trains and HSR track and systems may result in altered movement or foraging patterns of terrestrial and aerial wildlife species, particularly in non-urban areas, such effects would be localized. Therefore, CEQA does not require mitigation.

1691-1779

Impact	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Impact BIO#47: Intermittent and Permanent Lighting Disturbance of Wildlife Using Corridors during Operations	Nighttime lighting, including light from passing trains, could disturb wildlife attempting to move through or across the alignment. The impact would be most marked in areas with low existing light levels, especially where the alignment would be at grade.	Impacts under Alternative 2 would be similar to those under Alternative 1. Although more of Alternative 2 would be at grade, these portions would be in existing transportation corridors where light levels are already high.	Impacts under Alternative 3 would be greater than under the other three alternatives because it would cross agricultural areas east of Gilroy at grade, would cross more of the Santa Cruz Mountains to Diablo Range wildlife linkage, and would include the East Gilroy MOWF and Station in areas that currently experience low light levels.	Impacts under Alternative 4 would be the same as those under Alternative 2.

Comment 14: We disagree that CEQA does not require mitigation for the effects of intermittent and permanent lighting disturbances. Several focal species such as Tule elk, mountain lion, and American badgers are sensitive to light disturbance (Quinn J. & Diamond T 2008; Wilmers et al. 2013; Beier, P. 2006; Rich 2006). Lighting will be introduced into the Pacheco Pass which is predominantly pristine habitat with little or no human development. Tule elk, mountain lion, and American badgers have been routinely recorded using the Pacheco Pass linkage (Wildlife Permeability and Hazards across Highway 152 Pacheco Pass 2018-2019 conducted by Pathways for Wildlife for the Habitat Agency & Peninsula Open Space Trust (POST), Pathways for Wildlife, SCL Ecological. In progress (unpublished data). Southern Santa Cruz Mountains Wildlife Connectivity Study). **Is there no possible mitigation for the effects of intermittent and permanent lighting disturbances on species that are sensitive to lighting and tend to avoid lighted areas at night?**

Comment 15: How will HSRA provide mitigation for the light disturbance in linkages that have well documented wildlife movement such as the Pacheco Pass, Coyote Valley, and the Pajaro River floodplain?

Comment 16: More detail is needed in the EIR regarding specific mitigation measures intended to minimize the significant and unavoidable impacts of new sources of artificial light (e.g., due to the railway and trains, facilities and buildings, maintenance-of-ways, etc.), particularly in conservation areas, where it is important to avoid or reduce contribution to light pollution. Additionally, localized light impacts near wildlife crossing infrastructure should be fully mitigated to ensure wildlife crossings are effective and adequately mitigate for impacts elsewhere in wildlife corridors like Coyote Valley, Soap Lake, and Pacheco Pass. Please see Exhibit B, Fraser Shilling’s, comment letter for his expert opinion on the effects and mitigation measures from light impacts to wildlife movement. **How will HSRA develop proper mitigation for these negative effects of the train’s operational effects of light?**

Comment 17: Please provide an analysis and proposal for the use of directional or screened lighting fixtures to minimize light trespass onto natural lands adjacent to the HSR track.

Comment 18: Will the EIR be revised to acknowledge the significant effects of intermittent and permanent lighting on species that are sensitive to light disturbance and avoid lighted areas at night?

D. 3.7.7.9 Habitat Conservation Plans (pg 124 Page | 3.7-124)

Construction Impacts

Impact BIO#53: Conflict with Santa Clara Valley Habitat Plan Pg 124 Page | 3.7-125

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As shown in Table I-1 in Appendix I of the Biological and Aquatic Resources Technical Report (Authority 2020a), the project has potential to conflict with three actions required by the SCVHP. No other potential conflicts with the SCVHP are anticipated. **The three potential conflicts would be the same under all four project alternatives:**

Action LAND-L4 requires the acquisition and enhancement of natural and semi-natural landscapes between the Santa Teresa Hills and Metcalf Canyon to the south that will contribute to providing connectivity between the Santa Cruz Mountains and Diablo Range to promote the movement of covered and other native species at many spatial scales.

Action LAND-WP7 requires the acquisition of habitat near Santa Teresa Hills and Tulare Hill to provide connectivity between populations in the Diablo Range and the Santa Cruz foothills.

Action LAND-R3 requires the acquisition in fee title of or obtaining conservation easements on lands that protect at least 40 acres of existing California sycamore woodland (i.e., sycamore alluvial woodland) to preserve this rare land cover type in the SCVHP Plan Area. The biological objective that includes this action (Objective 9.2) further specifies that acquired stands should be at least 10 acres in size and contiguous.

The project would affect connectivity between the Diablo Range and the Santa Cruz foothills, creating a potential conflict with Actions LAND-L4 and LAND-WP7 of the SCVHP. Impacts on connectivity between the Diablo Range and the Santa Cruz Mountains are discussed in more detail in the WCA (Authority 2020a: Appendix C).

There are two potential conflicts with Action LAND-R3 of the SCVHP: impacts on the Pacheco Creek Reserve, a property owned and managed by the SCVHA; and a lack of available acres of California sycamore woodland to meet the combined preservation and restoration needs of the SCVHA and the Authority. The SCVHA acquired the 55.4-acre Pacheco Creek Reserve in 2017 because the property would address goals and objectives of the SCVHP, including Action Land-R3 (under Objective 9.2 in the SCVHP) (SCVHA 2019), which commits to the acquisition of at least 40 acres of large (at least 10 acres), contiguous stands of California sycamore woodland (County of Santa Clara et al. 2012). The reserve includes an 8.2-acre contiguous stand of sycamore alluvial woodlands, of which the project would affect 2.7 acres (0.4 acre permanent, 2.3 acres temporary). An impact on an existing reserve owned and managed by the SCVHA for the purposes of meeting the requirements under the SCVHP would be a potential conflict.

California sycamore alluvial woodland is a rare natural community type. Consequently, opportunities to preserve and restore or enhance sycamore alluvial woodland may be limited, posing a potential conflict between the Authority and the SCVHA. The SCVHP will need to preserve 54 acres of sycamore alluvial woodland if all impacts described in the SCVHP are incurred (County of Santa Clara et al. 2012). Because the Pacheco Creek Reserve includes 8.2 acres of sycamore alluvial woodland, the remaining need is 45.9 acres. However, because the project would permanently affect 0.4 acre, the remaining acquisition needed to achieve the goal and objectives of the SCVHP (if all impacts are incurred) is 45.5 acres. The Authority would need to acquire 37.2 acres of California sycamore woodland to mitigate project impacts. Therefore, the combined acquisition need for the project and the HCP is 82.7 acres. **Based on mapping by H.T. Harvey (SFEI and H. T. Harvey 2017) and the Authority (2016), it is estimated that there are 2,544 acres of available (unprotected) lands with opportunity for California sycamore**

woodland preservation and enhancement, 1,814 acres of which are in the Pajaro River HUC-8 watershed (where the impact would occur) and 730 acres of which are in the nearby Coyote Creek HUC-8 watershed. The combined mitigation need for the SCVHP and HSR of 82.7 acres totals 3.3 percent of the estimated available lands. Consequently, meeting the combined mitigation needs for the SCVHP and HSR is feasible and there is no conflict between the SCVHA and the Authority in terms of the limited availability of California sycamore woodland for preservation.

CEQA Conclusion

The impact under CEQA would be significant for all four alternatives because the project would result in impacts within the Pacheco Creek Reserve—an area protected in partial fulfillment of Action LAND-R3 of the SCVHP, resulting in a potential conflict. Project construction would affect riparian habitat within Pacheco Creek Reserve, including a patch of California sycamore woodland. Mitigation measures to address this impact are identified in Section 3.7.10, CEQA Significance Conclusions. Section 3.7.8, Mitigation Measures, describes these measures in detail.

The Pacheco Creek Reserve also includes areas identified by SEFI and H.T. Harvey & Associates (2017) as suitable for restoration of sycamore alluvial woodland, thus potentially contributing to the future restoration goals (i.e., 10-acre contiguous stands) of the SCVHA.

Comment 19. The DEIR states there is 2,544 acres of available (unprotected) sycamore alluvial woodlands within the Habitat Plan area, which is not supported by the SFEI and H. T. Harvey 2017 document that HSRA cites, please see excerpt from the document below.

Comment 20. Based on one of the “go-to” pieces of literature (Keeler-Wolf et al.1996) there are only 2000 acres of true SAW remaining in the state and this was in the mid-1990’s. More specifically, the SCVHP concludes there are only 367 acres of sycamore alluvial woodland within the Habitat Plan area (SCVHP Chapter 3, Page 3-69 and Figure 3-10 and Table 3-7), accounting for only 0.1% of the total land cover of the Plan.

Comment 21. The map of potential SAW enhancement areas included is very rough and based on extremely limited information, as mentioned in the document. The map and report do not provide any kind of estimate of acreages. Rough polygons were used to draw around areas observed as supporting some sycamores to provide a general understanding of locations of areas to potentially be considered for further assessment. It is clearly stated that these areas are what is recommended for consideration for enhancement and detailed site-specific surveys would be required before determining if they are actually suitable for further consideration.

Comment 22. We disagree with the DIER statement: “Consequently, meeting the combined mitigation needs for the SCVHP and HSR is feasible and there is no conflict between the SCVHA and the Authority in terms of the limited availability of California sycamore woodland for preservation.” Since the DEIR analysis of available California sycamore alluvial woodland exaggerates the available land within the SCVHP area that is suitable for conservation and restoration, the project impacts on sycamore alluvial woodland habitat are greater than what is portrayed in the document. Please adjust the figure to accurately account for sycamore alluvial woodland and adjust the effects analysis accordingly. **Additional mitigation, such as HSRA cooperation with the SCVHA on a joint purchase of land to be enrolled into the SCVHA Reserve System for the specific purpose of sycamore alluvial woodland conservation and restoration is necessary to conclude a less than significant impact.**

1691-1784

1691-1785

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1691-1787

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1691-1788

Comment 23. The project would negatively affect wildlife connectivity within the Diablo Range at the Pacheco Pass. The 2.5 miles of cut and fill earthen embankment will also be fenced off resulting in an extensive barrier within the linkage. Although mitigation in the form of culvert installation is proposed to facilitate wildlife movement under the at-grade sections of track in Pacheco Pass, this impact represents a fourth conflict with the SCVHP that was not sufficiently disclosed.

1691-1789

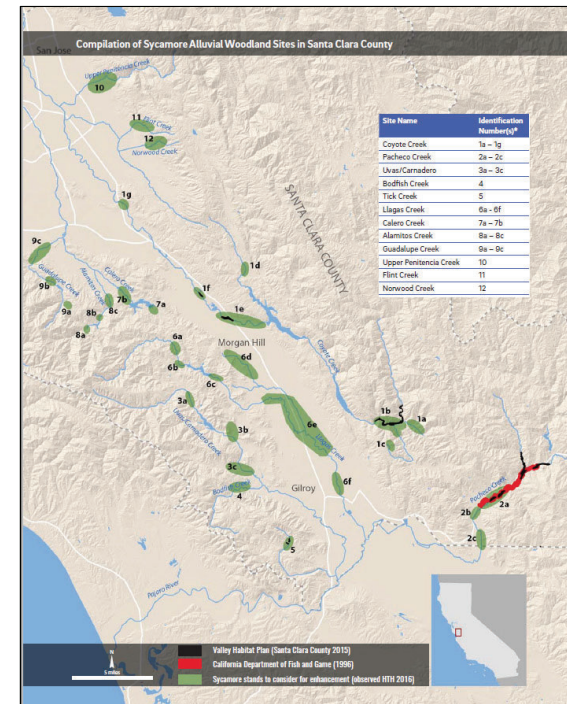
Comment 24: Most of the land identified in the SFEI study is not sycamore woodland, and given hybridization, climate change, and the disruption of the historical hydro-curve most of those acres are not suitable for sycamore woodland conservation or mitigation, further reducing the availability of this habitat type for the conservation needs of the SCVHP.

1691-1790

Comment 25: The Project impacts to the Pacheco Creek Reserve will potentially derail the SCVHA capstone sycamore alluvial mitigation strategy, which includes 8 acres of preservation and up to 20 acres of restoration/creation credits available toward fulfillment of the requirements of our Habitat Plan. Furthermore, Pacheco Creek itself is one of the last bastions of intact sycamore alluvial habitat, with natural recruitment, in the Plan Area.

San Francisco Estuary Institute and H.T. Harvey. 2017. Sycamore alluvial woodland habitat mapping and regeneration study.

Excerpt: Based on the local knowledge of HTH staff, and previous mapping efforts in the County, there are several sites preliminarily recommended for enhancement of SAW. To determine whether or not these sites are suitable for SAW enhancement, further site-specific investigations should examine the following parameters: location relative to the VHP Priority Preserve Areas; ownership; hydrology (managed versus natural); range of geomorphic zones; livestock grazing; and potential for acquisition, restoration, or management. We recommend the following locations be considered (Figure 30):



**3.7.7.9 Habitat Conservation Plans
No Project Impacts (pg 124 Page | 3.7-124)**

The conditions describing the No Project Alternative are the same as those described in Section 3.7.6.2. The same planned development and transportation projects would generally result in increases in VMT, construction of new impervious surfaces, and conversion of land cover types to transportation uses, all of which could affect the viability of existing HCPs. Under the No Project Alternative, recent development trends are anticipated to continue, leading to impacts on biological and aquatic resources and wetlands. Future changes in land use or allowable density of development, as well as ground disturbance associated with future infrastructure improvements such as highway expansions to accommodate population growth, would have impacts on

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HCP areas similar to those that have resulted from past development, such as habitat loss, fragmentation, and degradation, caused by the encroachment of new development into areas near or adjacent to such areas.

Project Impacts

Construction of the project could conflict with three HCPs: the SCVHP, the Greenprint, and the *Coyote Valley Landscape Linkage* report. The SCVHP is an adopted HCP and NCCP prepared pursuant to Section 10 of the FESA and the NCCPA. Its provisions are expressed through an organizing hierarchy of biological goals, biological objectives, and two primary types of actions: acquisition actions, which address the acquisition of conservation areas; and management actions, which address the management of conservation areas. Each biological goal is implemented through the pursuit of one or more biological objectives, and some biological objectives require an acquisition or management action. Therefore, a conflict could occur if construction and operation of any project alternative would result in a failure to achieve any acquisition or management action specified under the SCVHP, and if such a failure would thereby preclude achieving a biological goal or objective of the SCVHP. Table I-1 in Appendix I of the Biological and Aquatic Resources Technical Report (Authority 2020a) summarizes potential conflicts with regard to each action in the SCVHP.

The Greenprint is an approved local plan for conserving habitats. Its provisions are expressed through an organizing hierarchy of goals and strategies. Each biological goal is implemented through the pursuit of one or more strategies. Therefore, a conflict could occur if construction or operation of any project alternative would result in a failure to implement any strategy specified under the Greenprint. Table I-2 in Appendix I of the Biological and Aquatic Resources Technical Report (Authority 2020a) summarizes potential conflicts with regard to each strategy in the Greenprint.

The *Coyote Valley Landscape Linkage* report is an approved local plan for identifying, protecting, and restoring areas essential for wildlife movement in Coyote Valley. Several land purchases consistent with the goals of the report have been made or are in process and wildlife crossing modifications are in the planning stage. Therefore, a conflict could occur if construction or operation of any project alternative would prevent

Comment 26: There is only one Habitat Conservation Plan for Santa Clara County, which is the Santa Clara Valley Habitat Conservation Plan (HCP) implemented by the Santa Clara Valley Habitat Agency (SCVHA). Will the FEIR be revised to correct for this mistake?

3.7.9.8 Habitat Conservation Plans (pg 198 Page | 3.7-198)

Construction of the project alternatives would result in potential impacts on three HCPs: the SCVHP, the Greenprint, and the *Coyote Valley Linkage*. The SCVHP is an adopted federal HCP and NCCP prepared pursuant to Section 10 of the FESA and NCCPA, respectively. The Greenprint and *Coyote Valley Linkage* are approved regional or local HCPs. The project alternatives could have impacts on habitat connectivity under the SCVHP between the Santa Cruz Mountains and the Diablo Range by potentially limiting or affecting the movement of species between these regions. Additionally, the alternatives would have permanent and temporary impacts in a particular area targeted for protection; consequently, additional lands would need to be secured to meet the

Comment 27: There is only one Habitat Conservation Plan for Santa Clara County, which is the Santa Clara Valley Habitat Conservation Plan (HCP) implemented by the Santa Clara Valley Habitat Agency (SCVHA). Will the FEIR be revised to correct for this mistake?

E. Mitigation Measures (pg 129 Page | 3.7-129)

BIO-MM#55: Provide Compensatory Mitigation for Loss nesting Trees and Habitat

Comment 28: Will the HSRA be developing this CMP in collaboration with the Habitat Agency?

BIO-MM#10: Prepare and Implement a Compensatory Mitigation Plan for Species and Species Habitat

The Authority would prepare a compensatory mitigation plan (CMP) that sets out the compensatory mitigation that would be provided to offset permanent and temporary impacts on federal and state-listed species and their habitat, fish and wildlife resources regulated under Section 1600 et seq. of the Cal. Fish and Game Code, and special-status species. Mitigation implemented under this measure would be consistent with and would help advance mitigation commitments at the program level, including mitigation intended to address impacts in the GEA. Section 3.7 Biological and Aquatic Resources California High-Speed Rail Authority April 2020 San Jose to Merced Project Section Draft EIR/EIS Page | 3.7-141

Protection of habitat through acquisition of fee-title or conservation easement and funding for long-term management of the habitat. **Title to lands acquired in fee would be transferred to CDFW** and conservation easements would be held by an entity approved in writing by the applicable regulatory agency.

Comment 29: The preliminary Compensatory Mitigation Plan (CMP) was based on Maxent modeling and does not differentiate conservation or protected lands. Protected land impacts should include higher impacts and mitigations than just 1:1. Especially when there has been and will be significant investment by the Habitat Agency in working on habitat restoration, wildlife monitoring, and wildlife connectivity enhancements currently underway at Pacheco Pass.

Will the CMP result in higher mitigation ratios for impacts to conservation and protected lands?

Comment 30: Is CDFW aware that HSR plans to transfer title to lands acquired in fee?

Comment 31: Is there an opportunity for those lands to be transferred to the Habitat Agency instead?

BIO-MM#31: Provide Compensatory Mitigation for Impacts on California Tiger Salamander Habitat

The Authority would provide compensatory mitigation to offset the loss of modeled California tiger salamander habitat. **Compensatory mitigation** would be provided for impacts on habitat occupied or presumed occupied by California tiger salamander at a ratio of 3:1, unless higher ratios are required through regulatory authorizations issued under the FESA or CESA. Compensatory mitigation would be provided using one or more of the methods described in BIO-MM#10.

Comment 32: Who is the compensatory mitigation provided too?

BIO-MM#46: Implement Avoidance and Minimization Measures for Burrowing Owl

Occupied burrowing owl burrows found during pre-construction surveys would be avoided in accordance with the **SCVHP's condition of approval for covered activities in burrowing owl habitat** (County of Santa Clara et al. 2012: page 6-62). To the extent feasible, the Project Biologist would establish 250-foot no-work buffers around occupied burrowing owl burrows in the work area. An occupied burrow is defined as any burrow at which (1) an adult owl is observed on two or more pre-

1691-1791

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construction surveys, or (2) a pair of adult owls is observed on one or more pre-construction survey. Construction may proceed outside the 250-foot nondisturbance zone. Construction may proceed inside the 250-foot nondisturbance no-work buffer zone during the breeding season if the season-specific criteria (nesting season: February 1–August 31; non-nesting season: September 1–January 31) described in the SCVHP are met.

BIO-MM#47: Provide Compensatory Mitigation for Loss of Active Burrowing Owl Burrows and Habitat

To compensate for permanent impacts on occupied burrowing owl breeding habitat, the Authority would provide compensatory mitigation at a minimum 1:1 ratio for occupied breeding and foraging habitat. Lands proposed as compensatory mitigation would meet one of the following criteria:

Support at least two breeding adult owls for every breeding adult owl displaced by construction of the project

Support at least 1 acre of burrowing owl breeding habitat for every acre of habitat affected (i.e., 1:1 mitigation ratio). For the purposes of this measure, burrowing owl breeding habitat is defined as any land cover type with all of the following attributes:

Open terrain with well-drained soils

Short, sparse vegetation with few shrubs and no trees

Underground burrows or burrow surrogates (e.g., debris piles, culverts, pipes) for nesting and shelter from predators or weather. Burrows in earthen levees, berms, or canal banks within or along the margins of agricultural fields can be counted as compensatory breeding habitat as long as adjacent fields or pastures are suitable for foraging.

Abundant and accessible prey (arthropods, small rodents, amphibians, lizards)

1691-1798

Comment 33: 1:1 is standard but given the rarity of BUOW breeding success in the County and across the state 1:1 may be inadequate. **The compensatory mitigation at a minimum 1:1 ratio is too low for burrowing owls. Will the ratio be higher in the FIER?**

1691-1799

BIO-MM#61: Provide Compensatory Mitigation for Impacts on San Joaquin Kit Fox Habitat

The Authority would provide compensatory mitigation for impacts on San Joaquin kit fox habitat through the acquisition of suitable habitat that is acceptable to USFWS and CDFW. Habitat would be replaced at a minimum ratio of 1:1 for high- or moderate-value suitable habitat (natural lands) and at a ratio of 0.5:1 for low-value suitable habitat (urban or agricultural lands), unless a higher ratio is required by regulatory authorizations issued under the FESA and CESA. Compensatory mitigation would be provided using one or more of the methods described in BIO-MM#10.

Comment 34: Habitat replacement ratio of 1:1 for high- or moderate-value suitable habitat (natural lands) is too low for an endangered species in which the breeding success outside of Bakersfield is declining. If the Project is impacting high-value occupied habitat the ratio is too low. **Will the ratio be higher in the FIER?**

1691-1800

BIO-MM#72: Provide Compensatory Mitigation for Permanent Impacts on Riparian Habitat (pg 165 Page | 3.7-165)

The Authority would compensate for permanent impacts on riparian habitats at a ratio of 2:1 (mixed riparian and palustrine forested wetland) or **4:1 (California sycamore woodland)**, unless a higher ratio is required by agencies with regulatory jurisdiction over the resource. Compensatory mitigation may occur through habitat restoration, the acquisition of credits from an approved mitigation bank, participation in an in-lieu fee program or habitat preservation or enhancement at a permittee responsible mitigation site.

BIO-MM#85: Provide Compensatory Mitigation for Impacts on California Sycamore Woodland at the Pacheco Creek Reserve

To offset permanent impacts at the Pacheco Creek Reserve and alleviate conflict with the SCVHP, the Authority would provide compensatory mitigation at a 1:1 ratio. The replacement reserve would be of the same acreage as the existing reserve (8.2 acres) or greater, and it would be primarily be composed of a contiguous patch of the California sycamore alluvial woodland, the conservation target on which the reserve was formed. Mitigation lands can be co-located with the mitigation under BIO-MM#72 to meet the 10-acre minimum patch size requirement stipulated in Objective 9.2 of the SCVHP. This mitigation may be accomplished through preservation, enhancement, or restoration, or a combination thereof, with a preference given to mitigation opportunities in the Pajaro River HUC-8 watershed.

Comment 35: BIO-MM#72 includes a 4:1 compensation for California sycamore woodland. Why does BIO-MM#85 only give a 1:1 mitigation ratio for the Pacheco Preserve? The 1:1 mitigation ratio is inadequate mitigation for conflict with the HCP on a conservation land and Habitat Agency Reserve that was specifically meant for CA Sycamore woodland protection and restoration.

1691-1801

Comment 36: Will the Habitat Agency receive a 4:1 compensation for California sycamore woodland at the Pacheco Creek Reserve?

1691-1802

BIO-MM#76: Minimize Impacts on Wildlife Movement during Construction (pg 167 Page | 3.7-167)

To the extent feasible, the Authority would avoid placing fencing, either temporarily or permanently, within known movement routes for wildlife (e.g., the Fisher Creek underpass) in those portions of the alignment where the tracks are elevated (e.g., viaducts or bridges). The Authority would avoid conducting ground-disturbing activities within known wildlife movement routes during nighttime hours, to the extent feasible, and would shield nighttime lighting to avoid illuminating wildlife movement corridors in circumstances where feasible.

Comment 37: These are good methods to minimize impacts to wildlife movement during construction. **Will these also be applied to Pacheco Pass?**

BIO-MM#78: Establish Wildlife Crossings at Embankment in West Slope of Pacheco Pass (169 Page | 3.7-169)

The Authority would create dedicated wildlife crossings to accommodate wildlife movement across permanently fenced infrastructure in the western portion of the Pacheco Pass Subsection near Casa de Fruta, where wildlife movement would be significantly reduced. Wildlife crossings would be

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placed approximately every 0.3 mile, as feasible, where the alignment is at grade, on embankment, or trenched at the following locations:

- **Crossing A: B3161+34: 130 feet long by 40 feet wide by 23 feet high.**
- **Crossing B: B3174+00: 144 feet long by 40 feet wide by 38 feet high**
- **Crossing C: B3197+00: 165 feet long by 40 feet wide by 38 feet high**
- **Crossing D: B3209+98: 185 feet long by 40 feet wide by 38 feet high**

Crossings would conform to the minimum spacing and dimensions set forth in the WCA (Authority 2020a: Appendix C), unless different dimensions or frequencies are specified in authorizations issued under the FESA or CESA. Additionally, to the extent feasible, specific designs would incorporate the features outlined under BIO-MM#77 to facilitate wildlife movement through dedicated crossings.

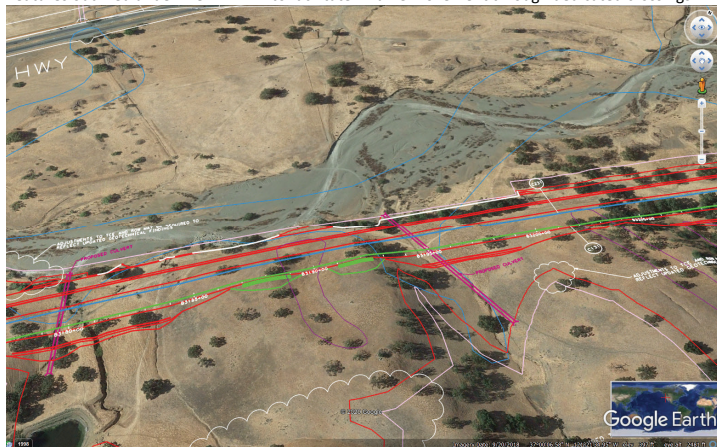


Figure 1. Proposed wildlife culverts as mitigation. Pacheco Pass Preferred Alternative 4 kml file with JM_FRA_Footprint_With_Parcel_Alt4 and JM-Alt 4_Record PEPD_KMZ_05162019.

1691-1803

Comment 38: The proposed wildlife Crossing A, Crossing B, Crossing C, and Crossing D for Pacheco Pass are too long to facilitate wildlife movement through them, particularly for species such as Tule elk, mountain lions, and deer. There have been extensive studies and analyses regarding the length of culverts and culvert use by these species (Beckmann, J.P et al. 2010; Forman 2000; Determining Wildlife Use of Wildlife Crossing Structures under Different Scenarios Cramer, P 2002; Caltrans Wildlife Crossing Guidance Manual Meese et al. 2009; Beier, P. 1995; Safe Passages. Ruediger B. 2007; Beier, P. 1993; Corridor Ecology 2006; Clevenger, A.P & M.P. Huijser 2011; Penrod K. 2006; Critical Linkages 2013; Dickson B. et al. 2005; Forman, R. T. 2010; Wilmers, C.et al. 2013; Road Ecology: Science and Solutions 2003).

1691-1803

For example, it has been found that the maximum length of a culvert or tunnel that deer will use is 120 feet (Determining Wildlife Use of Wildlife Crossing Structures under Different Scenarios Cramer, P 2002).

Please see Dec 13th 2018 e-mail discussion below about this problem with the proposed culverts between the Stakeholder group and HSR for further information regarding the issues with the wildlife crossings. These issues were never resolved in the DEIR, the culverts are the same length and are inadequate mitigation for 2.5 miles of cult and fill where the rail will be on embankment and heavily fenced.

Furthermore, these section of the rail will be introducing a barrier in a designated wildlife linkage and destroying habitat in pristine core habitat known to be utilized by species such as Tule Elk, mountain lions, bobcats, coyotes, and deer (Wildlife Permeability and Hazards across Highway 152 Pacheco Pass 2018-2019 conducted by Pathways for Wildlife for the Habitat Agency).

In regard to SR-152, the Habitat Agency and Pathways for Wildlife are working with stakeholders such as DFW and Caltrans to further improve the ability for wildlife movement across SR-152. Current research has found that SR-152 is highly permeable via several culverts and bridges. The work on implementing wildlife connectivity enhancements will increase the permeability of the highway and landscape. HSR will be counteracting these efforts by introducing a new barrier without adequate mitigation with poorly designed wildlife crossings.

1691-1804

Comment 39: Will HSRA work on redesigning the wildlife crossing so that they are less than 120 feet in length?

1691-1805

Comment 40: As discussed in the email exchanges below, a short span of bridge is preferred over a long culvert which can become dark and act as a deterrent for some species. HSRA states that site constraints limit undercrossings to a culvert design, rather than installing short sections of elevated bridge. Yet, no evidence of this has been provided. Please explain why some or all of the proposed Pacheco Pass culverts cannot be replaced with short elevated bridge segments.

1691-1806

Comment 41: How will HSR revise the proposed wildlife crossing mitigation BIO-MM#78 to be adequate?

From: Tanya Diamond <tanya@pfwildlife.com>

Sent: Thursday, December 13, 2018 11:45 AM

To: Diwa, Chris(PB)@HSR <Chris.Diwa@hsr.ca.gov>; Emily Tibbott <Emily.Tibbott@SGC.CA.GOV>; 'Andrea Mackenzie' <amackenzie@openspaceauthority.org>; mfreeman@openspaceauthority.org; Jake Smith <jsmith@openspaceauthority.org>; gbasson@openspaceauthority.org; Edmund Sullivan <edmund.sullivan@scv-habitatagency.org>; Terah Donovan <terah.donovan@scv-habitatagency.org>; Abigail Ramsden <aramsden@TNC.ORG>; Sasha Gennet <sgennet@TNC.ORG>; jhooper@openspaceauthority.org; Ahiga Snyder <Ahiga@pfwildlife.com>; nthurlow@openspacetrust.org; nsharma@openspacetrust.org; Shpak, Dave@HSR <Dave.Shpak@hsr.ca.gov>; Hunter, John@HSR <John.Hunter@hsr.ca.gov>; Meyer, Sue@HSR <Sue.Meyer@hsr.ca.gov>; Avina, Claire@HSR <Claire.Avina@hsr.ca.gov>; Parsons, Stephanie(PB)@HSR <Stephanie.Parsons@hsr.ca.gov>; Kohlstrand, Rebecca(PB)@HSR <Rebecca.Kohlstrand@hsr.ca.gov>; Kennerley, Gary(PB)@HSR <Gary.Kennerley@hsr.ca.gov>; Lipkin, Boris@HSR <Boris.Lipkin@hsr.ca.gov>; McLoughlin, Mark@HSR <Mark.McLoughlin@hsr.ca.gov>; Assouri, Kristiyan@HSR <Kristiyan.Assouri@hsr.ca.gov>; jiltzinger@hntb.com; kfranchi@hntb.com; Sloan, Rebecca <Rebecca.Sloan@icf.com>

Submission 1691 (Gerry Haas, Santa Clara Valley Habitat Agency, June 23, 2020) - Continued

Cc: Rosanna McGuire <rmcguire@HNTB.com>

Subject: Re: HSR San Jose-Merced: Santa Clara Valley & Pacheco Pass conservation community meeting

Hi All,

In looking at them, Exhibit C is 165 feet and Exhibit D is 185 feet in length. In working on the Highway 17 Laurel Curve wildlife underscrossing we did an extensive literature search with Caltrans biologist Nancy Siepel on how long is too long for wildlife to cross through a culvert as we have found culverts that wildlife species such as deer would not travel through due to length in several of our studies.

There have also been some other great studies by leading road ecologists such as Patricia Cramer who analyzed these questions and found in particular that best recommendations are to keep culverts less than 120 feet (37 m) in length as they traverse under the road. The longer the culvert, the higher rate of repellence for mule deer.

I attached the study, it was written for the Utah Dept of Transportation. I also pasted part of the Executive Summary below with relevant information regarding findings of the study in relation to the Pacheco Pass Undercrossing Exhibits.

Executive Summary excerpt:

The Utah Department of Transportation (UDOT) constructed wildlife crossing structures along Utah highways in an effort to help prevent wildlife-vehicle collisions on Utah roads. The costs of these structures can be best defended and invested if the structural designs, dimensions, and materials are researched for their compatibility with wildlife use. **This project, sponsored by the Utah Transportation Research Advisory Council (UTRAC) at UDOT, was designed to evaluate how different culvert and bridge designs function at passing mule deer, elk, and other wildlife.** The overall goal was to help wildlife and transportation professionals understand the effects of structure variables such as height, length, width, and structure type on wildlife use. Other mitigation efforts were also evaluated.

- At this time the best recommendations are to keep culverts less than 120 feet (37 m) in length as they traverse under the road. The longer the culvert, the higher rate of repellence for mule deer.

- In order to ensure high mule deer successful passage, culverts should be designed with the shortest possible length, tallest height, and widest width as possible. Length is most important, width is second in importance, and height is least important

- Elk in Utah are extremely reluctant to use any kind of underpasses or culverts to pass under roadways. At this time the data suggest elk will not pass through most culverts.

- All wildlife crossing structures in elk habitat should be designed as bridges with fencing to ensure some degree of use by all elk age classes and genders.

Elk in particular are very sensitive to using undercrossings and it has been found that they mainly utilize land bridges versus under crossings. The DFW and state park biologists who are working on the collared elk study along Hwy 152 were also talking about this with me several months ago.

Best,
Tanya

Tanya Diamond
Co-Principal: Wildlife Ecologist-GIS Analyst
[Pathways for Wildlife](http://pathwaysforwildlife.com)
Cell (408) 891-9833
<http://pathwaysforwildlife.com>
[Connecting Habitats for Wildlife](http://pathwaysforwildlife.com)

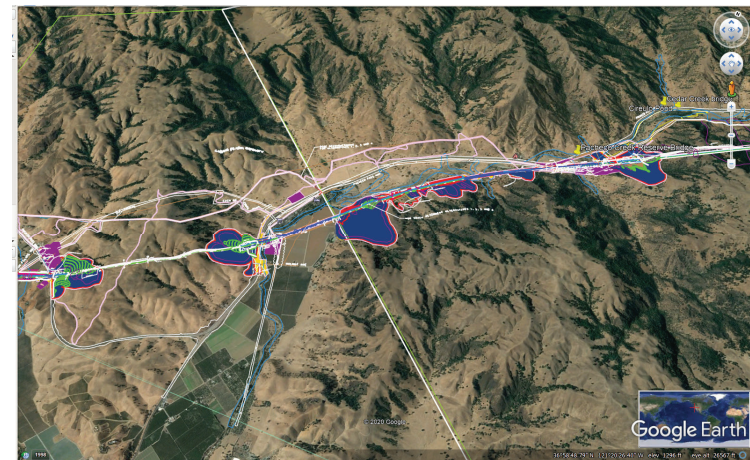


Figure 2. Pacheco Pass Preferred Alternative 4 kml file with JM_FRA_Footprint_With_Parcel_Alt4 and JM-Alt 4_Record PEPD_KMZ_05162019.

Submission 1691 (Gerry Haas, Santa Clara Valley Habitat Agency, June 23, 2020) - Continued

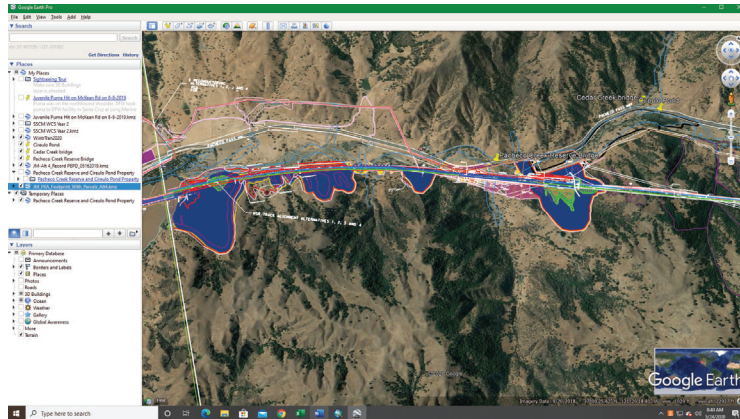


Figure 3. Pacheco Pass Preferred Alternative 4 kml file with JM_FRA_Footprint_With_Parcels_Alt4 and JM-Alt 4_Record PEPD_KMZ_05162019.

1691-1807

Comment 42: From the e-mail correspondence we understand that an **overpass** will not work, however it has never been assessed if the rail could go up on a **bridge for a short distance** within the cut and fill section. **In regards to Julian Bratina’s e-mail from 5/13/2020, please see below, will HSR evaluate if putting a section or sections of the cut and fill on a bridge is an option?** We feel it is warranted and worth the time to conduct this analysis to determine if trading in the long culverts for a short sections of a bridge would make for a functional mitigation measure, especially in light of the tremendous impacts to Pacheco Pass.

1691-1808

Comment 43: **HSRA did not evaluate if the rail could go on bridge for a short section in the cut and fill (Figure 2 and 3) why wasn’t this analysis done for the Pacheco Pass?**

HSRA Response to PFW e-mail on December 13, 2018 about the proposed culverts as mitigation, e-mail correspondence.

From: Shpak, Dave@HSR <Dave.Shpak@hsr.ca.gov>
Sent: Friday, January 25, 2019 5:39 PM
To: Sasha Gennet <sgennet@TNC.ORG>; Tanya Diamond <tanya@pfwildlife.com>; 'Andrea Mackenzie' <amackenzie@openspaceauthority.org>; mfreeman@openspaceauthority.org <mfreeman@openspaceauthority.org>; Jake Smith <jsmith@openspaceauthority.org>; gbasson@openspaceauthority.org <gbasson@openspaceauthority.org>; Edmund Sullivan <edmund.sullivan@scv-habitatagency.org>; Terah Donovan <terah.donovan@scv-habitatagency.org>; Abigail Ramsden <aramsden@TNC.ORG>; jhooper@openspaceauthority.org <jhooper@openspaceauthority.org>; Ahiga Snyder <Ahiga@pfwildlife.com>;

nthurlow@openspacetrust.org <nthurlow@openspacetrust.org>; nsharma@openspacetrust.org <nsharma@openspacetrust.org>
Cc: Rosanna McGuire <rmcguire@HNTB.com>; Hunter, John@HSR <John.Hunter@hsr.ca.gov>; Meyer, Sue@HSR <Sue.Meyer@hsr.ca.gov>; Parsons, Stephanie(PB)@HSR <Stephanie.Parsons@hsr.ca.gov>; Kohlstrand, Rebecca(PB)@HSR <Rebecca.Kohlstrand@hsr.ca.gov>; Kennerley, Gary(PB)@HSR <Gary.Kennerley@hsr.ca.gov>; Lipkin, Boris@HSR <Boris.Lipkin@hsr.ca.gov>; McLoughlin, Mark@HSR <Mark.McLoughlin@hsr.ca.gov>; Assouri, Kristiyan@HSR <Kristiyan.Assouri@hsr.ca.gov>; jlitzinger@hntb.com <jlitzinger@hntb.com>; kfranchi@hntb.com <kfranchi@hntb.com>; Sloan, Rebecca <Rebecca.Sloan@icf.com>; Diwa, Chris(PB)@HSR <Chris.Diwa@hsr.ca.gov>; Emily Tibbott <Emily.Tibbott@SGC.CA.GOV>
Subject: RE: HSR San Jose-Merced: Santa Clara Valley & Pacheco Pass conservation community meeting

Tanya and Sasha,
 Thank you for sharing your concerns, the supporting study, and related suggestions about the conceptual design of high-speed rail (HSR) wildlife crossing features in Pacheco Pass. Your collaboration with the Authority has measurably improved the HSR project, and we appreciate the time and knowledge that you have invested in our partnership.
 We have carefully reviewed and considered the study and suggestions for maintaining wildlife movement across the alignment near the Pacheco Portal. We’d like to respond to the comments you shared with the Pacheco Pass wildlife stakeholders and the HSR project team in your emails on December 13, 2019. In brief, overcrossings or open-span structures are not necessary or recommended to mitigate permeability reductions where the HSR guideway would be built on a series of cut and fill sections between the Casa de Fruta fields and the viaduct approach to the west portal of Tunnel #2. However, undercrossings are feasible, would result in relatively lessor secondary impacts, and would allow for some wildlife movement that would substantially reduce the consequences for local populations.

We agree that shorter wildlife undercrossings are more effective than longer undercrossings. All else being equal, shorter crossings should support higher levels of wildlife use, particularly for deer and elk, which are sensitive to crossing dimensions. We also agree that open-span bridges or wildlife overcrossings could be more effective than culvert undercrossings at facilitating frequent crossings by elk and deer.

However, in this vicinity of the HSR alignment, crossing designs are constrained by topography, geological conditions, and design criteria of the HSR guideway. Undercrossing dimensions are determined predominantly by:

- HSR track spacing and track profile (elevation),
- Required 6-foot minimum depth between top of rail and top of culvert,
- Slope of the culvert floor, and
- Proximity to Pacheco Creek.

Bratina, Julian@HSR <Julian.Bratina@hsr.ca.gov>
 Wed 5/13/2020 12:58 PM
 To:

- Tanya Diamond;
- Edmund Sullivan <edmund.sullivan@scv-habitatagency.org>;
- Julie King <julie.king@scv-habitatagency.org>

Cc: Shpak, Dave@HSR <Dave.Shpak@hsr.ca.gov>

Submission 1691 (Gerry Haas, Santa Clara Valley Habitat Agency, June 23, 2020) - Continued

Hi Tanya,

As discussed during the call, the wildlife crossing designs reflected the coordination efforts between the Authority and wildlife stakeholders, and were the result of collaborative analysis of project biologists and engineers to determine structural feasibility and biological efficacy. **Technical analyses of viaduct or bridge structures at this location have not been conducted, so we cannot speculate on the feasibility of these structures** in lieu of undercrossing culverts within the proposed fill sections.

While new information collected after the stakeholders and Authority concurred on undercrossing culverts may indicate a different approach for wildlife movement may be needed, changes to the PEPD design are not being considered at this time in the process. The Draft EIR/EIS comment period is the current opportunity to recommend design refinements to the Authority. The Authority will consider comments and determine the course of response for the Final EIR/EIS. **If directed by the Authority, the project team would follow up on any new data that would contribute to responsive analyses.**

Regards,

Julian Bratina

Assistant Project Manager, San Jose to Merced

California High-Speed Rail Program

Tel: 415 402 2276

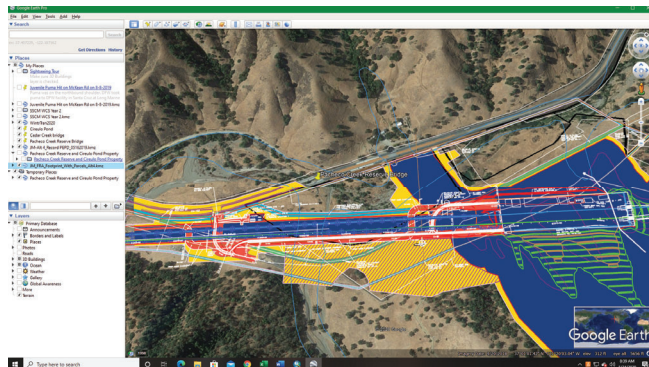


Figure 4. Pacheco Creek Reserve with Preferred Alternative 4 kml file with JM_FRA_Footprint_With_Parcel_Alt4 and JM-Alt 4_Record PEPD_KMZ_05162019. The Pacheco Creek Reserve property boundary is outlined in black.

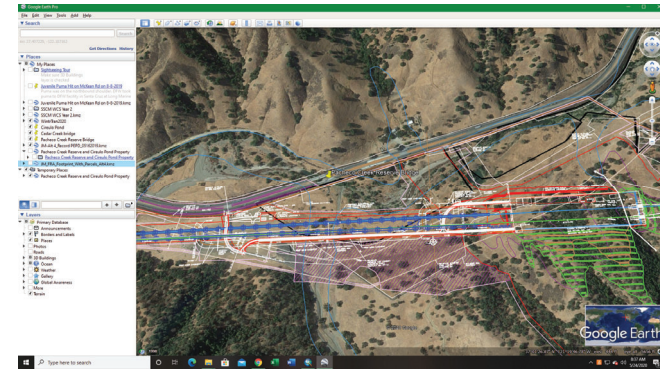


Figure 5. Pacheco Creek Reserve with Preferred Alternative 4 kml file with JM-Alt 4_Record PEPD_KMZ_05162019.

BIO-MM#79: Provide Wildlife Movement between the Santa Cruz Mountains and Diablo Range (pg 169 Page | 3.7-169)

Protection of 238 acres (Alternatives 1, 2, and 4) or 239 acres (Alternative 3) of lands prioritized for their importance to wildlife movement in the Santa Cruz Mountains to Diablo Range Wildlife Linkage and the Soap Lake 100-year floodplain, which corresponds to a 1-to-1 ratio of protected land to project footprint at the MOWF

Comment 44: Will the FIER include land protection and acquisition in collaboration with the SCVHA in the Pacheco Pass? The Pacheco Pass designated as the Bay Area Critical Linkage of the Diablo Range to the Inner Coast Linkage Design (Figure 1) It is the linkage most impacted by the Project, with the greatest habitat loss.

F. 3.7.9.1 Special-Status Species (pg 190 Page | 3.7-190)

American Badger (pg 196 Page | 3.7-196)

Construction of the project alternatives would have direct and indirect impacts on American badger habitat and on individuals, if any are present in affected habitat. The primary project activities affecting American badger habitat would be HSR right-of-way, TCE, underground easement, and utility easement. All project alternatives would have similar impacts on this species, with minor differences in area of affected habitat, because the portions of the alternatives that overlap with modeled habitat have nearly identical footprints. BIO-MM#1, BIO-MM#2, BIO-MM#3, BIO-MM#4, BIO-MM#5, BIO-MM#6, BIO-MM#13, and BIO-MM#64 are available to reduce this impact.

1691-1809

Submission 1691 (Gerry Haas, Santa Clara Valley Habitat Agency, June 23, 2020) - Continued

3.7.10 CEQA Significance Conclusions

Table 3.7-27 CEQA Significance Conclusions and Mitigation Measures for Biological and Aquatic Resources (pg 213 Page | 3.7-213)

CALIFORNIA High-Speed Rail Authority Section 3.7 Biological and Aquatic Resources

CEQA Impacts	Impact Description and CEQA Level of Significance Before Mitigation	Mitigation Measure	CEQA Level of Significance After Mitigation
Impact BIO#28: Permanent Conversion or Degradation of Habitat for and Direct Mortality of American Badger	Significant for all alternatives. The project would remove or disturb habitat for American badger, and could degrade habitat outside of but adjacent to the work areas. Activities could also result in mortality of individuals by crushing occupied burrows or collapsing burrow entrances and preventing escape. Activities could also disturb individuals and impair breeding, feeding, or sheltering behavior.	BIO-MM#1: Prepare and Implement a Restoration and Revegetation Plan BIO-MM#2: Prepare and Implement a Weed Control Plan BIO-MM#3: Establish Environmentally Sensitive Areas and Nondisturbance Zones BIO-MM#4: Conduct Monitoring of Construction Activities BIO-MM#5: Limit Vehicle Traffic and Construction Site Speeds BIO-MM#6: Establish and Implement a Compliance Reporting Program BIO-MM#13: Implement Work Stoppage BIO-MM#64: Conduct Pre-Construction Surveys for American Badger Den Sites and Implement Avoidance and Minimization Measures	Less than Significant

Impact BIO#28: Permanent Conversion or Degradation of Habitat for and Direct Mortality of American Badger

The Authority would implement mitigation measures to reduce the impacts on American badger. BIO-MM#1 would involve preparation of an RRP that would identify and describe procedures for restoring temporarily disturbed habitat to its former state. BIO-MM#2 would require the project biologist to develop a WCP prior to ground-disturbing activity to minimize and avoid the spread of invasive weeds into the project footprint and adjacent areas. BIO-MM#3 would require the project biologist to establish ESAs and nondisturbance zones (including WEF, where applicable) that support special-status species or aquatic resources and are subject to seasonal restrictions or other avoidance and minimization measures prior to ground-disturbing activity. BIO-MM#4 and BIO-MM#6 would require the project biologist to monitor construction activities for compliance with avoidance and minimization measures and established ESAs and nondisturbance zones and to document such monitoring through a compliance reporting program, respectively. BIO-MM#5 would require the project biologist to establish vehicle speed limits within the project footprint; restrict vehicle traffic to established roads, construction areas, and other permissible areas; and direct that routes be marked to prevent off-road traffic prior to ground-disturbing activity. BIO-MM#13 would allow the Project Biologist to halt work if any badgers are encountered that could be injured or killed by project activities. BIO-MM#64 would avoid direct impacts on individual American badgers during construction by requiring pre-construction surveys for and avoidance of occupied dens. These measures are expected to avoid direct impacts on individual American badgers. Therefore, the impact would be less than significant.

1691-1810

Comment 45: American badgers are currently planned for becoming a SCVHP covered species. Will American badgers be given the same Mitigation Measures as burrowing owls as detailed in BIO-MM#46 and BIO-MM#47?

1691-1811

Comment 46: Will the HSR follow the SCVHP's condition of approval for covered activities for American badger as illustrated below for burrowing owls?

1691-1812

Comment 47: Will American badgers include the same requirement specified in BI-MM#47 for burrowing owls? To compensate for permanent impacts on occupied burrowing owl breeding habitat,

1691-1812

the Authority would provide compensatory mitigation at a minimum 1:1 ratio. If not, **why isn't the American badger being given the same mitigation measures when they are both a Species of Special Concern?**

1691-1813

2. Mountain lion

Comment 48. Please see Exhibit 3 (SR 152 Pacheco Pass & Pacheco Creek Reserve Mountain Lion Report- August 2018-May 2020). The rail design crosses through the Habitat Agency's Pacheco Creek Reserve property boundary, which is outlined in black in Figure 5 of the exhibit. The yellow pin is at the Pacheco Creek Bridge in which a mountain lion was recorded traveling through the bridge on 6/27/2019 into the preserve. This is the only bridge in which a mountain lion has been recorded using to travel under the highway within the study area. Furthermore, multiple species have been consistently recorded using the bridge to travel under SR-152 on a monthly basis from August 1, 2018 to July 31, 2019 (Wildlife Permeability and Hazards across Highway 152 Pacheco Pass 2018-2019, Pathways for Wildlife).

How will the HSR compensate and mitigate for loss of mountain lion habitat and impacts to wildlife connectivity, such as mountain lions at the Pacheco Creek Reserve?

1691-1814

Comment 49. Now that the mountain lion is a candidate species for state listing how does the Authority propose to re-assess impacts in the EIR/EIS for mountain lions?

Even though HSRA used mountain lions as a focal species for their analysis, they did not mitigate for them as a special status species. There are no Mitigation Measures or Biological Impacts written in Ch 3.7 for mountain lions. For example, there is nothing written about providing a 1:1 mitigation measure for habitat loss for them, only for listed species.

1691-1815

Comment 50. Will Mitigation Measures and Biological Impacts be written for mountain lions in the FEIR?



Figure 2. Mountain lion cross through the Pacheco Creek bridge at the Pacheco Reserve on 6-27-2019.

Submission 1691 (Gerry Haas, Santa Clara Valley Habitat Agency, June 23, 2020) - Continued

1691-1816

3. Western monarch

Comment 51: The western monarch is likely to become a listed species. **How does the Authority propose to assess impacts in the EIR/EIS for western monarchs?** Western monarchs need to be analyzed and assessed within the FIER.

1691-1817

G. 3.7.9.7 Conservation Areas (pg 198 page Page | 3.7-198)

Construction of the project would have direct and indirect impacts on conservation areas. The primary project activities affecting conservation areas would be HSR right-of-way, TCE, and utility easement. Additional effects on water resources in conservation areas over the tunnel alignment may result from groundwater depletion during tunnel construction and the associated disruption of hydrologic cycles of surface water resources. All project alternatives would have identical impacts on Romero Ranch Conservation Easement, because all alternatives have identical footprints in this area. All project alternatives would have similar impacts on Soap Lake properties, by acres, and Alternatives 1 and 2 would be identical; however, Alternative 3 would have greater permanent impacts. The remaining major difference between project alternatives is that Alternative 3 would have an impact on the Silacci Conservation Area, while Alternatives 1 and 2 would have no impact on this area. The difference between the impacts on all other conservation areas would be minor by acres and number of conservation areas affected. BIO-MM#9, BIO-MM#10 and BIO-MM#84 are available to reduce this impact.

Comment 52: There is no mention of the Pacheco Creek Reserve owned by the Habitat Agency in **Impact BIO#51: Permanent Conversion or Degradation of Conservation Area. Why was the Pacheco Creek Reserve left out of 3.7.9.7 Conservation Areas but noted in Impact BIO#51: Permanent Conversion or Degradation of Conservation Area?**

1691-1818

Comment 53: Will the Pacheco Creek Reserve be included in 3.7.9.7 Conservation Areas in the FIER?

1691-1819

H. Adaptive Ungulates Movement Guide (pg 164 Page | 6-24)

1. Black-Tailed Deer

Alternatives 1, 2, and 4, Stations 2245–2260, 2325–2335; Alternative 3, Stations 2175–2190, 2255–2265

These sections of permeability reduction are the result of soil stabilization in western Pacheco Pass that must be fenced after construction. Deer movement in this region is evidenced by roadkill data (CROS 2017; Diamond 2017) along SR 152.

The loss of permeability in this location would likely be considerable. It is recommended that wildlife-friendly fencing be used around the soil stabilization areas and that security fencing be used only near the tunnel portal. This would minimize the permeability reduction footprint such that it would no longer be considerable. See Chapter 7 for details about wildlife-friendly fencing recommended in these locations.

Comment 54: The proposed mitigation for the wildlife crossings in Pacheco Pass is not adequate for deer. The culvert lengths are too long in length (Beckmann, J.P et al. 2010; Forman 2000; Determining

1691-1819

Wildlife Use of Wildlife Crossing Structures under Different Scenarios Cramer, P 2002; Caltrans Wildlife Crossing Guidance Manual Meese et al. 2009; Beier, P. 1995; Safe Passages. Ruediger B. 2007; Beier, P. 1993; Corridor Ecology 2006; Clevenger, A.P & M.P. Huijser 2011; Penrod K. 2006; Critical Linkages 2013; Dickson B. et al. 2005; Forman, R. T. 2010; Wilmers, C.et al. 2013; Road Ecology: Science and Solutions 2003).

For example, it has been found that the maximum length that deer will use is 120 feet (Cramer, P 2002).

1. Will the culvert size be reduced to adequately facilitate deer movement through the under crossings? 2. Will HSR work on redesigning the wildlife crossing so that they are less than 120 feet?

1691-1820

I. Very High Openness Fauna Movement Guild (pg 166 Page | 6-26)

1. Tule Elk

Alternatives 1 2, and 4, Stations 2335–3225; Alternative 3, Stations 2265–3225

This location of permeability reduction is the result of an embankment section of the rail being constructed south of SR 152 in western Pacheco Pass just east of Casa de Fruta. Roadkill (Diamond 2017; Road Ecology Center 2017) and radio collar data (Hobbs 2017) provide evidence that tule elk move in this region

It is recommended that wildlife undercrossings be constructed in this area to provide movement across the rail. For additional information about the proposed undercrossings in this location, see Chapter 7.

It should be noted that there is some evidence that wildlife undercrossings are not frequently used by tule elk (Cramer 2012) and that the effectiveness of using undercrossings to address movement effects on tule elk in this location may be low. However, it should also be noted that **SR 152, just north of these permeability reduction locations, likely functions as a significant barrier to northward elk movement in the existing condition.** Because the alignment is so close to SR 152, tule elk crossing the alignment would still have to contend with the existing movement barrier (SR 152). Because of the existing barrier, the wildlife underpasses, which meet the design criteria for elk described in Table 7-1, are sufficient to address the effect.

Comment 55: The CDFW Tule elk radio collaring project has recorded Tule elk successfully crossing SR-152 (Kristin Langner, CDFW Tule elk biologist, lead on the Tule elk collaring project, per. Com Nov 2019). The DEIR should revise the Tule elk section regarding that SR-152 is functioning as a significant barrier, that is a false statement.

1691-1821

Comment 56: The proposed mitigation for the wildlife crossings in Pacheco Pass is not adequate for Tule elk. The culvert lengths are too long in length (Beckmann, J.P et al. 2010; Forman 2000; Determining Wildlife Use of Wildlife Crossing Structures under Different Scenarios Cramer, P 2002; Caltrans Wildlife Crossing Guidance Manual Meese et al. 2009; Beier, P. 1995; Safe Passages. Ruediger B. 2007; Beier, P. 1993; Corridor Ecology 2006; Clevenger, A.P & M.P. Huijser 2011; Penrod K. 2006; Critical Linkages 2013; Dickson B. et al. 2005; Forman, R. T. 2010; Wilmers, C.et al. 2013; Road Ecology: Science and Solutions 2003). **Will the culvert size be reduced to adequately facilitate Tule elk movement through the under crossings?**

Submission 1691 (Gerry Haas, Santa Clara Valley Habitat Agency, June 23, 2020) - Continued

1691-1822

J. 7.2.2 Dedicated Wildlife Underpasses (pg 190 Page | 7-6)

Dedicated wildlife underpasses are part of project design. However, in eastern Pacheco Pass near Casa de Fruta there remains a need for improved permeability along a section of rail on embankment. Four wildlife crossings are proposed at this location. The proposed location and preliminary design of the wildlife crossings are illustrated on Figure 7-1 and in Appendix J; Appendix J includes more detailed location figures as well preliminary engineering drawings depicting important design information such as dimensions, orientation, and slope. Wildlife underpasses should be designed to incorporate the features described in Table 1 of Appendix J as applicable to the movement guilds addressed by the underpass. Dedicated wildlife underpasses should be inspected annually and maintained to verify that design features are intact and functioning. All needed repairs to wildlife crossings should be addressed within 6 months of the inspection.

Comment 57: 1. How will the effectiveness of the dedicated wildlife underpasses be evaluated? 2. Which entity/organization will be responsible for monitoring the wildlife underpasses for wildlife movement? 3. Which entity/organization will be funding the wildlife monitoring and data analysis of the wildlife underpasses?

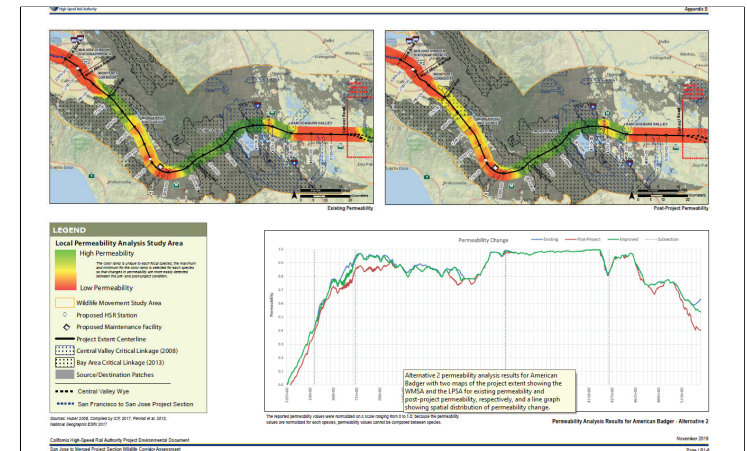
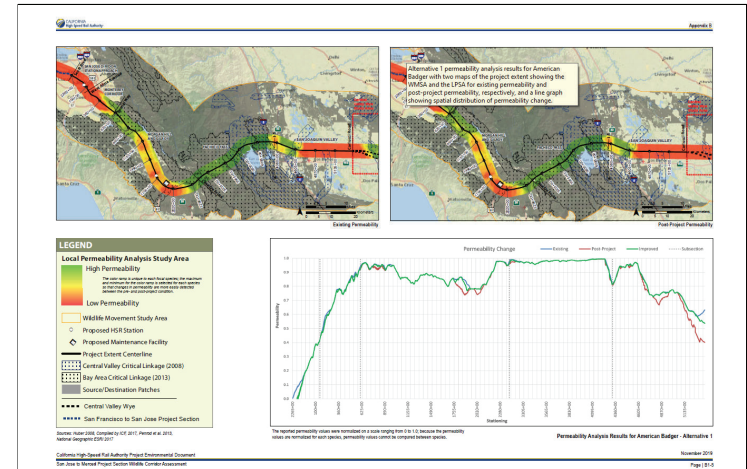
1691-1823

K. TR-04 Biological and Aquatic Resources Technical Report Appendix C

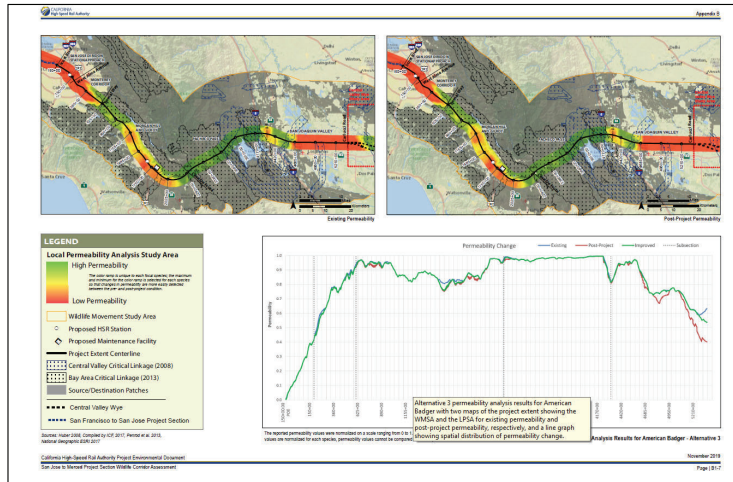
1. Permeability Analysis Results for American Badger (Pg 9, Page | B1-5)

Comment 58: Each of the permeability analyses for American badger results in no changes to the permeability for badger movement in Pacheco Pass. However, this completely is contradictory to the sections from Ch 6. Effects Analysis that describe the loss of habitat and direct mortality and disturbance that will occur with the construction of the HSR for badgers.

Loss of Denning and Dispersal Habitat for and Direct Mortality or Disturbance of American Badger
 Construction of the HSR track and systems would take place in suitable habitat for American Badger, a CDFW species of special concern. While habitat is present in all five subsections, the preponderance is in the Morgan Hill and Gilroy and Pacheco Pass Subsections because of the extensive and unfragmented grassland, chaparral, and scrub in these areas. Construction activities would convert and temporarily disturb habitat and could result in the disturbance, injury, and mortality of individual badgers.



Submission 1691 (Gerry Haas, Santa Clara Valley Habitat Agency, June 23, 2020) - Continued



1691-1827

and CBI 2017, SCCWCTWG 2019). Nonetheless, it is imperative that the Project not further degrade permeability through this tenuous linkage. Published and ongoing studies in Soap Lake and Pacheco Pass similarly reflect a degree of permeability across (under) existing roads, including for HSR focal species (Wildlife Permeability and Hazards across Highway 152 Pacheco Pass 2018-2019; POST, Pathways for Wildlife, SCL Ecological unpublished data 2020).

Will the EIR be revised to reflect that roads are not impermeable and therefore document and mitigate the additional impact of the Project on wildlife movement near roads?

1691-1828

Comment 63: The DEIR lacks sufficient detail to evaluate effectiveness of the wildlife crossing infrastructure.

1. **Directional Fencing:** The DEIR designs for wildlife crossing infrastructure do not provide detail on the configuration and extent of directional/exclusionary fencing, which is critical to achieving passage structure effectiveness and promoting permeability through highways (Dodd et al. 2007, Gagnon et al. 2010, Loberger et al. 2013) and presumably applies to railway ecology. Appendix J of the Wildlife Corridor Assessment, which is Appendix C of the Biological and Aquatic Resources Technical Report, provides some description of taxa-specific and multispecies fencing consideration and BIO-MM#81 provides some narrative description of fencing; however, the Preliminary Engineering for Project Design plans do not provide the details including the extent and tie-ins, which are critical to effectiveness. Appropriately designed and maintained fencing will be essential to prevent wildlife from entering the HSR right of way and adjacent Monterey Road and Union Pacific railway in Coyote Valley.
2. **Wildlife Intrusion Deterrents:** More detail is needed regarding the specifications of the wildlife intrusion deterrents (BIO-MM#81) for at-grade crossings, given the variability of effectiveness of these features to deter deer (Kintsch et al 2017), as well as a discussion of design considerations for local focal species, including special-status herpetofauna.

Will the EIR be revised to include detailed designs for directional fencing and wildlife intrusion deterrents and ensure that these elements are designed based on the literature documenting factors influencing their effectiveness?

1691-1824

Comment 59: For each of the species modeled, there is no change in the permeability of the landscape at the Cut and Fill sections of the rail design in the Pacheco Pass. How can that be correct when the rail will be heavily fenced creating a barrier to movement for this section of the rail design? This modeling was also done before the proposed mitigation of the culverts, which would also not mitigate adequately enough for no change in permeability post project. The analysis is flawed. **Will HSR redo the permeability analysis to adequately address the impacts of the rail design in Pacheco Pass?**

1691-1825

Comment 60: Is the resulting modeling the reason for the: 1. poor mitigation for wildlife connectivity in the Pacheco Pass 2. Leaving out the construction effects for HSR at the Pacheco Pass 3. Overall lack of mitigation for the Pacheco Pass?

1691-1826

Comment 61: In terms of properly mitigating for Pacheco Pass, can an overpass be constructed for species such as Tule elk and mountains lions over SR-152 by HSR in working with the Habitat Agency? This could help offset habitat loss within the linkage and create adequate mitigation for Pacheco Pass from the cumulative effects of the rail design in Pacheco Pass.

1691-1827

Roads as Barriers

Comment 62: The DEIR Wildlife Corridor Assessment methods including characterization of roads as barriers causes the analysis to underestimate the impacts of the Project on permeability of the landscape for wildlife. For example, wildlife in Coyote Valley are impacted by the presence of roads and; however, the available data suggest they are somewhat permeable (Serieys and Wilmers 2019, SCOSA

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1691-1829

Summary

The DEIR does not acknowledge the importance of the Pacheco Pass area as a critical landscape linkage within the region and the state nor does it identify or adequately mitigate the project impacts on wildlife connectivity in this area.

Pacheco Pass has been identified as a priority for connectivity by the California State Wildlife Action Plan (CDFW 2015) and the Santa Clara County Regional Conservation Investment Strategy (ICF 2019), and is a natural landscape block in the California Essential Habitat Connectivity Project (Spencer et al 2010). The Santa Clara Valley Habitat Conservation Plan/Natural Community Conservation Plan (Valley Habitat Plan) identifies Pacheco Pass on SR-152 as a focal area in the Biological Goals and Objectives, Reserve System design, and long-term monitoring (Santa Clara Valley Habitat Plan 2012). The Wildlife Permeability and Hazards across Highway 152 Pacheco Pass 2018-2019 (Pathways for Wildlife 2020) documents wildlife use of bridges and culverts to cross under SR-152 and recommended improvements to wildlife crossing infrastructure. Stakeholders who participated in the HSR's Wildlife Connectivity Analysis emphasized the importance of maintaining permeability through this area.

Nonetheless, the Project proposes 2.5 miles of cut and fill to install the rail at grade with extensive fencing which will fragment habitat within this important wildlife corridor. It will limit the potential for movement by wide-ranging species for which the region currently provides suitable habitat including mountain lion, tule elk, black-tailed deer, and American badger. These species have been documented using wildlife crossing infrastructure and moving at grade through SR-152 (Pathways for Wildlife 2020, POST et al. unpublished data). The embankment and associated fence proposed for the Project will direct wildlife towards SR-152.

Despite the broad recognition of the importance of the Pacheco Pass region for wildlife connectivity, the DEIR analysis of impacts to wildlife movement in Section 3.7.9.6 (page 3.7-198) and Section 3.7.7.7 (Impact Bio#42 Temporary Impacts to Wildlife Movement and Impact BIO#43 Permanent Impacts to Wildlife Movement) does not mention Pacheco Pass. The area is not characterized in the Wildlife Connectivity Analysis report, which is Appendix C of the Biological and Aquatic Resources Technical Report, which does not provide recommended design measures for habitat connectivity in this segment.

Moreover, BIO-MM#79 provides for land protection and conservation in Coyote Valley and Soap Lake, but not in Pacheco Pass. Likewise, BIO-MM#76 minimizes impacts on wildlife movement during construction within known movement routes for wildlife, but does not reference Pacheco Pass. As described below the wildlife crossing infrastructure proposed for this region was not sited based on wildlife movement data, nor is it designed to accommodate the large, wide-ranging species including tule elk, that will need to utilize it to avoid having the Project fragment their populations.

How will the EIR be revised to address the gaps in the analysis of the importance of maintaining permeability through Pacheco Pass, include design features to prevent habitat fragmentation in this area, identify the impacts of the Project on wildlife movement through this landscape linkage, and provide mitigation including compensatory mitigation for the project impacts on connectivity through the Pacheco Pass?

1691-1830

The DEIR should be revised to apply all mitigation measures for habitat connectivity to Pacheco Pass, which has been identified as part of the landscape linkage (Penrod et al. 2013) and large landscape block (Spencer et al. 2010). The following specific measures should be applied to Pacheco Pass:

1. **BIO-MM#76:** This measure minimizes impacts on wildlife movement during construction within known movement routes for wildlife, which should include and specific reference Pacheco Pass.
2. **BIO-MM#79:** This measure will protect 238 acres (or 239 acres for Alternative 3) of "lands prioritized for importance to wildlife movement in the Santa Cruz Mountains to Diablo Range Wildlife Linkage and the Soap Lake 100-year floodplain, which corresponds to a 1-to-1 ratio of protected land to project footprint at the MOWF [maintenance of way facility]." This measure should be expanded to include land protection to safeguard wildlife connectivity in the landscape linkage within Pacheco Pass (Penrod et al. 2013), where prioritize can be identified in coordination with the Valley Habitat Agency which is working on landscape connectivity in the region.

1691-1831

The DEIR relies heavily on wildlife crossing infrastructure included in the Project design and mitigations to mitigate significant effects of the project on wildlife connectivity and associated impacts on populations in the region, including mountain lion, San Joaquin kit fox, and other protected species. However, the effectiveness of the infrastructure at mitigating the Project impacts on these and other species may be limited due to a variety of factors including:

1. Wildlife may be deterred from using the structures by light, vibration, and noise, which may not be fully mitigated;
2. The ecological context including location of the infrastructure with respect to wildlife movement corridors is not fully considered;
3. The need for habitat protection and restoration to ensure habitat on either side is intact and can promote effective use of the crossing infrastructure; and
4. Aspects of the design do not adhere to the widely accepted standards for effective crossing structures, as some structures are too short and/or too long for use by many wildlife species.

The DEIR does not include monitoring to evaluate the effectiveness of the structures at facilitating wildlife passage through the train corridor, nor does it include an adaptive management plan that would determine remedial actions to promote wildlife movement in the event that the infrastructure is not sufficient to mitigate the impacts.

Due to the stated impacts on wildlife movement by the Project, further mitigation through design is encouraged, onsite and offsite compensatory mitigation will be needed, and a dedicated monitoring and adaptive management plan will be essential to evaluate the effectiveness of features such as wildlife crossing infrastructure and prevent the Project from severing connectivity in critical landscape linkages that it traverses including Coyote Valley, the Upper Pajaro River, and Pacheco Pass.

1691-1832

Need to Monitor Wildlife Crossing Infrastructure

The DEIR relies heavily on wildlife crossing infrastructure to mitigate the Project impacts on wildlife connectivity. However, the DEIR does not discuss how monitoring will be used to evaluate effectiveness of the structures, including through documenting wildlife use, or identify alternative mitigations and remedial actions in the case that they are not effective at preventing habitat fragmentation.

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1691-1832

Will the DEIR be revised to discuss how wildlife underpasses will be monitored and how remedial actions will be taken to improve wildlife connectivity if/where monitoring indicates that one or more species are not able to utilize the structures and the Project is impeding wildlife connectivity?

1691-1833

Mitigate Impacts to Habitat on Site to Ensure Crossing Structures are Effective

In areas important for wildlife connectivity, including where wildlife crossing infrastructure will be installed or improved, the temporary project impacts should be restored and additional habitat mitigation should be conducted on site, where feasible and necessary to maintain the larger wildlife corridor and promote wildlife use of the wildlife crossing infrastructure.

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DEPARTMENT OF ENVIRONMENTAL SCIENCE AND POLICY
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DAVIS, CALIFORNIA 95616-8576

6/18/2020

Re: Noise & Vibration Effects of High-Speed Rail through the Coast Range and Coyote Valley

Dear Responsible Parties and Others:

The letter below describes various impacts of the High-Speed Rail (HSR) based upon its construction and operation. The comments relate to the Draft Environmental Impact Report (DEIR) titled: "San Jose to Merced Project Section Draft Environmental Impact Report/Environmental Impact Statement" found at https://www.hsr.ca.gov/programs/environmental/eis_eir/draft_san_jose_merced.aspx.

I am co-director of the Road Ecology Center at UC Davis and have ~20 years' experience in field and geographic information system analysis and modeling related to wildlife connectivity and impacts of human actions on connectivity. I have attached my curriculum vitae (Appendix B) which provides more detail about my expertise. My research center is the oldest and one of the largest research centers specializing in studies of how transportation systems impact ecosystems, including wildlife, aquatic systems, shorelines, and human communities. I am also Lead Organizer of the International Conference on Ecology and Transportation, the last conference of which was in Sacramento (2019) and featured HSR Chief Executive Officer Brian Kelly as one of our plenary speakers. I am co-chair of the Animal-Vehicle Conflict Sub-Committee of the Transportation Research Board (National Academies of Science Engineering and Medicine), a national body that provides guidance on how to study and resolve animal-vehicle conflicts, such as between wildlife and trains. I am therefore expert in the areas I comment on below, including carrying out field and computational research on noise and light impacts, impacts of infrastructure on wildlife connectivity, and mitigation of these impacts.

Sincerely,

A handwritten signature in black ink, appearing to read 'Fraser Shilling'.

Fraser Shilling, Ph.D.
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Summary of Comments

There are a variety of mammal, amphibian, reptile, and bird species that are sensitive to key aspects of anthropogenic noise and vibration, including loudness, sound frequency, loudness at certain frequencies, stochastic vs. chronic noise, and ground vibration. Train noise originates from: “propulsion or machinery noise; mechanical noise resulting from wheel-rail interactions; and/or guideway vibrations aerodynamic noise resulting from airflow moving past the train, including the pantograph” (FRA 2012). Because of the speed of high-speed rail, the speed at which loud noise appears can be considered a sudden, or stochastic noise, while regular occurrence of the noise could contribute to a chronic noise condition. Stochastic and chronic noise from anthropogenic sources can cause stress, habitat avoidance, nest abandonment, reduced foraging, infrastructure avoidance, and fear responses (e.g., flight). This means that if there is natural habitat near an area with train noise disturbance, wildlife (e.g., mammals and birds) will avoid inhabiting, avoid moving through an area, or fail to flourish in these areas, decreasing the ecosystem value of the area. The degree of impact depends on noise level entering the habitat area, propagation of noise through the area, and sensitivity of the particular species.

1691-3593

Background and Literature Review

The proximate impacts of anthropogenic noise on wildlife and birds are disturbance of normal activity, masking of communication (i.e., for territoriality, breeding and predation-avoidance), and very high levels, harm to hearing (Francis and Barber, 2013). Impacts from trains, onceding infrastructure and operation impacts, are reviewed in Barrientos et al. (2019) and include habitat and population fragmentation, stochastic and chronic noise and light disturbance.

Vehicle (including train) noise is measured as sound pressure levels using a logarithmic decibel scale. The range of sound frequencies that wildlife is sensitive to is similar to the range of human audibility (FHWA, 2004), which is usually measured as dB(A), a weighting scheme based on human audibility, or Leq, the equivalent continuous sound level. Anthropogenic and vehicle noise can affect wildlife communication (Parris and Schneider 2009; Owens 2013), habitat occupancy (Goodwin and Chrver 2010), vigilance (Shannon et al. 2014; Li et al. 2009), predation efficiency (Siemers and Schaub 2011), predator avoidance behavior (Meillere et al. 2015) and various other types of behavior and likelihood of occupancy (reviews: Barber et al., 2011; Francis and Barber 2013). These effects vary among wildlife species, leading to differential responses within wildlife communities (Francis and Barber 2013), which could affect trophic and other interactions. Recently, McClure et al. (2015) and Ware et al. (2015) experimentally introduced vehicle noise into roadless areas to generate what is known as a “phantom road”, and demonstrated behavioral and other effects on migrating birds. This was the first direct evidence of vehicle noise by itself being the cause of disturbance for birds. Herpetofauna (amphibians and reptiles) are also vulnerable to anthropogenic noise, primarily

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low-frequency vibrations, which can cause harmful behaviors, such as emerging from burrows during dry conditions. These effects may be experienced at noise level of ~40 dBA and higher (Barber et al., 2011).

Traffic related light (at night) disturbance has been shown to affect animal behavior and occupancy (Davies et al., 2013) and have cascading ecological and biodiversity impacts (Longcore and Rich, 2004; Newport et al., 2014). For example, elk use wildlife underpass structures where traffic is absent and at higher-continuous traffic volumes, but less frequently at intermediate-occasional traffic volumes (Gagnon et al., 2007). Transportation-sourced artificial light is likely to vary across many orders of magnitude across different vehicle types and volumes, and attenuate differently within natural landscapes depending on the surrounding habitat. Light dissipation with distance is superficially similar to sound decay, but in real environments may result in different outcomes. Light intensity decreases with the inverse square of distance, just as sound does. Light intensity is measured as either radiance or irradiance with associated spectral properties. Similar to the case with noise, the expected transmission and decay of light with distance is usually not the actual distance as light can be absorbed and reflected by environmental elements (ground, vegetation, structures). The actual distance of light propagation to particular levels defines the light impacts on species. This zone can be mapped using either light propagation models or field light measurements, or both.

1691-3594

Thresholds

There have been proposed thresholds for significant noise impacts on wildlife, with 55 dBA being the most commonly-cited (Dooling and Popper, 2007). This is consistent and more conservative than Barber et al. (2011) and Shannon et al. (2016), who showed that wildlife disturbance by anthropogenic noise started at sound levels of 40-50 dBA. For diverse wildlife approach and crossing any infrastructure, noise and light intensities must be below thresholds of sensitivity for wildlife species, or they will refuse to approach and cross. This will absolutely result in fragmentation of wildlife populations, imperiling species in isolated areas.

Methods for Determining Impacts

Sensitive Receptors

There are at least 69 species of bird, 24 species of ground-dwelling and aerial (bat) mammal species, 15 species of herpetofauna, previously observed in the vicinity of the proposed HSR line and adjacent habitat. Recorded species occurrences from 4 databases are shown in Figures 3 and 4 and listed in Appendix A. The data were from the California Roadkill Observation System (<https://wildlifecrossing.net/california>), the California Highway Incident Processing System (<https://roadecology.ucdavis.edu/chips>), the California Natural Diversity Database (<https://wildlife.ca.gov/data/cnddb>), HerpMapper (<https://www.herpmapper.org/>), and the federal

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Biodiversity in Service of Our Nation (<https://bison.usgs.gov/#home>) database. Habitat types include: riparian, blue oak woodland, grassland, and coastal sage scrub. Sound levels above 45 dBA may impact presence and habitat value for herpetofauna, songbirds, and various mammals (Francis and Barber, 2013; Barber et al., 2011).

Noise Impact

Rate of noise decay was estimated using an online calculator (<http://hyperphysics.phy-astr.gsu.edu/hbase/Acoustic/isprob2.html>; Georgia State University, Department of Physics and Astronomy). The calculated change in sound level is based on the inverse square method. Calculated sound levels at different distances from the sound source (rail-line) were based on a starting noise level of 93 dBA at 25 m (DEIR). The speed of the train, acceleration/deceleration, number of cars, track condition, surrounding habitat, distance from the train, and climate conditions will all contribute to actual noise levels. The level and importance of impact was determined using the guidance from FRA (2012, Figure 2) and the scientific literature.

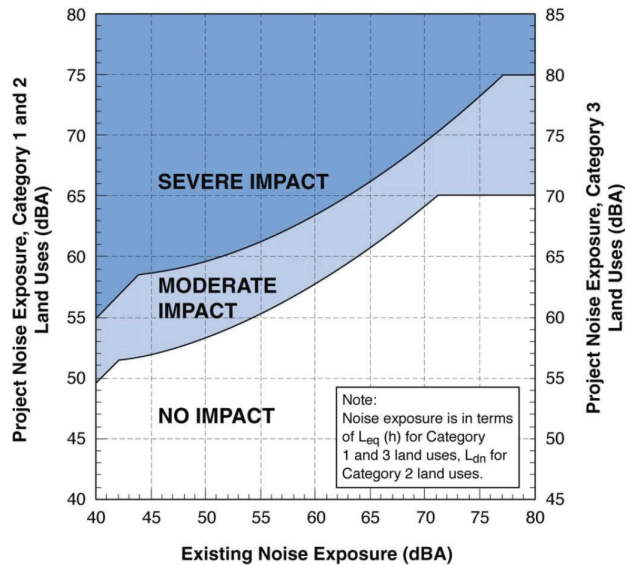


Figure 1. Figure 3.1 Noise Impact Criteria for High-Speed Rail Projects Potential train noise impact relative to existing noise levels (Figure 3.1, “Noise Impact Criteria for High-Speed Rail Projects”, FRA, 2012)

Results

Sensitive Receptors

The area around the proposed HSR alignment through the Diablo Range where train noise impacts are of concern includes habitat (oak woodland, grassland, coastal sage scrub) appropriate for 15 amphibian/reptile species, and 24 mammal species, including 5 bat species. Other than low-intensity grazing, there is very little anthropogenic disturbance of this area and it is likely that the natural habitat areas support, or could support, most or all of these species.

Wildlife are likely to be responding to absolute the noise/light intensity, relative (to ambient) noise/light intensity and the rate of change in intensity. The literature (e.g., Barrientos et al. (2019) has many examples of wildlife sensitivity to anthropogenic noise and light. The relative impact is displayed well in Figure 1 (FRA, 2012), which shows how impact of train noise on different land-uses varies with the existing condition, where the quieter the existing condition (e.g., native habitat) the lower noise level is needed to cause impacts.

Estimate of Theoretical Train Noise Propagation

Assuming a starting noise level of 93 dBA at 25 m (DEIR; FRA 2012), a sound level of 65 dBA could be expected at ~600 m from the sound source (red arrow, Figure 2), a sound level of 55 dBA at 2000 m from the sound source (orange arrow, Figure 2), and a sound level of 45 dBA at 6200 m from the sound source (green arrow, Figure 2).

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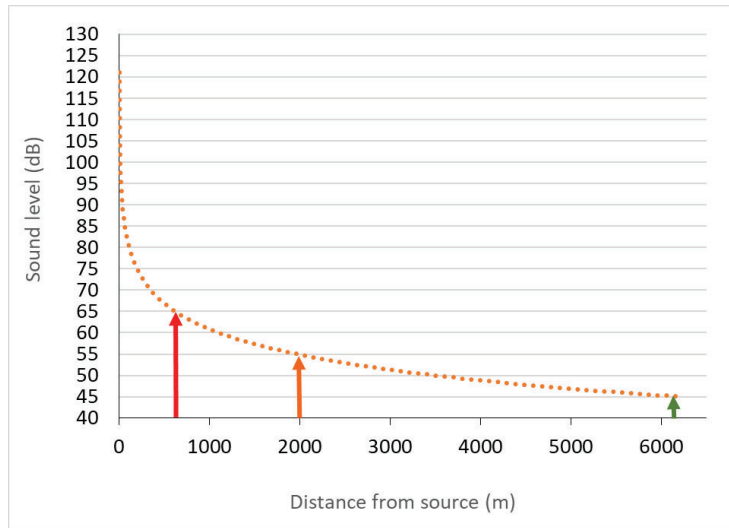


Figure 2. Rate of decay of vehicle noise with distance, starting at the suggested noise level at 25 m (93 dBA, DEIR, FRA 2012). The red arrow indicates the distance (~600 m) where a sound level of 65 dBA would be expected. The orange arrow indicates the distance (~2000 m) where a sound level of 55 dBA would be expected. The green arrow indicates the distance (~6200 m) where a sound level of 45 dBA would be expected.

1691-3597

Noise Impacted and Buffer Areas

Actual noise and light levels and rate of change in levels from train travel will depend on topography, habitat type, climate conditions, train acceleration or deceleration, number of cars, and train speed. Similarly, impacts of train noise and light will depend on the intensity, rate of change, and chronic exposure. The noise model used in the DEIR (San Jose to Merced Project Section, Wildlife Corridor Assessment Report, section 4.5.3.1 Methods for the Noise Analysis) is a spreadsheet model that makes assumptions about the vegetation, climate and topography of the alignment to estimate noise. In particular, the assumption about flat topography assumes along-ground noise absorbing that will be absent for through-air propagation of noise when a train is on a hillside, which is true for most of the alignment through the Coast Range, Pacheco Pass area. This modeling approach is inadequate to measure the potential impacts to wildlife from noise, which should be based upon readily-available models in GIS that take into account

1691-3597

topography, climate, vegetation, starting noise level and other characteristics (e.g., Barber et al., 2011).

1691-3598

The potential impact distances areas were overlaid with known wildlife presence in the coast range/Pacheco Pass portion of the HSR (Figure 3) and through the Coyote Valley area (Figure 4). It is clear that for the distances of possible (<6,200 m) and likely (<2,000 m) noise impacts, many native species have been observed and have been killed on roads while attempting to move north-south through the range, or east-west across Coyote Valley. This indicates both: 1) the presence of the species and thus impacts to the species from train-noise and light and 2) the fact that most, or all wildlife species are not moving along “wildlife corridors” as mapped by GIS modelers. For small mammals and herpetofauna, these distances – several kilometers are beyond normal or even exceptional movement distances. This means that even occasional train-related aversion impacts will keep individuals of species of small mammals and herpetofauna from approaching the alignment and enjoying available crossings. For medium and large sized mammals, the periodic high intensity noise and light from trains several times per day or night will have two types of impacts –wildlife aversion to occupying an area within one kilometer of the rail alignment and flight responses from wildlife that approach the alignment if a train is running. It is possible that sensitive species, which includes most of those listed in this letter, will never approach the alignment and use the grade, or crossing structures to cross the alignment.

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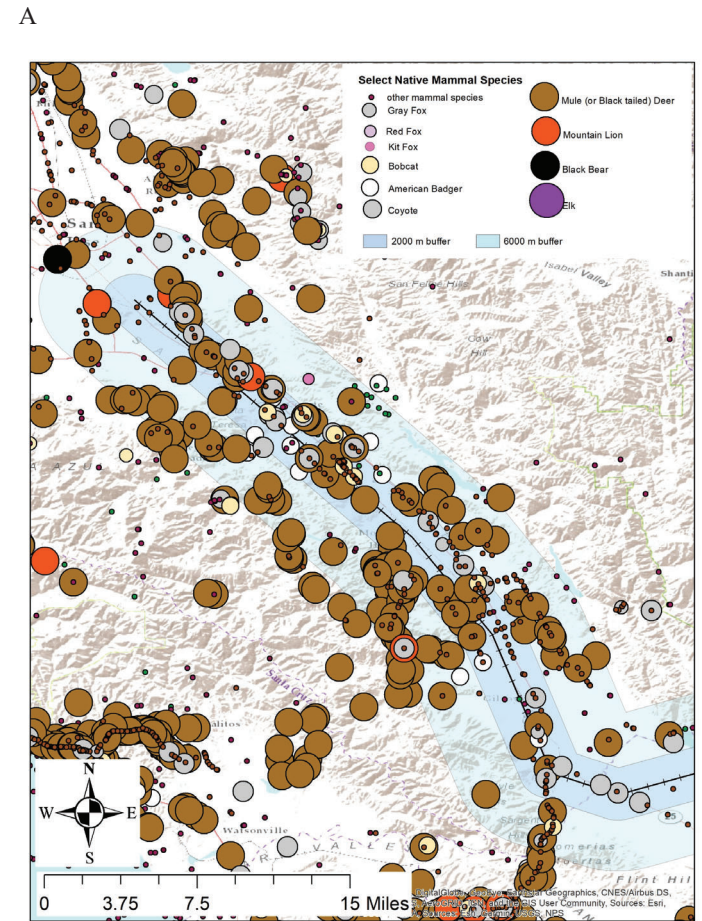
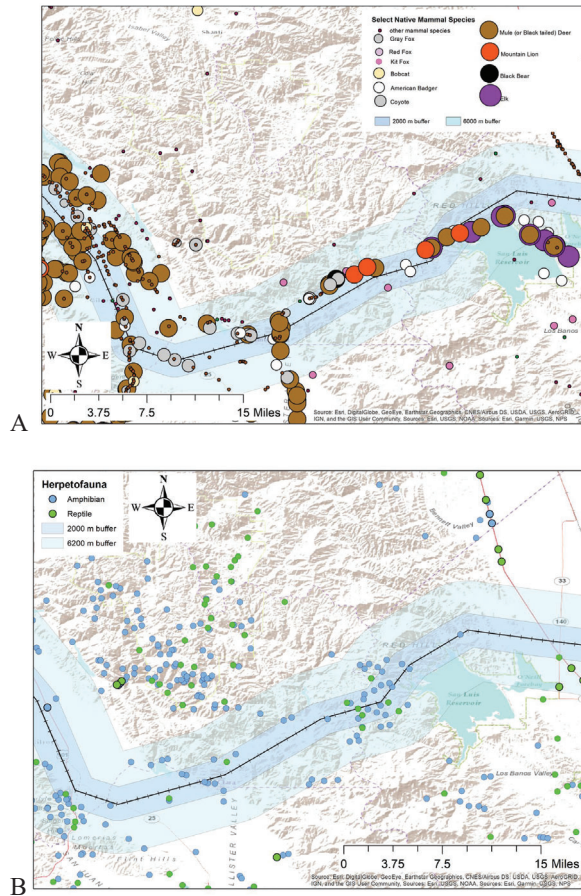


Figure 3. HSR noise impact areas and (A) mammal and (B) herpetofauna occurrences in the Inner Coast Range/Pacheco Pass portion of the HSR alignment. Impact areas are indicated by blue bands of different widths based on noise intensity. Symbols indicate the select wildlife species previously observed at particular locations.

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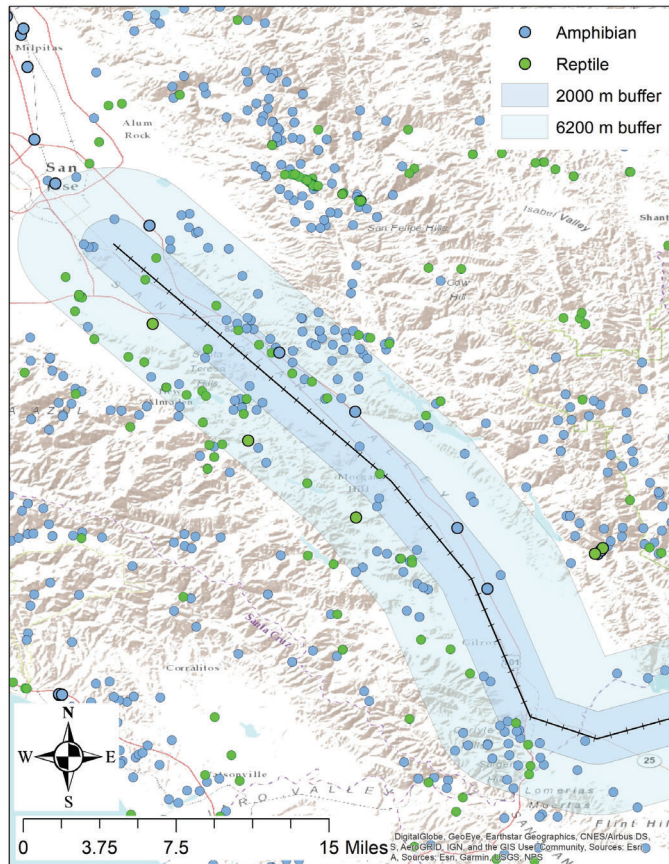


Figure 4. HSR noise impact areas and (A) mammal and (B) herpetofauna occurrences in the Coyote Valley area. Impact areas are indicated by blue bands of different widths based on noise intensity. Symbols indicate the select wildlife species previously observed at particular locations.

Impacts

1691-3599

The DEIR lists Operations Impacts (pg 113 Page | 3.7-112-113): Impact BIO#43: Permanent Impacts on Wildlife Movement and Impact BIO#44: Intermittent Noise Disturbance of Wildlife Using Corridors during Operations. The DEIR describe Mitigation Measures Bio-MM#58 (Provide Compensatory Mitigation for Impacts on Waterfowl, Shorebird, and Sandhill Crane Habitat), and BIO-MM#80 (Minimize Permanent Intermittent Noise, Visual, and Train Strike Impacts on Wildlife Movement) for Impact BIO#44, and conclude that they will result in Less than Significant impacts. The DEIR describes the impacts of BIO#44 as limited to waterbirds: “Significant for all alternatives: noise of passing trains would cause direct impacts on large congregations of wintering waterbirds in the GEA IBA.”

The train noise and light would disturb all wildlife species within 1000 m of the alignment and most species within 2000 m (>55 dBA). This means that it is likely that there would be a strong aversion effect of the HSR, resulting in failure of wildlife to approach and cross the alignment, whether at grade or through crossing structures. This would isolate wildlife populations in the Diablo Range north of the alignment, resulting in possibility of local extinctions of various species and loss of healthy ecosystem function.

1691-3600

Impact BIO#45: Intermittent Vibration Disturbance of Wildlife Using Corridors during Operations

Ground vibration is disturbing to amphibians and other ground-dwelling vertebrates. It can cause animals to leave burrows, exposing them to cold, predation and other harm. Ground vibration has been cited by Washington State Department of Transportation as a primary reason that amphibians in mitigation wetlands fail to use wildlife crossing structures under Interstate-90. This is because they won’t approach or live in areas near the infrastructure. The consequences for amphibians and other ground-dwelling organisms could be that they become genetically and otherwise isolated from other populations of the species. In the case of the HSR alignment, this isolation would be primarily of

1691-3601

Impact BIO#47: Intermittent and Permanent Lighting Disturbance of Wildlife Using Corridors during Operations

Just as train noise would spread across surrounding landscapes, light from the train at night would similarly propagate across surrounding habitat areas and disturb resident and moving wildlife (Longcore and Rich, 2004). In addition, there is no evidence in this area that wildlife movement would be restricted to “wildlife corridors”. Although the non-peer-reviewed literature has many mentions of “wildlife corridors” (e.g., Penrod et al., 2013), there is little support in the peer-reviewed ecological or wildlife biology literature that “wildlife corridors” exist in nature and are used preferentially by wildlife over other areas not designated by people as “corridors”. This means that the impacted area is larger than just those mapped as “corridors” and include the majority of the non-urban landscape around the HSR alignment.

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1691-3602

Mitigation

Evaluating and proposing noise abatement strategies to benefit residential areas and wildlife is not new in transportation (e.g., Barrett 1996; Zimmer and Buffington, 1997; Baaj et al., 2001). There is a wide variety of structures intending to mitigate traffic noise and light disturbance of sensitive receptors (e.g., residential areas) near roadways. The most commonly used are walls adjacent to the right-of-way, varying in their materials (e.g., plastic, concrete) and effectiveness. Although these may effectively shield adjacent areas from light (absent stray reflections), noise is notoriously harder to control because of noise reflection, refraction, and vibration of the noise wall itself.

BIO#80 includes introducing sound walls: “The noise barriers would be a minimum height of 17 feet and would be designed to provide a minimum of 10 dBA attenuation of sound generated by HSR operations, as measured be built in conjunction with the and would be completed before HSR train operations begin.” (DEIR). There are two problems with this approach: 1) the walls would inhibit wildlife movement for the entire length of the walled area, preventing their crossing at-grade, even when no trains were present; and 2) It is very difficult to build sound walls that have a true noise attenuation of 10 dBA for more than a few hundred yards beyond the wall footprint. This is because sound diffracts around any barrier due to its waveform characteristics, can reflect from non-absorbent walls, and be transmitted through the wall itself, or through the ground as low-frequency vibration (Kerby, 1973). Even if the noise wall were a perfect barrier reducing sound intensity by 10 dBA< the effect of this reduction on the impact area would be minimal. Instead of 65 dBA and 55 dBA train noise extending 600 and 200 meters, respectively from the alignment, the distance would be 400 m and 1,200 m (Figure 5). The final return to background/no disturbance would be 4,000 m instead of 6,200 m. Even these reduced distances mean that wildlife would be faced with highly disturbing noise levels if they attempted to approach the alignment. If they remained averse to approaching the HSR alignment, then the fragmentation and isolation impacts on wildlife populations would continue and remain un-mitigated.

1691-3603

It is unlikely that most wildlife species will approach the rail alignment because of the noise, light and ground vibration. This means that the impacts described in the DEIR will not be mitigated by approaches described in the DEIR. For example, BIO-MM#77: Design Wildlife Crossings to Facilitate Wildlife Movement; BIO-MM#78: Establish Wildlife Crossings at Embankment in West Slope of Pacheco Pass; BIO-MM#79: Provide Wildlife Movement between the Santa Cruz Mountains and Diablo Range describe constructed wildlife crossings as suitable and adequate mitigation for impacts to wildlife movement. However, due to train noise and light intensities being greatest at the approaches and opening of these structures, it is unlikely that sensitive species will approach or use these crossing structures at a frequency sufficient to reduce genetic, population and ecosystem impacts from this barrier effect. My previous research demonstrated that at the lower noise and light intensities associated with crossings under highways, ~40% of wildlife species avoided the structures, an effect that was

1691-3604

related to traffic volumes (Shilling et al., 2020). In addition, the modeling premise for the potential use of crossing structures by species is un-tested and potentially faulty (San Jose to Merced Project Section, Wildlife Corridor Assessment Report of the DEIR). For example, the section entitled: “4.2.2 Step 2—Assignment of All Potential Focal Species into Species Movement Guilds” is based on Kintsch and Cramer (2011) a report to the Washington State Department of Transportation. The guild approach in Kintsch and Cramer (2012) and Penrod et al (2013) has never been statistically tested to see if it holds up with real wildlife movement and neither report has been published in the peer-reviewed literature. Thus there is no evidence that guild approach is an effective strategy to evaluate potential wildlife use of crossing structures. In addition, the section “5.2 Existing Wildlife Movement Information” includes reports of GIS modeling of hypothetical wildlife movement (sections 5.2.1, 5.2.5, 5.2.9, and 5.2.10). In addition, none of the remaining sections of 5.2 were published in the peer-reviewed literature and consisted primarily of ad hoc data collection, including data collected from me and my Center (section 5.2.11 Wildlife Vehicle Collisions). Given that the connectivity modeling in this Assessment is based on hypothetical wildlife “corridors” and “linkages” and ad hoc wildlife monitoring, none of which has been peer-reviewed, it seems unlikely that the product of the modeling will inform about actual wildlife movement and potential impacts to wildlife movement. This concern was shared by me with Shannon Crossen, author of this report, in 2017 when she requested our wildlife-vehicle collisions data. These concerns are also reflected in section 4.7 Limitations That May Influence Results.

1691-3605

According to the San Jose to Merced Project Section, Wildlife Connectivity Assessment Report in the DEIR, “Wildlife underpasses have been incorporated into the project design to minimize the effects of the project on wildlife movement under all four alternatives.” (section 6.1.2.1). However, these underpasses will not be effective if placed where wildlife do not occur, or not moving. This is possible given that the modeling approach used did not use actual movement patterns of native wildlife species present in the study area. Nor will they be effective if the approach zone to the crossing structure is exposed to excess noise and light from train passage, analogous to effectiveness of crossing structures under highways (Shilling et al., 2020). These are not trivial issues as mitigation structures that meet these criteria have been demonstrated to not pass wildlife, thus rendering them as ineffective mitigation (e.g., SR 241 in Orange County, Winston Vickers, personal communication).

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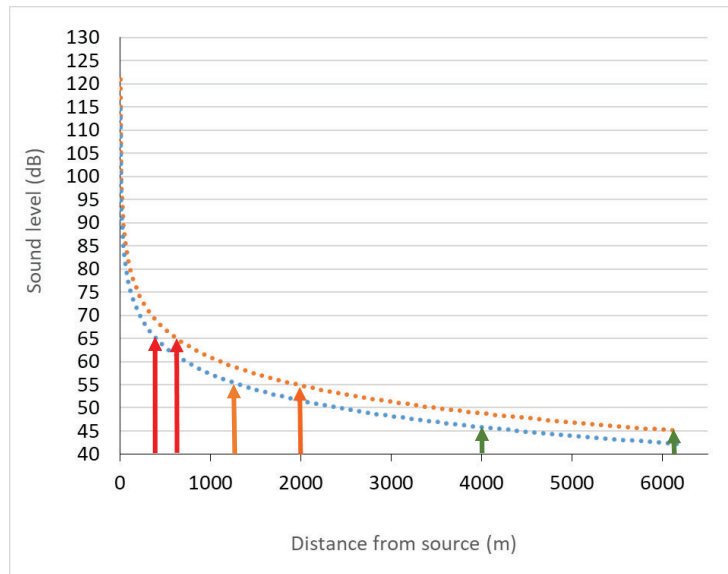


Figure 5. Comparison of noise propagation with (blue line) and without (orange line) sound walls to mitigate noise impacts starting at the mitigated noise level 10 dBA lower than unmitigated level. The red arrows indicates the distances (~600 m, ~400 m) where a sound level of 65 dBA would be expected. The orange arrow indicates the distances (~2000 m, 1200 m) where a sound level of 55 dBA would be expected. The green arrow indicates the distance (~6200 m, 4000 m) where a sound level of 45 dBA would be expected. In each case the first value is unmitigated and the second value mitigated using sound walls.

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Appendix A1. Herpetofauna and mammal species in vicinity of HSR alignment and potentially isolated by alignment.

Group	Species Name
Reptiles	Blunt-nosed leopard lizard
	Coast horned lizard
	Gopher snake
	Ringneck snake
	San Joaquin coahcwhip
	Western pond turtle
	Western racer
	Western skink
Amphibians	California chorus frog
	California red-legged frog
	California tiger salamander
	Common kingsnake
	Foothill yellow-legged frog
	Western spadefoot toad
	Western toad
Mammals (ground)	American badger
	Black-tailed jackrabbit
	Black bear
	Bobcat
	Brush rabbit
	California ground squirrel
	Coyote
	Desert cottontail
	Elk
	Gray fox
	Mountain lion
	Mule deer
	Raccoon
	Red fox
	San Francisco dusky-footed woodrat
	San Joaquin kit fox
	San Joaquin pocket mouse
	Santa Cruz kangaroo rat
	Striped skunk
	Mammals (bats)
Pallid bat	

	Townsend's big-eared bat
	Western mastiff bat
	Yuma myotis

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Appendix A2. Native bird species, including species of special concern or listing (in **bold**), observed in the inner coast range.

Acorn Woodpecker
American Goldfinch
American Kestrel
Anna's Hummingbird
Ash-throated Flycatcher
Bewick's Wren
Black Phoebe
Black-headed Grosbeak
Brewer's Blackbird
Brown-headed Cowbird
Bullock's Oriole
Bushtit
California Quail
California Thrasher
California Towhee
Cassin's Kingbird
Chipping Sparrow
Cliff Swallow
Common Raven
Cooper's Hawk
Dark-eyed Junco
Golden Eagle
Golden-crowned Sparrow
Grasshopper Sparrow
House Finch
Killdeer
Lark Sparrow
Lazuli Bunting
Lesser Goldfinch
Lewis' Woodpecker
Loggerhead Shrike
Mourning Dove
Northern Flicker
Northern Harrier
Northern Mockingbird
Nuttall's Woodpecker
Oak Titmouse
Orange-crowned Warbler
Pacific-slope Flycatcher
Phainopepla

Prairie Falcon
Red-tailed Hawk
Red-winged Blackbird
Rock Wren
Ruby-crowned Kinglet
Rufous Hummingbird
Savannah Sparrow
Say's Phoebe
Sharp-shinned Hawk
Spotted Towhee
Steller's Jay
Turkey Vulture
Violet-green Swallow
Warbling Vireo
Western Bluebird
Western Kingbird
Western Meadowlark
Western Scrub-Jay
Western Tanager
Western Wood-Pewee
White-breasted Nuthatch
White-crowned Sparrow
White-tailed Kite
Willow Flycatcher
Wilson's Warbler
Wrentit
Yellow Warbler
Yellow-billed Magpie
Yellow-rumped Warbler

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RESEARCH INTERESTS

Mr. Shilling's current work focuses on three research areas: landscape and transportation ecology, indicators of ecosystem performance, and wildlife ecology. He collaborates with social scientists, natural scientists, and humanities professors in interdisciplinary investigations of land-use, water policy, and transportation policy implications. Mr. Shilling is co-Director of the UC Davis Road Ecology Center and the China-US Land Ecology Center and a research scientist in the Department of Environmental Science and Policy. He practices at the interface between science and policy, requiring that he collaborate and interact with regulatory agencies, resource management agencies, community organizations, and academics of many disciplines

EDUCATION

Ph.D. in Biological Sciences, University of Southern California, 1991
 B.Sc. in Biological Sciences, University of Southern California, 1986

PROFESSIONAL RESEARCH EXPERIENCE

2017-present	Co-Director, China-US Land Ecology Center, UC Davis
2015-present	Academic Coordinator II, Department of Environmental Science and Policy
2004-present	Co-Director, UC Davis Road Ecology Center
2000-2014	Staff Researcher, Department of Environmental Science and Policy
1998-2000	Research Coordinator, Sierra Nevada Network for Education and Research, UC Center for Water and Wildlands Resources
1995-1998	Postdoctoral Fellow, Division of Biological Sciences and the Institute of Theoretical Dynamics, University of California, Davis (NIH and ITD-funded)
1991-1994	Postdoctoral Fellow, University of Connecticut (NIH-funded)

SUPERVISORY AND TEACHING EXPERIENCE

Course Director	"General Ecology" (4-unit undergraduate class) at the Thai Nguyen University for Agriculture and Forestry, Vietnam, Fall, 2013. "Social Surveying Methods" (2 & 4-unit graduate course), for CRD and GGG methods credit, UC Davis, Spring, 2011. "Improving Community and Landscape Connectivity" (2-unit graduate seminar), Transportation Studies Program, UC Davis, Fall, 2009. "Road Ecology: Road Effect Zone" (2-unit graduate seminar), Transportation Studies Program, UC Davis, Winter, 2008. "Road Ecology" (4-unit graduate course), Transportation
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Studies Program, UC Davis, Spring, 2007. "[Modeling Reserve Design](#)" (2-unit graduate seminar) Department of Environmental Science and Policy, UC Davis, 1995-96.

Guest Lecturer ["California Indian Environmental Policy II"](#) (NAS 162), UC Davis, 2014; ["Water Policy"](#), UC Davis, 2005, 2006, 2007, 2008, 2010.

Scientific Leadership Lead Organizer for the International Conference on Ecology and transportation, (September, 2019). Coordinated the 3rd California Sustainability Indicators Symposium (2011) in Sacramento and Los Angeles. Designed and coordinated the 2nd California Connectivity Forum (2010). Co-designed and coordinated the Best Science in Connectivity Workshop sponsored by the Wildlife Conservation Society (2009). Co-designed and coordinated the California Connectivity Forum (2008). Designed and directed 3 Road Ecology Center workshops on road effects; integrated land-use, conservation, and transportation planning; and habitat connectivity. Designed and conducted a 2-day workshop for Washington Department of Natural Resources on Developing Decision-Support Systems for Forested Landscapes. Designed and directed 5 regional workshops on watershed assessment throughout California (2004-2006). Organized California's first Road Ecology Conference (1999).

ACADEMIC COMMUNITY AND PUBLIC SERVICE

Journal Editor: Korean Journal of Civil Engineering (former Associate Editor)

Journal Reviewer: Ecological Indicators, Landscape Ecology, Conservation Biology, Biological Conservation, Environmental Management, Landscape and Urban Planning, Transportation Research Record, Ecoscience, Environmental Modeling and Software, Ecological Engineering, Land Degradation and Development, Environmental Science and Pollution Research, Open Urban Studies and Demography Journal, Biological Bulletin (past reviewer), Developmental Biology (past reviewer)

Transportation Research Board: Co-chair TRB Animal Vehicle Collision Subcommittee (ANB20-2, current); member TRB Ecology and Transportation Committee (ADC30, current); Strategic Highway Research Program 2: Expert Task Group (2007-2009); member TRB Sustainable Transportation Indicators Subcommittee (current).

Federal Highways Administration: Eco-Logical Champion, providing on-call technical assistance to state DOTs and MPOs (2014-present)

IENE 2016: Member of Programme Committee

Review Panelist: Water Research Foundation (2015-16)

CALFED: Member of Watershed Program Sub-Committee (2002-2006)

City of Davis Open Space Commission: Member (2000-2003) and Chair (2000-2002)

University of California, Davis: Diversity Award (1996)

American Society of Zoologists/Society for Integrative & Comparative Biology: Conservation Chair (1992-1997)

2

RECENT ENVIRONMENTAL SCIENCE & POLICY PUBLICATIONS

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CONFERENCE and INVITED PRESENTATIONS

Mr. Shilling has prepared and delivered presentations at conferences of the: American Planning Association, American Society of Limnology and Oceanography, American Society of Zoologists/Society for Integrative and Comparative Biology, American Society for Cell Biology, Gordon Conferences, Ecological Society of America, International Conference on Ecology and Transportation, Transportation Research Board, Infra Eco-Network Europe, Life Strade Project (Italy), National Congress of American Indians, National Water Quality Monitoring Council, Bay-Delta Science Conference, Marine Biological Laboratory, The Wildlife Society, Sierra Nevada Alliance, California Aquatic Bioassessment Workgroup, Great Valley Center, California Rangeland Coalition, Salmon Restoration Federation, California Association of Resource Conservation Districts, Korea Institute for Construction Technology, and other regional symposia, conferences, and workshops.

Response to Submission 1691 (Gerry Haas, Santa Clara Valley Habitat Agency, June 23, 2020)

1691-1766

The EIR/EIS conclusion of less-than-significant impacts on wildlife movement after implementation of mitigation measures is based primarily on the assumption that SR 152 is a substantial existing barrier to north-south movement, especially for large mammals such as tule elk and mountain lion, and that the project (with the design and mitigation measures in place) would not significantly further degrade existing conditions. The project avoids wildlife movement impacts at Pacheco Pass by being underground for most of the distance and otherwise minimizes impacts by being on viaduct for extensive sections. Where viaduct is not feasible along Pacheco Creek, direct impact on wildlife movement is primarily offset by four wildlife undercrossings (see the very end of Appendix J of the WCA [Appendix C of Authority 2020a, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS] for drawings of the four undercrossings and the design recommendations in Table 7-1 of the main body of the WCA). Three bridges and culverts on SR 152 have been shown by camera trap data to be especially important to wildlife movement in this area. The rail alignment directly south of these points is on viaduct, and wildlife crossing in this area would be further shielded from noise, light, and activity on the rails by installation of a noise barrier along the alignment. The rail would directly affect the Pacheco Creek Preserve. Direct effects are primarily offset by replacing the loss of approximately 2 acres of sycamore alluvial woodland with a patch that is at least 8.2 acres (the size of the patch affected). Lastly, regarding the commenter's assertion that the No Project Alternative is the environmentally superior alternative, the Authority notes that the description of why the Preferred Alternative is also the environmentally superior alternative is provided in Section 8.5, Environmentally Superior Alternative, of the Draft EIR/EIS.

1691-1767

Refer to Standard Response SJM-Response-BIO-1: Wildlife Connectivity in Coyote Valley and Pacheco Pass.

Impacts on wildlife movement from construction noise are expected to be temporary and are described in Impact BIO#42 in the Draft EIR/EIS. Impacts from construction noise are expected to be mitigated to less- than- significant with implementation of BIO-MM#76, which requires The Authority to consider careful construction timing, including avoiding construction within known wildlife movement routes during nighttime hours. The commenter also asserts that additional analysis and mitigation are necessary in the western Pacheco Pass region. The Authority notes that Standard Response SJM-Response-BIO-1: Wildlife Connectivity in Coyote Valley and Pacheco Pass discusses wildlife connectivity in the Pacheco Pass, including the analysis and conclusions regarding this area. Additionally, the Authority notes that the Final EIR/EIS provided additional analysis regarding noise, artificial light, and movement of species, including mountain lion. Collectively, the additional analysis in the Revised/Supplemental Draft EIR/EIS and the mitigation provided support the findings of a less-than-significant impact on wildlife movement within this region.

Response to Submission 1691 (Gerry Haas, Santa Clara Valley Habitat Agency, June 23, 2020) - Continued

1691-1768

The undercrossings along the at-grade section of rail in western Pacheco Pass were placed there because that is the location of the impact. Within the location of impact, geographic and topographic constraints were taken into consideration to maximize crossing width and height and minimize crossing length. Although the use of wildlife of any new structure cannot be guaranteed, Pathways for Wildlife (2020) has provided evidence that most movement guild focal species (e.g., coyote, fox, and deer) do use culverts and bridge underpasses in western Pacheco Pass. The Authority agrees that larger mammals such as mountain lion and Tule elk are less likely to use undercrossings, but the wildlife movement and transportation planning literature (e.g., FHWA 2011, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS) does provide undercrossing design recommendations for these species. The four proposed western Pacheco Pass undercrossings exceed the width and height recommendations and are below the maximum length recommendations for these larger species, and therefore do have increased potential to be used by mountain lion and Tule elk. To address concerns about undercrossing use and functionality, a wildlife crossing monitoring and adaptive management plan has been added to BIO-MM#77b in the Final EIR/EIS. Under this measure, crossings would be monitored to determine effectiveness.

1691-1769

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife.

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife. The findings and conclusions related to noise effects on mammals were described in the Final EIR/EIS. BIO-MM#80 would be implemented at locations including Coyote Valley, upper Pacheco Creek, and the vicinity of the California Aqueduct. That mitigation measure calls for construction of noise barriers that would shield wildlife at important crossing locations from noise, light, or movement of operating trains. With this mitigation, impacts on wildlife movement at these locations would be less than significant.

1691-1770

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife.

1691-1771

BIO-MM#58 in the Draft EIR/EIS addresses potential impacts on two Audubon IBAs, the Upper Pajaro River IBA (centered on the Soap Lake region) and the GEA IBA (within the San Joaquin Valley). Neither of the IBAs overlap with the Pacheco Creek Regional Open Space Reserve referenced by the commenter. Mitigation for effects on the Pacheco Creek Reserve is described in BIO-MM#85.

1691-1772

The rail must be fenced for safety and security, regardless of whether a noise barrier is used in a particular location. For this reason a noise barrier does not per se reduce wildlife permeability. Consequently, the project includes dedicated wildlife crossings in the design to facilitate the continued movement of wildlife under the rail. Additionally, BIO-MM#81 requires numerous other measures to exclude wildlife from the rail where they could be struck and killed. Lastly, in locations where permeability is significantly reduced, the Authority would also acquire and enhance lands within linkages. Collectively, the suite of mitigation measures related to wildlife movement in the Final EIR/EIS, including BIO-MM#77a, BIO-MM#77b, BIO-MM#78, BIO-MM#79, BIO-MM#80, BIO-MM#81, and BIO-MM#82, will avoid, minimize, and mitigate impacts on wildlife movement, including any effects from noise barriers.

1691-1773

Yes, the Authority has clarified in the Final EIR/EIS in BIO-MM#80 that the Authority would consult with agencies and affected organizations, including local wildlife movement stakeholders regarding the design of the noise barriers.

Response to Submission 1691 (Gerry Haas, Santa Clara Valley Habitat Agency, June 23, 2020) - Continued

1691-1774

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife.

The findings and conclusions related to noise effects on mammals were described in the Final Draft EIR/EIS. BIO-MM#80 would be implemented at locations including Coyote Valley, upper Pacheco Creek, and the vicinity of the California Aqueduct. That mitigation measure calls for construction of noise barriers that would shield wildlife at important crossing locations from noise, light, or movement of operating trains. With this mitigation, impacts on wildlife movement at these locations would be less than significant. With respect to impacts from vibration, the Draft EIR/EIS analyzed impacts in Impact BIO#45. The analysis was then supplemented with additional noise and vibration analysis in the Revised/Supplemental Draft EIR/EIS. Overall, the conclusion from these analyses, as described in the Final EIR/EIS, supports the finding that vibration would be less than significant for each of the alternatives.

1691-1775

Operations impacts of vibration are addressed in Impact BIO#47, with reference to a more detailed evaluation in the WCA (Appendix C, Wildlife Corridor Assessment Report, of the Biological and Aquatic Resources Technical Report [Authority 2020a, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS]). Impacts of vibration are found to be less than significant, and the analysis cites a variety of studies in evidence. No evidence has been brought forward supporting an assertion of significant impact from vibration. Accordingly, no mitigation is required.

1691-1776

Operations impacts of vibration are addressed in Impact BIO#47, with reference to a more detailed evaluation in the WCA (Appendix C, Wildlife Corridor Assessment Report, of the Biological and Aquatic Resources Technical Report [Authority 2020a, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS]). Impacts of vibration are found to be less than significant, and the analysis cites a variety of studies in evidence. No evidence has been brought forward supporting an assertion of significant impact from vibration. Accordingly, no mitigation is required.

1691-1777

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife. Operations impacts of noise and vibration are addressed in Impacts BIO#44 and BIO#47. The EIR/EIS finds that wildlife impacts of noise are significant, and mitigation is required. Impacts of vibration are found to be less than significant, which is the correct determination based on the effects analysis and evidence presented.

1691-1778

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife.

Additional analysis of construction as well as operational noise effects on mammals was included in the Revised/Supplemental Draft EIR/EIS and has been carried forward into the Final EIR/EIS. However, the Authority notes that the conclusions of the Draft EIR/EIS in Impact BIO#42 regarding the effects of noise on wildlife movement during construction remain correct. Overall, project construction (including noise) could interfere substantially with established native wildlife corridors through several mechanisms as described in Impact BIO#42. BIO-MM#76 includes measures to minimize noise and vibration impacts on wildlife movement during construction. These measures include maintaining known wildlife crossing areas unobstructed (i.e., no equipment storage, staging, or unnecessary work in these areas), the use of vibratory (rather than impact) pile driving for work within or near waterbodies, which is less impactful on aquatic species, and through the establishment of wildlife-friendly fencing. Collectively, these measures, when considered within the temporary context of the work, support a less-than-significant finding after the application of mitigation.

1691-1779

Refer to Standard Response SJM-Response-BIO-5: Lighting Impacts to Wildlife.

The Authority notes that the Draft EIR/EIS was modified and recirculated for public review following the listing of the mountain lion as a candidate under the California Endangered Species Act in mid-2020. Section 3.7, Biological and Aquatic Resources, and the Final EIR/EIS incorporates additional analysis and additional mitigation related to lighting impacts.

Response to Submission 1691 (Gerry Haas, Santa Clara Valley Habitat Agency, June 23, 2020) - Continued

1691-1780

Refer to Standard Response SJM-Response-BIO-5: Lighting Impacts to Wildlife.

Additional analysis and conclusions related to lighting effects on wildlife movement is included in the Final EIR/EIS. Mitigation measure BIO-MM#89 has been included in the Final EIR/EIS to minimize the impacts of operational lighting on wildlife movement and wildlife species. Additionally, the Authority notes that additional mitigation for impacts from noise under BIO-MM#80 included in the Final EIR/EIS would have additional benefits related to artificial lighting impacts.

1691-1781

Refer to Standard Response SJM-Response-BIO-5: Lighting Impacts to Wildlife.

The Authority notes that the Draft EIR/EIS was modified and recirculated for public review following the listing of the mountain lion as a candidate under the California Endangered Species Act in mid-2020. Section 3.7, Biological and Aquatic Resources, and the Final EIR/EIS incorporates additional analysis and additional mitigation related to lighting impacts.

1691-1782

Refer to Standard Response SJM-Response-BIO-5: Lighting Impacts to Wildlife.

The Authority notes that the Draft EIR/EIS was modified and recirculated for public review following the listing of the mountain lion as a candidate under the California Endangered Species Act in mid-2020. Section 3.7, Biological and Aquatic Resources, and the Final EIR/EIS incorporates additional analysis and additional mitigation related to lighting impacts.

1691-1783

Refer to Standard Response SJM-Response-BIO-5: Lighting Impacts to Wildlife.

The Authority notes that the Draft EIR/EIS was modified and recirculated for public review following the listing of the mountain lion as a candidate under the California Endangered Species Act in mid-2020. Section 3.7, Biological and Aquatic Resources, and the Final EIR/EIS incorporates additional analysis and additional mitigation related to lighting impacts.

1691-1784

The estimated 2,544 acres of available land for sycamore alluvial woodlands restoration and enhancement were created by digitizing the Sycamore Stands to Consider for Enhancement polygons in Figure 30 of the SFEI and H.T. Harvey 2017 report, as cited in Section 3.7 of the Draft EIR/EIS (Observed HTH 2016). These digitized locations were then intersected with riparian land cover data on lands that are not publicly known to be protected. This analysis was done to provide assurance that offsetting impacts on existing sycamore alluvial woodland habitat was feasible. The project would need 37.2 acres of sycamore alluvial woodland restoration or enhancement and protection and this analysis, informed by the best available data, suggests there is at least one if not two orders of magnitude more sycamore alluvial wetland available than what is needed.

1691-1785

The analysis does not identify acres of existing sycamore alluvial wetland but of "Sycamore Stands to Consider for Enhancement (Observed HTH 2016)" per Figure 30 in SFEI and H.T. Harvey 2017, as cited in Section 3.7 of the Draft EIR/EIS. If there is only 367 acres in SCVHP, that should still be enough to meet the HSR and SCVHA combined need of 82.7 acres.

1691-1786

Yes, that is consistent with the Authority's understanding of the data. The analysis was used to understand acres of potential opportunity for enhancement. As indicated in Bio-MM#85, the Authority would provide compensatory mitigation at a 1:1 ratio.

Response to Submission 1691 (Gerry Haas, Santa Clara Valley Habitat Agency, June 23, 2020) - Continued

1691-1787

The total mitigation need for SCVHA and HSR is 82.7 acres. Whether the comparative metric is the 367 acres of existing sycamore alluvial woodland as captured in the 2012 SCVHP (County of Santa Clara et al. 2012, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS) or the 2,544 acres of enhancement potential identified using the H.T. Harvey and SFEI 2017 data (SFEI and H. T. Harvey 2017, as cited in Section 3.7 of the Draft EIR/EIS), there is enough available land such that it is feasible to meet the mitigation need. In addition, the Authority intends to coordinate its mitigation planning with the SCVHA to avoid conflicts to the maximum extent feasible.

1691-1788

Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS analyzes the impact on wildlife movement from the at-grade and cut-and-fill sections of the project in western Pacheco Pass near Casa de Fruta and concludes that there would be a significant impact on wildlife movement. As the commenter notes, mitigation is proposed to reduce this impact to a less-than-significant level. Regarding the commenter's assertion that this impact represents a conflict with the SCVHP, the Authority disagrees. As described in Impact BIO#53 in the Draft EIR/EIS, SCVHCP Action LAND-L4 does require the habitat agency to acquire and enhance natural and semi-natural areas to provide for connectivity between the Santa Cruz mountains and the Diablo Range. As acknowledged in the Final EIR/EIS, the project would affect connectivity between the Diablo Range and the Santa Cruz mountains, but project alternatives would not affect the acquisition or enhancement of lands to promote this action as described under Action LAND-L4. Consequently, no conflict with the SCVHCP was identified.

1691-1789

As noted in response to submission SJM-1691, comment 1787, no matter the comparative metric, achieving the combined mitigation needs for HSR and SCVHA is numerically feasible because the mitigation requirement is significantly less than lands available for preservation or enhancement.

1691-1790

Based on the project footprint and sycamore alluvial woodland mapping within the Pacheco Reserve (as described in Impact BIO#53), there would be 0.4 and 2.3 acres of permanent and temporary effects on the preserve, respectively. To offset this effect, HSR would mitigate for the loss of the complete 8.2-acre reserve. That is, the analysis assumes that the 0.4-acre permanent loss within the reserve affects the entire reserve and thus commits to protecting another 8.2-acre reserve. It is for this reason that the mitigation is assumed sufficient and the potential for conflict with the SCVHA less than significant.

1691-1791

The definition of terms used in the analysis of biological resources in the Draft EIR/EIS are found in Section 3.7.1.1, Definition of Terminology. As described in that section, the term "HCP" as used under CEQA includes both federal HCPs (such as the SCVHP) as well as "other approved local, regional, or state conservation plans". Three plans meet this definition and are discussed in the Draft EIR/EIS. No corrections are necessary regarding HCPs discussed in the EIR/EIS.

1691-1792

The definition of terms used in the analysis of biological resources in the Draft EIR/EIS are found in Section 3.7.1.1, Definition of Terminology. As described in that section, the term "HCP" as used under CEQA includes both federal HCPs (such as the SCVHP) as well as "other approved local, regional, or state conservation plans". Three plans meet this definition and are discussed in the Draft EIR/EIS. No corrections are necessary regarding HCPs discussed in the EIR/EIS.

Response to Submission 1691 (Gerry Haas, Santa Clara Valley Habitat Agency, June 23, 2020) - Continued

1691-1793

BIO-MM#55 outlines the mitigation requirements for permanent loss of active Swainson's hawk nesting trees and habitat. The Authority notes that BIO-MM#10 is the overall HMP for species and species habitat, and the Authority would coordinate with the habitat agency regarding the acquisition of mitigation lands within Santa Clara County. Furthermore, as noted in revised BIO-MM#10, the Authority would coordinate with conservation agencies and organizations regarding how acquired lands are transferred and protected and specifically the SCVHA because of the unique role of the SCVHA in the region as a subject matter expert and land manager.

1691-1794

The Preliminary Compensatory Mitigation Plan was prepared to show the feasibility of achieving wetland and listed species mitigation on the landscape for each alternative at a gross scale. It does not inform mitigation ratios for impacts on protected lands. The ultimate mitigation ratio for protected lands may end up being higher than 1:1 as noted by the commenter.

1691-1795

BIO-MM#10 has been revised in the Final EIR/EIS to note that title to lands acquired in fee would be transferred to the most suitable landowner/manager in the region, which would be determined in coordination with the conservation agencies and organizations, including CDFW. The most suitable landowner/manager may in fact be CDFW or it may be another entity, but the clarification to the mitigation measure will allow for selection of the most suitable entity.

1691-1796

Yes. BIO-MM#10 has been revised in the Final EIR/EIS to note that title to lands acquired in fee would be transferred to the most suitable landowner/manager in the region, which would be determined in coordination with the conservation agencies and organizations, including CDFW. The most suitable landowner/manager may in fact be CDFW or it may be another entity, but the clarification to the mitigation measure will allow for selection of the most suitable entity. For mitigation lands within Santa Clara County, SCVHA may be the most suitable entity.

1691-1797

Compensatory mitigation for impacts on species and species habitats is required under various mitigation measures including BIO-MM#31. BIO-MM#10 outlines the overall requirements for implementation of the CMP, including the options for purchase of mitigation lands. For lands protected through acquisition of fee-title or conservation easement, funding for long-term management of the habitat is required. As noted in BIO-MM#10, which has been revised in the Final EIR/EIS, title to lands acquired in fee would be transferred to the most suitable landowner/manager in the region, as determined in coordination with conservation agencies and organizations, including CDFW. Compensatory mitigation may also be completed through the purchase of mitigation credits at an agency-approved bank (if available), or payment into an in-lieu fee program (if available). Compensatory mitigation is provided, in part, to satisfy the requirements of state and federal wildlife agency requirements.

1691-1798

The Authority has determined, based on the assessment in the Draft EIR/EIS, that the compensatory mitigation outlined in BIO-MM#47 will be sufficient to reduce effects on burrowing owls to a less-than-significant level. In general, burrowing owl habitat is not limited within the region, and the ratio provided would compensate for the impact by protecting habitat in perpetuity, where impacted habitat currently has no protections. The Authority also notes, however, that numerous other species that occur in similar habitats to burrowing owl will also require compensatory mitigation, providing further benefits to burrowing owl.

1691-1799

The Authority has proposed a mitigation ratio for impacts on San Joaquin kit fox habitat that would reduce effects to a less-than-significant level. In general, San Joaquin kit fox habitat (mostly movement habitat is being impacted) is not limited within the region, and the ratio provided would compensate for the impact by protecting habitat in perpetuity, where impacted habitat currently has no protections. However, as noted in BIO-MM#61, the final mitigation ratio could be higher if determined necessary under subsequent authorizations issued under FESA and/or CESA. Consequently, no changes to the Final EIR/EIS have been made.

Response to Submission 1691 (Gerry Haas, Santa Clara Valley Habitat Agency, June 23, 2020) - Continued

1691-1800

BIO-MM#85 provides a 1:1 mitigation ratio for the loss of an 8.2-acre reserve. The analysis assumes that any loss to the reserve affects the reserve's function and conflicts with the goal to preserve contiguous patches. So, the mitigation provides a 1:1 replacement of the reserve, not of the affected part of the reserve. This conservative approach is considered adequate to conclude less-than-significant conflict impact on with the SCVHP.

1691-1801

All loss of sycamore alluvial woodland, regardless of where it occurs, would be offset with a ratio of 4:1 as described in BIO-MM#72. The SCVHA would be compensated 1:1 for the loss of an 8.2-acre sycamore alluvial woodland reserve, as described in BIO-MM#85.

1691-1802

Yes, the Authority has clarified in the Final EIR/EIS, BIO-MM#76, that the measure would apply to culverts and bridges that provide passage under SR 152 in the western Pacheco Pass area.

1691-1803

The wildlife crossings in western Pacheco Pass meet published design criteria for all movement guilds represented by focal species such as fox, deer, mountain lion, and Tule elk (e.g., FHWA 2011, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS; Dodd et al. 2007). While it is recognized in the literature that shorter crossings are better, width and height (combined with length to create "openness") are also recognized as important crossing attributes. The literature also recognizes that other factors such as the presence of fencing improve use. For example, regarding the Cramer 2012 document and Diamond 2018 email (which summarizes the Cramer 2012 document) cited in the comment, in the abstract the document makes the following statements: culverts "should" be less than 120 feet (and are not an absolute maximum as described in the comment) and wider crossings and the presence of fencing will improve use. The crossings in western Pacheco Pass vary in length between 130 and 180 feet, but the widths are all 40 feet and the heights for 3 of the 4 crossings are 38 feet (with one being 23 feet high). While the lengths are not ideal, the widths and heights of the crossings, along with the fact that they will be fenced, is presumed to compensate for the length (which is a function of the rail design and topography in this location). To help improve siting and design of the wildlife crossings as more information becomes available between environmental review and construction, and provide assurances to the agencies that designed features will be built, a commitment to provide agency review of the 75-90% designs was added to BIO-MM#77a in the Final EIR/EIS. A wildlife crossing monitoring and adaptive management commitment was also added to BIO-MM#77b. These two measures would improve certainty around design and siting and characterize use to inform future wildlife movement planning. SR 152 has been recently shown to be permeable to low and moderate movement guild species (fox, coyote, badger, bobcat, and deer) as use of culverts and underpasses by these species has been documented. These results support the likelihood of these same species using the crossings through the project. However, for species like Tule elk and mountain lion, it is assumed that SR 152 is less permeable in the existing condition and poses a greater barrier to movement. That is, the existing movement condition is considered degraded for these species. At the writing of the Final EIR/EIS, the most recent, publicly available information specific to western Pacheco Pass has been considered and incorporated where appropriate. At this time, the Authority is not aware of any public designs or funded plans for additional wildlife crossings in the region and therefore there is no analysis of the project's effects on crossings in the region. Also, the project would be

Response to Submission 1691 (Gerry Haas, Santa Clara Valley Habitat Agency, June 23, 2020) - Continued

1691-1803

underground and on viaduct for most of its extent through Pacheco Pass. Based on the existing conditions, the dimensions for the wildlife crossings in western Pacheco Pass, the fencing to encourage use of the crossings, the use of tunnels and viaducts to avoid and minimize impacts throughout Pacheco Pass and the degraded existing condition for high openness movement species like the mountain lion and Tule elk along with improvements to BIO-MM#77a to provide 75-90% design review and BIO-MM#77b to write and implement a monitoring/adaptive management plan, the finding of a less-than-significant impact on movement in this region is the correct determination .

1691-1804

At this time, the proposed crossing designs in western Pacheco Pass (described in Appendix J, Recommended Design Improvements Locations and Dimensions, of the WCA [Appendix C of Authority 2020a, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS]) are minimized in length and maximized in width and height to the extent feasible. The locations chosen for the crossings were selected to minimize the length. BIO-MM#77a was modified in the Final EIR/EIS to include require agency review of the wildlife crossings at the 75-90% project design phase so that siting and dimensions can be optimized. BIO-MM#77b was also included in the Final EIR/EIS to include agency review of plans for the internal design of crossings and monitoring/adaptive management for crossing use. The current design, along with these additional measures, will provide assurance that the crossing design can continue to be adjusted and informed, to the extent feasible, with new information as it becomes available and that the functionality of crossings will be monitored and adaptively managed.

1691-1805

Cost feasibility is the rationale for the use of culverts over short bridges. However, engineers have determined that the 120-foot maximum culvert length is feasible, and BIO-MM#78 has been modified in the Final EIR/EIS to include this design requirement.

1691-1806

BIO-MM#78 has been revised in the Final EIR/EIS to require a culvert length no greater than 120 feet.

1691-1807

BIO-MM#78 has been revised in the Final EIR/EIS to require a culvert length no greater than 120 feet. With the use of viaduct and tunnel through much of Pacheco Pass and the reduction in length of the four wildlife crossings in western Pacheco Pass, the overall impact in the region is considered less than significant.

1691-1808

Due to the openings in the rail associated with the tunnels and viaducts in Pacheco Pass, the knowledge about movement in the region, and functionality of wildlife crossings for small and moderate movement guild species (i.e., based on local studies, coyote, fox, and bobcat frequently use crossings), the proposed mitigation is considered commensurate with the impact.

1691-1809

Yes. BIO-MM#77a was revised in the Final EIR/EIS to include agencies and local stakeholders, including the SCVHA, in planning and prioritizing land acquisition around wildlife crossings, as well as in optimizing the placement of wildlife crossings at 75%–90% design.

1691-1810

The Authority is not a participating agency in the SCVHP and therefore the potential coverage of American badger under the plan has no bearing on the Authority or the treatment of badger in the EIR/EIS. The Draft EIR/EIS evaluates potential impacts on American badger under Impact BIO#28, including the loss of denning and dispersal habitat, and the potential direct mortality of badgers. The Draft EIR/EIS finds that these impacts are potentially significant and measures to reduce these effects to a less-than-significant level are included. BIO-MM#64 requires the Authority to conduct pre-construction surveys for den sites and to avoid impacts on den sites during the pup-rearing season. BIO-MM#64 also requires the Authority to implement passive den exclusion measures to discourage use of dens prior to project disturbance activities. The Draft EIR/EIS concludes that based on the status of the species, potential impacts, and with implementation of BIO-MM#64, impacts would be reduced to a less-than-significant level and no additional mitigation is required, which is the correct determination based on the effects analysis and evidence presented.

Response to Submission 1691 (Gerry Haas, Santa Clara Valley Habitat Agency, June 23, 2020) - Continued

1691-1811

The Authority is not a participating agency in the SCVHP. However, as noted in response to submission SJM-1691, comment 1810, the Authority has included mitigation measures that reduce impacts of the proposed project on American badger to a less-than-significant level.

1691-1812

Please refer to the responses to submission SJM-1691, comments 1810 and 1811. Mitigation requirements in the Draft EIR/EIS for burrowing owl are generally consistent with CDFW recommendations for this species. The Authority believes that CDFW's recommendations for burrowing owl are informed by the conservation needs for this species. No such recommendations exist for American badger, and the Authority has concluded that survey and avoidance of individuals and pups is sufficient to minimize impacts to a level that is less-than-significant, and additional compensatory mitigation is not necessary. However, the Authority also notes that numerous other species that occur in similar habitats to American badger (e.g., burrowing owl, California tiger salamander) would also require compensatory mitigation, providing further benefits to American badger.

1691-1813

The Authority revised the Draft EIR/EIS to include an analysis of the proposed project impacts on the mountain lion, now a candidate for listing under CESA, and recirculated it for public review. The Draft EIR/EIS was recirculated for public comment and the Authority will consider and respond to all comments received on the recirculation when preparing the Final EIR/EIS.

1691-1814

The Authority revised the Draft EIR/EIS to include an analysis of the proposed project impacts on the mountain lion, now a candidate for listing under CESA, and recirculated it for public review. The Draft EIR/EIS was recirculated for public comment and the Authority will consider and respond to all comments received on the recirculation when preparing the Final EIR/EIS.

1691-1815

The Authority revised the Draft EIR/EIS to include an analysis of the proposed project impacts on the mountain lion, now a candidate for listing under CESA. The Draft EIR/EIS was recirculated (on a limited basis) for public comment and the Authority will consider and respond to all comments received on the recirculation when preparing the Final EIR/EIS. Specific mitigation measures addressing potential impacts on mountain lion are included in the Revised Draft EIR/ Second Draft EIS. Comments received on these mitigation measures will be considered in the Final EIR/EIS.

1691-1816

The Authority revised the Draft EIR/EIS to include an analysis of the proposed project impacts on the monarch butterfly, under consideration for listing under FESA. The Draft EIR/EIS was recirculated (on a limited basis) for public comment and the Authority will consider and respond to all comments received on the recirculation when preparing the Final EIR/EIS.

1691-1817

Section 3.7.9.7, Conservation Areas, is an impact summary for NEPA comparison of alternatives. Discussion of Pacheco Creek Reserve was inadvertently omitted from this section, but it has been added to the Final EIR/EIS. Impacts on the Pacheco Creek Reserve were discussed in the Draft EIR/EIS under Impact BIO#51 and, therefore, this omission does not change the conclusions of the Draft EIR/EIS relative to this impact.

1691-1818

Section 3.7.9.7, Conservation Areas, is an impact summary for NEPA comparison of alternatives. Discussion of Pacheco Creek Reserve was inadvertently omitted from this section, but it has been added to the Final EIR/EIS. Impacts on the Pacheco Creek Reserve were discussed in the Draft EIR/EIS under Impact BIO#51 and, therefore, this omission does not change the conclusions of the Draft EIR/EIS relative to this impact.

Response to Submission 1691 (Gerry Haas, Santa Clara Valley Habitat Agency, June 23, 2020) - Continued

1691-1819

Wildlife-friendly fencing around soil stabilization areas, where feasible, is required under BIO-MM#76. Eight-foot fence is only used directly along the rail. Currently, the proposed design of crossings as described in Appendix J, Recommended Design Improvements Locations and Dimensions, of the WCA (Appendix C of Authority 2020a, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS) remain longer than 120 feet; however, other crossing attributes that will compensate for the length are described in the response to submission SJM-1691, comment 1803. BIO-MM#77a has been revised in the Final EIR/EIS to allow for agency and stakeholder review at the 75-90% design phase to refine crossing placement based on the best available information and BIO-MM#77b has been included to require a monitoring and adaptive management plan for the crossings.

1691-1820

The personal communication from Cristen Langner stating that SR 152 is not a significant barrier to Tule elk is new information. However, the statement is in contradiction to CDFW's 2020 document titled: California Wildlife Barriers 2020, 2020 Priority Wildlife Movement Barrier Locations by Region (CDFW 2020). The CDFW document identifies 11.7 miles of SR 152 in Santa Clara County (i.e., western Pacheco Pass) as a priority barrier for large and meso carnivores and Tule elk. Priority barriers are those that are most important to address from a wildlife connectivity/movement perspective. The CDFW Tule elk radio collar data transmitted to the Authority by Joe Hobbs in 2017 did not show movement across SR 152 that would suggest regular or frequent connectivity across SR 152. Penrod et al. 2013, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS, identified SR 152 as one of the most substantial barriers in the Santa Cruz to Gabilan Range Linkages and the SCVHP (County of Santa Clara et al. 2012, as cited in Section 3.7, Biological and Aquatic Resources, of The Draft EIR/EIS) recognizes SR 152 as a partial barrier to wildlife movement, noting the 6-mile median barrier as a major contributor. A 1-year camera trapping study of five culverts and bridges in western Pacheco Pass (Pathways for Wildlife 2020, as cited in Section 3.7, Biological and Aquatic Resources, of the Final EIR/EIS) did not capture Tule elk or mountain lion moving under SR 152. Based on this information, the Authority finds it reasonable to conclude that SR 152, in western Pacheco Pass where the median barrier is present, is a significant barrier to mountain lion and Tule elk movement.

Response to Submission 1691 (Gerry Haas, Santa Clara Valley Habitat Agency, June 23, 2020) - Continued

1691-1821

Please refer to the response to submission SJM-1691, comments 1805 through 1807. BIO-MM#78 has been revised in the Final EIR/EIS to limit the length of wildlife crossings in western Pacheco Pass to no more than 120 feet. While the exact measurements necessary to facilitate use of crossings by Tule elk are not well documented in the scientific literature, aspects of crossings important to elk have been incorporated into the design of the crossings (e.g., clear line of sight). Additionally, the Authority has incorporated changes to BIO-MM#77, now BIO-MM#77a, in the Final EIR/EIS requiring the Authority to work with wildlife movement stakeholders and agencies to optimize wildlife crossings. Lastly, the Authority has incorporated additional mitigation measure BIO-MM#77b into the Final EIR/EIS requiring monitoring of the crossings for effectiveness and implementation of adaptive management if required. Please also note that, per radio collar data from Hobbs (2017, as cited in Section 3.7, Biological and Aquatic Resources, of the Final EIR/EIS), Tule elk are not frequently present in western Pacheco Pass, as their core habitat is in and around San Luis Reservoir on the east side of Pacheco Pass.

1691-1822

To address monitoring and adaptive management of wildlife crossings, a new mitigation measure, BIO-MM#76b, was added to the Final EIR/EIS. The entity that would perform the monitoring would be selected post-construction. The Authority would be responsible for funding the monitoring and adaptive management program.

1691-1823

The presence of habitat impacts on badgers does not require the presence of other impacts, so the occurrence of habitat effects does not require a change in permeability effects. Thus, Impact BIO#28 finds a significant impact due to loss of denning and dispersal habitat for and direct mortality or disturbance of American badger (less than significant with mitigation), but impacts BIO#42 and BIO#43 do not find a significant temporary or permanent effect on movements by American badger.

1691-1824

The cut-and-fill sections and the 2.5-mile rail section in western Pacheco Pass that is at grade/on embankment are concluded to be locations of considerable permeability reduction in the post-project scenario for all alternatives and most movement guilds, including Tule elk, mountain lion, bobcat, and badger. That is the reason for the use of wildlife-friendly fencing around cut-and-fill areas and the measure requiring four undercrossings. See Section 6.1.2, Permanent Effects, of the WCA (Appendix C of Authority 2020a, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS) for this information.

1691-1825

The Authority disagrees that there is a lack of mitigation in western Pacheco Pass. BIO-MM#77 requires cut-and-fill/soil stabilization areas be fenced with wildlife-friendly fencing. BIO-MM#78 requires four undercrossings be built to provide movement through the at-grade/embankment portion of the project in western Pacheco Pass. BIO-MM#80 was revised in the Final EIR/EIS to provide additional mitigation in the form of additional noise barriers in the Pacheco Pass region. BIO-MM#77 was revised for the Final EIR/EIS to require the Authority to work with agency and stakeholder partners to validate and optimize wildlife crossing locations at the 75 to 90 percent design phase to make sure up-to-date information can be incorporated into the siting of crossings. BIO-MM#77 was also modified to include a monitoring and adaptive management strategy for wildlife crossings. These measures are in combination with other measures in the greater Pacheco Pass regions that include tunnels (which avoid impacts on movement) and viaduct sections (which minimize impacts on movement). Lastly, measures to minimize effects on wildlife movement during construction are included in the Draft EIR/EIS in BIO-MM#76, which requires the Authority to consider existing wildlife crossing areas when considering materials staging, avoiding construction during known movement corridors during nighttime hours, and the placement of wildlife-friendly fencing at tunnel portal areas.

Response to Submission 1691 (Gerry Haas, Santa Clara Valley Habitat Agency, June 23, 2020) - Continued

1691-1826

To improve potential use of wildlife crossings for high mobility high openness movement guilds, the wildlife crossings' length would be limited to 120 feet as feasible, as per revisions to BIO-MM#78 in the Final EIR/EIS. With respect to Tule elk and mountain lion specifically, aspects of crossings important to elk and mountain lion have been incorporated into the design of the crossings (e.g., clear line of sight). Additionally, the Authority has incorporated changes to BIO-MM#77, now BIO-MM#77a, in the Final EIR/EIS requiring the Authority to work with wildlife movement stakeholders and agencies to optimize wildlife crossings. Lastly, the Authority has incorporated additional mitigation measure BIO-MM#77b into the Final EIR/EIS requiring monitoring of the crossings for effectiveness and implementation of adaptive management if required.

1691-1827

Neither the EIR/EIS nor the WCA (Appendix C of Authority 2020a, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS) identifies any sections of road within the RSA as impermeable to any movement guilds in the existing condition. There are qualitative discussions that describe roads as being significant, substantial, or considerable barriers to movement, especially for some movement guilds. For example, mountain lions and Tule elk in western Pacheco Pass do not frequently cross under SR 152 as discussed in the response to submission SJM-1691, comment 1820. These discussions are specific to movement guild and location and based on agency reports and other guidance literature.

1691-1828

Refer to Standard Response SJM-Response-BIO-3: Coyote Valley Wildlife Crossings.

At-grade sections of the HSR would be enclosed by an 8-foot-tall chain link fence except four locations along Monterey Road in Coyote Valley, and this information is included Volume 3 of the Draft EIR/EIS. The location-specific design requirements of the fencing to exclude species known to be or potentially present in the region are provided by BIO-MM#81. This fencing's primary purpose is to exclude humans from the rail but would also function to exclude wildlife and thus force them to use provided crossings to cross the rail. Exclusion barriers at at-grade crossings along Monterey Road are required by BIO-MM#81. To further assure function of exclusion barriers at at-grade crossings, text requiring monitoring and provisions for additional measures (if monitoring suggests an effect) from the WCA (Appendix C of Authority 2020a, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS) was added to BIO-MM#81 in the Final EIR/EIS. With this addition of text directly to the measure, rather than including it by reference to the WCA, the commitment to wildlife exclusion at at-grade crossings is clarified.

Response to Submission 1691 (Gerry Haas, Santa Clara Valley Habitat Agency, June 23, 2020) - Continued

1691-1829

The EIR/EIS relies heavily on Appendix C, Wildlife Corridor Assessment Report, to the Biological and Aquatic Resources Technical Report (Authority 2020a, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS) to characterize the existing condition of, and evaluate impacts on, wildlife movement. Section 5, Existing Conditions for Wildlife Movement, of the WCA recognizes through summaries of various regional reports and planning documents (e.g., Penrod et al. 2013, as cited in Section 3.7 of the Draft EIR/EIS) the existence and importance of the Pacheco Pass region for movement. However, to address this comment specifically, Section 3.7.6.2, Biological Conditions, of the Final EIR/EIS was revised to include both Soap Lake and Pacheco Pass as important areas for wildlife movement. The EIR/EIS finds, consistent with the commenter, that the 2.5-mile rail segment in western Pacheco Pass would create a significant barrier to wildlife movement and, as a result, BIO-MM#78 requires four wildlife crossings under the rail in this location. These measures, along with the additions under BIO-MM#77a for review of 75-90% designs by agencies and stakeholders, the monitoring and adaptive management of crossings added to BIO-MM#77b, and the requirement to convert fencing around the cut-and-fill soil stabilization areas, as well as the tunnel and viaduct sections in the greater Pacheco Pass region, allow for a less-than-significant conclusion. BIO-MM#78 requires the four wildlife crossing specifically in western Pacheco Pass and, while BIO-MM#76 does apply throughout the alignment, additional text was added to recognize Pacheco Pass as an example of a location where the measures would apply.

1691-1830

In response to submission SJM-1691, comment 1829, BIO-MM#76 was revised in the Final EIR/EIS to include Pacheco Pass as a specific example of locations where the measure would apply. BIO-MM#79 applies specifically to offsets in Soap Lake for the maintenance facility, which cannot be feasibly moved and crossings are not an option due to length. BIO-MM#77a includes an added provision in the Final EIR/EIS to concentrate land protection and enhancements around wildlife crossings to improve future use.

1691-1831

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife.

BIO-44 evaluates the potential that noise may deter wildlife from using crossings and reviews evidence from sites within the study area indicating that wildlife are very likely to use the crossings, particularly with implementation of mitigation per BIO-MM#80. BIO-MM#77a was revised in the Final EIR/EIS to encourage land acquisition and protection in the locations where wildlife crossings to improve and preserve crossings function. In addition, a crossing monitoring and adaptive management program was added as a requirement to BIO-MM#77b.

1691-1832

The Authority appreciates the comment and has included new measure BIO-MM#77b in the Final EIR/EIS to describe how monitoring of the effectiveness of wildlife crossings will be conducted, and how adaptive management will occur. The monitoring and adaptive management would still be coordinated closely with the local wildlife movement stakeholders, similar to our previous coordination regarding project design.

1691-1833

BIO-MM#10 was revised in the Final EIR/EIS to state that compensatory lands would be sited on-site and in-kind for temporary habitat loss whenever possible and as near the impact as possible, especially where impacts occur in natural areas, within known or likely movement routes, or where crossings through the project would be located.

1691-3592

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife.

Response to Submission 1691 (Gerry Haas, Santa Clara Valley Habitat Agency, June 23, 2020) - Continued

1691-3593

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife. All major points made by commenter are discussed in the analysis of noise impacts to wildlife, in an analysis that additionally considers potential effects of visual disturbance (wildlife response to the appearance of an anthropogenic stressor), as well as factors in the project area such as existing background levels of sound and activity. The analysis considers that HSR train noise is qualitatively different from automotive noise associated with major highways, and contains many citations to the literature on wildlife impacts attributable to HSR operations.

1691-3594

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife. Commenter cites a noise threshold that is dated (cf. Dooling and Popper 2015) and is intended for assessment of automotive traffic impacts. Commenter's citations do not provide new information or a reasoned basis to alter the analysis of noise impact on wildlife. Commenter's suggestion that wildlife are sensitive to noise at levels lower than existing background levels in the study area is not useful. Commenter provides no evidence in support of the assertion that wildlife would not use crossings designed for their use, whereas data exist demonstrating that wildlife can and frequently do use crossings at very noisy highways in the project vicinity, such as U.S. Highway 101 and SR 152.

1691-3595

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife. Impact BIO#44 identifies significant noise impacts on wildlife. Commenter provides no new information that alters the estimate of the magnitude of that impact. Most of the citations addressing noise impacts in Barrientos et al. (2019) are included in the noise analysis summarized in SJM-Response-BIO-6, and the concept of relative noise differences is explicitly considered in the discussion of background noise levels in the noise analysis summarized in SJM-Response-BIO-6.

1691-3596

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife. Noise modeling used for this analysis, described in Standard Response: SJM-Response-BIO-6, used a more conservative model than that used by commenter.

1691-3597

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife. Commenter is correct in noting that site-specific noise propagation models were not developed for areas other than the Upper Pajaro River IBA and GEA IBA. See details in SJM-Response-BIO-6. Notwithstanding, the analysis still concludes significant noise impacts on wildlife (Impact BIO#44). Commenter does not provide information altering the estimated severity of that impact.

1691-3598

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife.

Please refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife. Sources cited in the standard response provide evidence that wildlife would use the provided crossings. The topic of noise-related wildlife impacts, which include flight responses and avoidance, is addressed in Impact BIO#44 in the Draft EIR/EIS and in the WCA (Appendix C of the Biological and Aquatic Resources Technical Report [Authority 2020a, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS]). The WCA also includes the analysis of visual disturbance, which may provoke avoidance or a flight response (Impact BIO#46 in the Draft EIR/EIS, also based on analysis in the WCA). Both impacts on wildlife are found to be significant.

1691-3599

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife.

The analysis has been revised and recirculated in the Revised/Supplemental Draft EIR/EIS, and now concludes significant impacts on a variety of species of wildlife at a variety of locations; please refer to Section 3.7, Biological and Aquatic Resources, of the Final EIR/EIS.

Response to Submission 1691 (Gerry Haas, Santa Clara Valley Habitat Agency, June 23, 2020) - Continued

1691-3600

The analysis of ground vibration effects is presented in Impact BIO#45 in the Draft EIR/EIS. That analysis cites studies indicating that ground vibration is an especially important impact for reptiles and amphibians. However, nearly all portions of the proposed alignment have existing heavy ground traffic from vehicles, mostly associated with highways, that establish a high baseline level of ground vibration. Accordingly, HSR-caused vibrations are determined to be a less-than-significant impact. The comment does not provide specific information that would change any of the conclusions in the Draft EIR/EIS.

1691-3601

Refer to Standard Response SJM-Response-BIO-5: Lighting Impacts to Wildlife.

Regarding the commenter's assertions about the term "wildlife corridors" and the validity of the approach to assessing project impacts, the Authority disagrees. As described in the WCA (Appendix C of Authority 2020a, as cited in Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS), "wildlife corridors" are landscape features that provide for the movement of wildlife between two or more habitat patches and often provide the shortest, most direct linkage between two patches of suitable habitat. While movement outside of corridors does happen, such movement in the context of the specific project region with substantial human development, is more limited. Overall, the goal of the assessment and mitigation is to maintain or improve the movement of wildlife between habitat patches. Numerous researchers, including Penrod et al. (2013, as cited in Section 3.7 of the Draft EIR/EIS), support this approach.

1691-3602

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife.

1691-3603

Refer to Standard Response SJM-Response-BIO-6: Noise Impacts on Wildlife. Please refer to the response to submission SJM-1691, comments 3594 to 3598, and 3600, which address commenter's assertion that wildlife will not approach the rail alignment. The Draft EIR/EIS analysis found that the rail alignment functions as a barrier only to a limited extent, primarily at times of frequent train passage and in areas where background noise, light and vibration levels are low or moderate; otherwise, the rail alignment does not present a barrier. Commenter has presented no new information to alter that determination.

1691-3604

Please see Revised Draft EIR/Supplemental Draft EIS Appendix 3.7-A, Special-Status Species Subject to Project Impacts, for further discussion of this issue. That analysis reviews camera trap data (and limited roadkill data) collected in Coyote Valley at U.S. Highway 101 and in western Pacheco Pass at SR 152. This evidence documents widespread wildlife crossing of these heavily used transportation corridors by a wide variety of common wildlife and by many special-status species. The documented crossings are occurring despite the fact that no crossing specifically designed for use by wildlife exist at either of these locations, and there are no other engineered solutions supporting such crossing use. This direct evidence of wildlife use at crossings that are both less suitable and more dangerous than the crossings proposed for the project shows a high probability of wildlife use of proposed crossing structures, without any need to refer to guild definitions. Also, please refer to recent literature on this topic cited in Appendix 3.7-A.

1691-3605

Please refer to the response to submission SJM-1691, comments 3594 to 3598, and 3600, which address commenter's assertion that wildlife will not approach the rail alignment. The Draft EIR/EIS analysis found that the rail alignment functions as a barrier only to a limited extent, primarily at times of frequent train passage and in areas where background noise, light, and vibration levels are low or moderate; otherwise, the rail alignment does not present a barrier that would affect the functionality of the wildlife crossing structure. Commenter has presented no new information to alter that determination.

Submission 1288 (Jake Smith, Santa Clara Valley Open Space Authority (OSA), May 19, 2020)

San Jose - Merced - RECORD #1288 DETAIL

Status : Action Pending
Record Date : 5/19/2020
Submission Date : 5/19/2020
Interest As : Business and/or Organization
First Name : Jake
Last Name : Smith

Stakeholder Comments/Issues :

To Whom it May Concern,

The Santa Clara Valley Open Space Authority (OSA) respectfully requests an extension of time for the public comment period of the California High-Speed Rail Project - San Jose to Merced Project Section Draft EIR/EIS.

As posted, the DEIR/DEIS is available for public review for 45 days, ending on June 8, 2020. OSA, like many other public agencies, organizations and private individuals throughout California, has encountered disrupted work schedules and other complications from the current statewide stay-at-home order at a time when we are normally very busy. We believe we are not the only entity seeking to extend the public comment period for this Project Section because so many of us have been under duress for several weeks.

OSA formally requests that the public comment period for the San Jose to Merced Project Section DEIR/DEIS be extended by 60 days beyond this initial 45-day comment period.

Thank you very much for your consideration.

Jake Smith
Conservation GIS Coordinator
408.224.7476
Openspaceauthority.org

We strongly believe that connecting people to nature and outdoor open spaces is more important than ever and we need EVERYONE'S help to #KeepYourParksOpen during this time. Learn how you can do your part to #LoveYourParks6FeetApart<<https://www.openspaceauthority.org/visitors/conditions-safety.html#HealthNotice>>.

[cid:image001.png@01D62AC9.A0678420]<<https://www.openspaceauthority.org/visitors/conditions-safety.html#HealthNotice>>

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1288-86

Response to Submission 1288 (Jake Smith, Santa Clara Valley Open Space Authority (OSA), May 19, 2020)

1288-86

Refer to Standard Response SJM-Response-OUT-1: Public Outreach.

Submission 1747 (Jason Kim, Santa Clara Valley Transportation Authority, June 23, 2020)

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June 23, 2020

California High-Speed Rail Project
San Jose to Merced Project Section Draft EIR/EIS
100 Paseo de San Antonio, Suite 300
San Jose, CA 95113

Attn: Boris Lipkin and Mark A. McLoughlin
Via Email: san.jose_merced@hsr.ca.gov

Subject: San Jose to Merced Project Section: Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) for the California High-Speed Rail Project.

Dear California High Speed Rail Authority,

Thank you for the opportunity to provide comments on the High-Speed Rail (HSR) alternatives on the San Jose to Merced Project section.

1747-629 | VTA is supportive of HSR enhancing the transit options within our region, particularly the Preferred Alternative #4. VTA looks forward to strengthening our partnership regarding the work being conducted as part of the Diridon Integrated Station Concept (DISC), and continuing collaboration regarding VTA's BART Silicon Valley (BSV) Phase II Extension to address any conflicts that may arise between these two efforts.

1747-630 | Diridon Integrated Station Concept
While the current HSR Environmental document does not include the most up to date DISC concept layout, VTA looks forward to continued collaboration with HSR and the other DISC partner agencies to integrate all upcoming and planned projects in the Diridon station area. As both the DISC and HSR programs progress, we look forward to continuing our partnership at Diridon as it is a critical juncture for HSR, BSV, and VTA Bus and Light Rail Services..

1747-631 | BART Silicon Valley
VTA has completed a review of the four alternatives based on the May 2019 Draft EIS/EIR Preliminary Engineering Plans and May 2019 Google Earth kmz files provided by HSR, comparing the current BSV Phase II single-bore project configuration. Particular interest has been given to where the HSR alignment and BSV alignment intersect in several places between Diridon Station and the Santa Clara Caltrain Station.

The Draft EIR/EIS is utilizing outdated information on the BSV Phase II project based on VTA's analysis of the May 2019 Google Earth files and the Preliminary Engineering Plans. There are discrepancies between HSR plans and current BSV Phase II plans at the location of the BART tunnel, Diridon BART Station, and associated infrastructure. The BART tunnel will be located under Santa Clara Street and not adjacent to it as shown in HSR plans. The Final EIR/EIS materials should reflect the currently proposed

California High Speed Rail Authority
June 23, 2020
Page 2 of 3

1747-631 | location of the BSV Phase II project. The correct tunnel alignment and station locations may be found in the project's 2018 Final SEIS/SEIR Volume III Appendix B: Project Plans and Profiles under the Single-Bore Alternative and the Diridon Station North Option on our website: <https://www.vta.org/projects/bart-sv/phase-ii/planning-and-environmental>.

1747-632 | The most notable item in our review was in Alternative 2. The Preliminary Engineering Plans (Book 2A Sheets 1 and 2 of 253) show series of columns proposed along the Newhall Yard and Maintenance Facility to W. Hedding Street which conflict with the BART Tunnel. This will need to be resolved if HSR proceeds with Alternative 2.

1747-633 | Along Newhall Yard there is a proposed HSR Temporary Construction Easement (TCE), identified in the Preliminary Engineering Plans in Alternatives 1, 3, and 4 that encroaches upon VTA's proposed joint maintenance road and is within 12 feet of the BART Tunnel. We request coordination in this area as the project progresses to address any potential operating or construction conflicts.

1747-634 | Additionally, VTA will be establishing both an exclusion zone and protection zone to the sides and above the BART tunnel. The exclusion zone is the closest area around the tunnel where no future improvements will be allowed, and the protection zone is an area beyond the exclusion zone where proposed future improvements must obtain prior approval from VTA. VTA looks forward to further coordination as we establish the exclusion and protection zones and as HSR identifies any proposed improvements that may fall within these zones.

1747-635 | VTA requests additional information on the columns depths that are not shown on the current plan sets (Volume 3) to confirm that there are no potential conflicts at the crossing of the BART and HSR alignments adjacent to Diridon Station as shown in Alternatives 1, 2, and 3 and the W. Hedding Street overpass as shown in Alternatives 1 and 3. VTA also requests additional depth information of the pedestrian underpass (ramps/stairs) at the College Park Caltrain Station and the HSR Substation Sta A, located between I-880 and McKendrie Street, as both of these structures are proposed above the BART tunnel. The depths of these features should clearly be shown within the Preliminary Engineering Plans in the Final EIR/EIS.

1747-636 | If there is a future plan to redesign the Santa Clara Street overpass in Alternative 4, VTA would like to coordinate with HSR to address any potential conflicts with the proposed BART tunnel. VTA has environmentally approved Construction Staging Areas (CSAs) for the Santa Clara Caltrain and Diridon Stations. The HSR alternatives show an encroachment upon these CSAs. We request early coordination at these locations to establish any mutual needs for these properties and construction management within these station areas as appropriate based on individual construction schedules as HSR's design progresses.

1747-637 | VTA Transit Service
Additionally, HSR is using an outdated version of the VTA Bus and Light Rail operating Plan. HSR is utilizing the draft version of the New Transit Service Plan (NTSP) which VTA recently adopted. Service for NTSP started in December 2019. VTA is currently operating a Temporary emergency service network due to the ongoing pandemic. The Final EIR/EIS should reflect the NTSP. More information can be found on our website at <http://newtransitplan.vta.org/>. Please see Attachment A for additional detailed VTA comments.

Submission 1747 (Jason Kim, Santa Clara Valley Transportation Authority, June 23, 2020) - Continued

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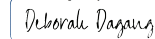
California High Speed Rail Authority
June 23, 2020
Page 3 of 3

Attachment A
VTA Detailed Comments
6/24/2020

Thank you for the opportunity to review this project. If you have any question, please contact Jason Kim at (408) 321-7542 or jason.kim@vta.org.

Sincerely,

DocuSigned by:



Deborah Dagang
Director of Planning and Programming

CC: Jason Kim, Jill Gibson

[CHSRA15025]toCV]

1747-638

Volume 1: Report

Chapter 2 Alternatives

Page 2-42

- The VTA Bus and Light Rail information used in the document is outdated. While the historical information regarding ridership and service is correct, VTA recently updated their service plan in late 2019 the VTA New Transit Service Plan (NTSP) is still technically VTA's official service plan even though we are continually adjusting both our Bus and Light Rail operating plan due to the current pandemic. Please update any references to VTA service to reflect the VTA NTSP (<http://newtransitplan.vta.org/>), including figure 2-31.

1747-639

Chapter 3.2 Transportation

Pg3.2-30

- As stated in a previous comment, VTA has recently updated its transit service plan. Please update text on page 3.2-30 to reflect this current NTSP.

Volume 3: Preliminary Engineering Plans

General Comments:

1747-640

- Continue coordination with HSR and VTA BSV as designs progress. Currently BSV Phase II is advancing the single bore alignment with the "north" option at Diridon Station.
- Continue coordination through the Diridon Integrated Station Concept (DISC) Plan process for Diridon Station, including Diridon Design Variant option
- Coordinate on Construction Management Plans including Construction Staging Areas (CSAs), haul routes, etc, depending on HSR's final construction schedule.
- Need additional information on column and foundation depths to confirm no conflicts

Below is a list of locations in the Preliminary Engineering Drawings where there may be conflicts with the VTA BSV alignment.

Alternative 1:

1747-644

- Temporary Construction Easement (TCE) conflicts with joint maintenance road and gets within 12ft of BART horizontal alignment along entire length of Newhall Yard

1747-645

- Caltrain TPS#2/HSR Substation Sta A, located between I-880 and McKendrie St, is above the BART tunnel
 - Top of exclusion zone at conflict area is approx. 40ft below surface
 - Likely need to coordinate with Caltrain

1747-646

- Columns from W Hedding Overpass located directly on tunnel

Submission 1747 (Jason Kim, Santa Clara Valley Transportation Authority, June 23, 2020) - Continued

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Attachment A
VTA Detailed Comments
6/24/2020

- 1747-647 |
 - Pedestrian Underpass for College Park Caltrain Station – immediately south of alignment crossing
 - Depth of pedestrian underpass (ramps/stairs) unknown at College Park Caltrain Station
 - Top of BART exclusion zone is approximately 50ft below surface
- 1747-648 |
 - HSR/BART alignment crossing by Diridon Station
 - HSR crosses BART alignment on elevated bridge - possible conflict with columns north of Santa Clara St below foundation (unknown depth, close to side of exclusion zone)
 - Top of exclusion zone at Santa Clara St underpass is approximately 40ft below surface
- 1747-649 |
 - HSR structures within the environmentally approved CSAs at Santa Clara and Diridon Stations

Alternative 2:

- 1747-650 |
 - Column conflicts along Newhall Yard, all the way to W Hedding St
 - Yard is at-grade; most column foundations are approximately 10ft away, some columns conflict directly; columns have an unknown depth
- 1747-651 |
 - Same as Alt 1:
 - Caltrain TPS#2/HSR Substation Sta A, located between I-880 and McKendrie St, is above the BART tunnel
 - HSR/BART alignment crossing just north of Bellarmine College Prep
 - TCE along Stockton Ave
 - HSR/BART alignment crossing by Diridon Station
 - HSR structures within the environmentally approved CSAs at Santa Clara and Diridon Stations

Alternative 3:

- 1747-652 |
 - Same as Alternative 1

Alternative 4 (Preferred Alternative):

- 1747-653 |
 - BART alignment will be single bore with the north layout (in Santa Clara St) – no longer advancing south option.
- 1747-654 |
 - HSR Diridon Station plans do not show BART station plaza, have different configurations for Stover and Crandall Streets
 - Continue coordination with Caltrain / BSVII as design on both progress
- 1747-655 |
 - HSR/BART alignment crossing by Diridon Station
 - Top of exclusion zone at Santa Clara St underpass is approximately 40ft below surface
- 1747-656 |
 - Caltrain TPS#2/HSR Substation Sta A, located between I-880 and McKendrie St, is above the BART tunnel
 - Top of exclusion zone at conflict area is approx. 40ft below surface
 - Continue coordination with Caltrain / BSVII
- 1747-657 |
 - Temporary Construction Easement (TCE) conflicts with joint maintenance road and gets within 12ft of BART horizontal alignment along entire length of Newhall Yard
- 1747-658 |
 - HSR structures are located within the environmentally approved CSA at Santa Clara Station

Response to Submission 1747 (Jason Kim, Santa Clara Valley Transportation Authority, June 23, 2020)

1747-629

The Authority is actively continuing to work with local agencies to develop additional information on existing and planned projects into project design. During Detailed Design Post-ROD, the Authority will coordinate to work with local agencies to refine information, identifying and evaluating all known facilities needed during future design phases.

1747-630

Refer to Standard Response SJM-Response-GEN-2: Consideration of Diridon Integrated Station Concept and the Google Development at the San Jose Diridon Station.

The comment noted DISC is not up to date.

1747-631

The commenter mentions that there have been updates and new information generated regarding the BART Silicon Valley Phase II project. The design in the Draft EIR/EIS shows columns that avoided direct conflicts with yard tracks based on the Newhall Yard geometry provided on March 6, 2017. The Final EIR/EIS has been updated with the new information concerning the BART Silicon Valley Phase II project. Additional coordination will occur with the agency during detailed design post-ROD to avoid conflicts with BSV Phase II.

1747-632

The Authority is actively continuing to work with local agencies to develop additional information on existing and planned projects into project design. During Detailed Design Post-ROD, the Authority will coordinate to work with local agencies to refine information, identifying and evaluating all known facilities needed during future design phases. Depths of columns or other features at Diridon Station, Hedding Street overpass, College Park Caltrain Station pedestrian underpass, and Traction Power Facility Substation A will be finalized during detailed design post-ROD in coordination with VTA to avoid conflicts between HSR and the BART system. As identified in Chapter 8, Preferred Alternative, Alternative 4 is the Authority's preferred alternative.

1747-633

The Authority is actively continuing to work with local agencies to develop additional information on existing and planned projects into project design. During Detail Design Post-ROD, the Authority will coordinate to work with local agencies to refine information, identifying and evaluating all known facilities needed during future design phases.

1747-634

The Authority is actively continuing to work with local agencies to develop additional information on existing and planned projects into project design. During Detailed Design Post-ROD, the Authority will coordinate to work with local agencies to refine information, identifying and evaluating all known facilities needed during future design phases.

1747-635

Depths of columns or other features at Diridon Station, Hedding Street overpass, College Park Caltrain Station pedestrian underpass, and Traction Power Facility Substation A will be finalized during Detailed Design Post-ROD in coordination with VTA to avoid conflicts between HSR and the BART system.

1747-636

The Authority is actively continuing to work with local agencies to develop additional information on existing and planned projects into project design. During Detailed Design Post-ROD, the Authority will coordinate to work with local agencies to refine information, identifying and evaluating all known facilities needed during future design phases.

1747-637

The comment notes VTA operates on a temporary emergency service network due to COVID-19 instead of the NTSP adopted December 2019. Please refer to Section 2.6.1.5, Planned Intercity Transit Improvements, and Figure 2-31 for information about VTA's bus and light rail operating plan. Impact TR#15 addresses effects on VTA's transit services. The analysis in the Draft EIR/EIS is considered a conservative analysis because it reflects impacts on a robust system prior to the reduced service associated with COVID-19.

Response to Submission 1747 (Jason Kim, Santa Clara Valley Transportation Authority, June 23, 2020) - Continued

1747-638

The comment notes VTA operates on a temporary emergency service network due to COVID-19 instead of the NTSP adopted December 2019 reflected in the Draft EIR/EIS. As the new service plan is temporary, HSR has provided a conservative and high estimate of project impacts.

1747-639

The comment is noted and does not raise any issue with any of the conclusions of the Draft EIR/EIS. The comment noted that the Draft EIR/EIS should update its description of the existing transit service plan to reflect recent changes implemented by the Santa Clara Valley Transportation Authority. Please refer to Section 3.2.5.4, Transit, of the Draft EIR/EIS for a description of the existing transit services and facilities consistent with the time of NOP publication. As is normal, VTA and other bus providers consistently adjust their service in response to changes in demand to better serve their customers. VTA most recently updated its transit service schedule and fares on March 17, 2020, in response to the COVID 19 pandemic. Service alerts and further temporary updates to transit service are issued frequently across the transit routes that serve the project area and are expected to continuously be updated through at least the end of 2020.

1747-640

The Authority is actively continuing to work with local agencies to develop additional information on existing and planned projects into project design. During Detailed Design Post-ROD, the Authority will coordinate to work with local agencies to refine information, identifying and evaluating all known facilities needed during future design phases.

1747-641

Refer to Standard Response SJM-Response-GEN-2: Consideration of Diridon Integrated Station Concept and the Google Development at the San Jose Diridon Station.

The comment noted that the DISC process is ongoing.

1747-642

The Authority is actively continuing to work with local agencies to develop additional information on existing and planned projects into project design. During Detailed Design Post-ROD, the Authority will coordinate to work with local agencies to refine information, identifying and evaluating all known facilities needed during future design phases.

1747-643

Column and foundation depths will be finalized as part of Detailed Design Post-ROD. The Authority will coordinate with VTA during design to ensure that there are no conflicts with the BART system.

1747-644

Construction activities where the TCE is near BART facilities, including the maintenance road and horizontal alignment, will be coordinated with VTA. Currently, there is no trackwork outside of PCJPB right-of-way for the majority of the Newhall Yard. Trackwork east of the PCJPB right-of-way starts just north of Newhall Street.

1747-645

Depths of foundations or other features at the Traction Power Facility Substation A will be finalized during Detailed Design Post-ROD in coordination with VTA and Caltrain to avoid conflicts between HSR and the BART and Caltrain systems.

1747-646

Depths of columns or other features at the W. Hedding Street overpass will be finalized during Detailed Design Post-ROD in coordination with VTA to avoid conflicts between HSR and the BART system.

1747-647

Depths of column, foundations, or other features at the College Park Caltrain Station pedestrian crossing will be finalized during Detailed Design Post-ROD in coordination with VTA to avoid conflicts between HSR and the BART system.

Response to Submission 1747 (Jason Kim, Santa Clara Valley Transportation Authority, June 23, 2020) - Continued

1747-648

Depths of column, foundations, or other features at Diridon Station will be finalized during Detailed Design Post-ROD in coordination with VTA to avoid conflicts between HSR and the BART system.

1747-649

Permanent station features and temporary construction facilities at Diridon Station will be coordinated with VTA during Detailed Design Post-ROD to avoid conflicts with BSV Phase II's CSAs.

1747-650

Columns avoided direct conflicts with yard tracks based on the Newhall Yard geometry provided on March 6, 2017. Additional coordination will be done during Detailed Design Post-ROD to avoid conflicts with the Newhall Yard.

1747-651

Permanent features (e.g., columns and foundations) and/or temporary construction at Traction Power Facility Substation A, the alignment crossing north of Bellarmine College Preparatory, TCE along Stockton Avenue, and Diridon Station will be finalized during Detailed Design Post-ROD in coordination with VTA to avoid conflicts between HSR and the BART system during construction and operation.

1747-652

Between Scott Avenue and Tamien Station, Alternative 3 is the same as Alternative 2. Permanent features (e.g., columns and foundations) and/or temporary construction at Traction Power Facility Substation A, the alignment crossing north of Bellarmine College Preparatory, TCE along Stockton Avenue, and Diridon Station will be finalized during Detailed Design Post-ROD in coordination with VTA to avoid conflicts between HSR and the BART system during construction and operation.

1747-653

The Authority is actively continuing to work with local agencies to develop additional information on existing and planned projects into project design. During Detailed Design Post-ROD, the Authority will coordinate to work with local agencies to refine information, identifying and evaluating all known facilities needed during future design phases.

1747-654

The Authority is actively continuing to work with local agencies to develop additional information on existing and planned projects into project design. During Detailed Design Post-ROD, the Authority will coordinate to work with local agencies to refine information, identifying and evaluating all known facilities needed during future design phases.

1747-655

The Authority is actively continuing to work with local agencies to develop additional information on existing and planned projects into project design. During Detailed Design Post-ROD, the Authority will coordinate to work with local agencies to refine information, identifying and evaluating all known facilities needed during future design phases.

1747-656

The Authority is actively continuing to work with local agencies to develop additional information on existing and planned projects into project design. During Detailed Design Post-ROD, the Authority will coordinate to work with local agencies to refine information, identifying and evaluating all known facilities needed during future design phases.

1747-657

Construction activities where the TCE is near BART facilities, including the maintenance road and horizontal alignment, will be coordinated with VTA. Currently, there is no trackwork outside the PCJPB right-of-way for the majority of the Newhall Yard. Trackwork east of the PCJPB right-of-way starts just north of Newhall Street.

Response to Submission 1747 (Jason Kim, Santa Clara Valley Transportation Authority, June 23, 2020) - Continued

1747-658

Permanent station features and temporary construction facilities at Diridon Station will be coordinated with VTA during Detailed Design Post-ROD to avoid conflicts with BSV Phase II's CSAs.

Submission 1663 (Rita Khosla, Santa Clara Valley Water District, June 23, 2020)

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Clean Water • Healthy Environment • Flood Protection

California High-Speed Rail Authority
Page 2
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File: 32244
Various

June 23, 2020

California High-Speed Rail Authority
Northern California Regional Office
Attn: Draft San Jose to Merced Project Section EIR/EIS
100 Paseo de San Antonio, Suite 300
San Jose, CA 95113

Subject: San Jose to Merced Project Section: Draft EIR/EIS

Dear California High-Speed Rail Authority:

The Santa Clara Valley Water District (Valley Water) has reviewed the San Jose to Merced Project Section: Draft Environmental Impact Report/Environmental Impact Statement (DEIR/DEIS) for the California High Speed Rail Project (Project). Valley Water is a special district with jurisdiction throughout Santa Clara County. Valley Water acts as the county's groundwater management agency, principal water resources manager, flood protection agency and is the steward for its watersheds, streams and creeks, and underground aquifers.

This letter transmits comments that focus on the areas of interest and expertise of Valley Water.

General Comments:

Water Supply

Valley Water is concerned that the DEIR does not adequately evaluate potential project impacts related to water supply, including effects of dewatering and reduced natural recharge as described below and further detailed in specific comments.

1663-2060 | Impact HYD#9 describes dewatering and subsurface structures that could impact both water supply and water quality, and the DEIR notes that "Local groundwater management agencies and the RWQCBs would review the project design plans to determine whether the project would affect the groundwater basin, existing remedial operations, and downstream water resources". While Valley Water agrees this coordination is needed, Valley Water believes the Authority should conduct the preliminary analysis of potential impacts based on project design plans, for review by groundwater management agencies and RWQCBs.

1663-2061 | Many of the project alternatives will create impervious surface areas or decrease natural recharge in other ways. Valley Water is concerned that the DEIR does not provide a sufficient analysis of the impact the project will have on recharge. This is of particular concern in the Coyote Valley and Llagas Subbasin, which are less developed and are highly dependent on local groundwater supplies. See several of the specific comments below that support this comment.

1663-2062 | **Groundwater Quality**
The majority of the project alignment in the Santa Clara and Llagas subbasins overlies aquifers that supply 100% of the drinking water for the local community. Therefore, protection of groundwater quality

1663-2062

is a significant concern for the project. The DEIR should provide a detailed analysis of the potential impacts and additional studies that should be performed. The analysis of impacts on groundwater quality should include both permanent and temporary impacts due to tunnel construction, dewatering, and operational impacts.

1663-2063

Wells

The project is likely to impact both public and private wells. These impacts may include direct impacts to those wells located in the immediate vicinity of the alignment and temporary or permanent indirect impacts to other nearby wells due to dewatering or other project related activities. While the DEIR focuses on public water wells, there are many privately-owned domestic, agricultural, and industrial wells that also need to be considered, especially since the project area includes communities that rely almost entirely on groundwater. A detailed analysis should be completed of the potential impacts on any water supply wells within the project area, not just the wells that may need to be re-located.

1663-2064

Due to the long agricultural history of the Santa Clara and Llagas subbasins, and subsequent land development, there are likely many abandoned wells. While some of these abandoned wells may have been sealed prior to well permitting requirements, many have open casings and may be discovered during construction. It is not uncommon for these wells to have significant artesian flow, which may impact dewatering and construction activities. If encountered, abandoned wells must be properly destroyed, with related work permitted by Valley Water.

1663-2065

Data Analysis and Regulatory Agency Review

Valley Water has decades worth of water level and quality data in the Santa Clara and Llagas subbasins that would be beneficial to the analyses that should be completed. Valley Water would be happy to work with the project team to share the necessary information to help achieve a successful project that also helps to protect the groundwater supply and quality.

1663-2066

Impact to Valley Water's Watersheds Operations and Maintenance

Valley Water prefers alternatives that do not require creek crossings. In general, the Project should not negatively impact Valley Water creeks and watersheds nor Valley Water's ability to conduct operations and maintenance activities along creeks and other watershed assets over which Valley Water has responsibility.

1663-2067

This project should not induce encouragement of encampments in creeks (e.g. bridge crossings over creeks and waterways). If anticipated, the project should determine methods for discouraging such activity.

Specific Comments:

1663-2068

Volume 1, Fact Sheet, Page 5, Permits, Approvals, and Consultations: Local approvals should be listed. Valley Water's Water Resources Protection Ordinance require that a Valley Water encroachment permit be obtained prior to any modification of or encroachment onto a Valley Water facility. Valley Water is a Responsible Agency under the California Environmental Quality Act when the project requires permitting under the Water Resources Protection Ordinance. All four alternatives involve a modification of at least one Valley Water facility. Additionally, Valley Water is a local agency partner with the United States Army Corps of Engineers, the United States Department of Agriculture, Natural Resource Conservation Service (NRCS) and the United States Bureau of Reclamation for flood protection and water supply projects which will be affected by all four alternatives. Please note that NRCS approvals are required for any modifications to the PL-566 constructed channels, including Llagas Creek and West Branch Llagas Creek, not just for Alternative 3 impacts to Llagas Creek in Gilroy (this should also be corrected on Page 2-157 in Chapter 2).



Submission 1663 (Rita Khosla, Santa Clara Valley Water District, June 23, 2020) - Continued

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California High-Speed Rail Authority
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June 23, 2020

California High-Speed Rail Authority
Page 4
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1663-2068			Additionally, the local floodplain administrators within each community participating in the National Flood Insurance Program must approve modifications to the Federal Emergency Management Agency floodplains regulated in each community.	1663-2074		Management Plan. However, this paragraph omits that Department of Water Resources (DWR) approved the Valley Water's GWMP as an Alternative to a GSP for the Santa Clara and Llagas subbasin in 2019. Valley Water suggests adding this information about the approval as an Alternative.
1663-2069			<p>Page 3.6-50 and 3.6-51, Impact PUE #1: Planned and Accidental Temporary Interruption of Utility Service—This section refers to utility impacts identified in Appendix 3.6-A. Valley Water provides wholesale water supply to Santa Clara County. Appendix 3.6-A is missing some Valley Water facilities, including the Central Pipeline in the Diridon Station approach segment and the Pacheco Conduit (also a US Bureau of Reclamation Facility) in the Pacheco Pass segment. As a water wholesaler, Valley Water's pipeline infrastructure is much different than that of a water retailer. Valley Water pipelines are very large diameter pipelines which bring water to and from major water treatment plant and storage facilities serving all of Santa Clara County. Relocating or shutting down any Valley Water facilities is a major endeavor which requires advance planning because shut downs have the potential to impact service or supply to large areas of the county, not isolated service areas or neighborhoods, particularly if shutdowns occur during peak water demand. Additionally, due to the large diameter infrastructure involved, construction complexity (including limited availability of materials) and site disturbance is much greater than that associated with water retail service utilities. A discussion of impacts to Valley Water's water supply infrastructure and service due to planned and accidental temporary service interruptions should be included and appropriate mitigation provided.</p>	1663-2075		<p>Page 3.8-10, first sentence: The text states "The Authority is not required to comply with local land use and zoning regulations..." Please provide the background reference to the California Codes supporting this statement and clarify if the Authority does not have to comply with any local regulations, including flood plain management regulations required by FEMA for communities participating in the NFIP or with ordinances such as Valley Water's Water Resources Protection Ordinance.</p>
1663-2070			<p>Page 3.6-55 thru 3.6-58, Impacts PUE #3: Reduced Access to Existing Utilities in the HSR Right-of-Way and Impact PUE #4: Existing Major Utilities Requiring Relocation or Removal—As mentioned in comments for Impact PUE #1, Valley Water's infrastructure is much different than water retailer infrastructure. Pipeline failures on Valley Water facilities may be catastrophic due to their large diameter and potential for high pressure. Access to our pipeline infrastructure must be maintained and access to our facilities must not be impeded. Shutdowns to any Valley Water conveyance facility has the potential to impact water supply availability to large portions of Santa Clara County. Additionally, due to the close proximity of the water treatment plants, storage facilities and/or source of supply, these facilities cannot be relocated outside of High Speed Rail right of way since all alternatives require crossing Valley Water water supply facilities. Please amend this discussion to include impacts to Valley Water facilities and provide appropriate mitigation for those impacts.</p>	1663-2076		<p>Table 3.8-8: In this table, please revise the Santa Clara and Llagas Area subbasins area with the latest DWR Basin boundary areas. The Santa Clara and Llagas subbasin areas are 189,564.6 and 47,371.4 acres as of DWR Basin modification date of 06/30/2016 and 06/27/2016, respectively. This information is available on the DWR Bulletin 118 CA groundwater basin GIS coverage at: https://water.ca.gov/Programs/Groundwater/Management/Bulletin-118.</p>
1663-2071			<p>Page 3.6-88, Section 3.6.7, PUE-MM#1 first paragraph: The first sentence states "...the contractor would construct percolation ponds on existing SCRWA-owned agricultural land adjacent to the existing percolation ponds or on other land owned or acquired by the SCRWA to replace the net percolation capacity of the percolation ponds taken by project construction". Moving these ponds require significant study and review and approval by the groundwater management agency and Regional Water Board for potential impacts on groundwater quality and nearby well owners.</p>	1663-2077		<p>Page 3.8-15, Table 3.8-3 Summary of Data Sources: Under the groundwater section in this report, Santa Clara Valley Water District (Valley Water) 2016 GWMP is listed as one of the groundwater data sources. Valley Water recommends in addition to this list of data sources Valley Water's Annual Groundwater Report (https://www.valleywater.org/your-water/where-your-water-comes-from/groundwater/groundwater-quality), which is an important groundwater data source and includes all the most current groundwater data for each calendar year. See general comment.</p>
1663-2072			<p>Page 3.8-6, Rivers and Harbors Act of 1899 (33 U.S.C. § 401 et seq.): This section should include Valley Water's role in the approval process as the local sponsor with operation and maintenance responsibilities over Guadalupe River and Llagas Creek.</p>	1663-2078		<p>Page 3.8-29, first paragraph: Similar to the unconfined area in Llagas Area, a number of percolation ponds and in-stream managed (artificial) recharge facilities also exist in the unconfined area of the Santa Clara Subbasin. Please consider making these additions to this paragraph.</p> <p>Valley Water also suggests adding text about confining layers and artesian conditions within portions of the Santa Clara Subbasin. As noted previously, abandoned wells may be encountered during excavation, which can produce very high flow rates and need to be properly destroyed.</p>
1663-2073			<p>Page 3.8-88, Section 3.6.7, PUE-MM#1 first paragraph: The first sentence states "...the contractor would construct percolation ponds on existing SCRWA-owned agricultural land adjacent to the existing percolation ponds or on other land owned or acquired by the SCRWA to replace the net percolation capacity of the percolation ponds taken by project construction". Moving these ponds require significant study and review and approval by the groundwater management agency and Regional Water Board for potential impacts on groundwater quality and nearby well owners.</p>	1663-2079		<p>Page 3.8-29, under the Llagas Area Subbasin: That following statement is not entirely correct "The Llagas Area subbasin is in the southern portion of Coyote Valley that drains toward Monterey Bay." The Llagas area subbasin is not in the Coyote Valley, but it does drain toward Monterey Bay. Valley Water suggests revising the sentence as follows: "The Llagas Area subbasin is located south of the Coyote Valley and drains toward Monterey Bay."</p> <p>Valley Water also suggests adding text about confining layers and artesian conditions within the Llagas Subbasin. As noted previously, abandoned wells may be encountered during excavation, which can produce very high flow rates and need to be properly destroyed.</p>
1663-2074			<p>Page 3.8-6, Watershed Protection and Flood Prevention Act (16 U.S.C. 1001 et seq.): This section should be revised to include West Branch Llagas Creek as a NRCS facility constructed as part of PL-566, along with Llagas Creek in Gilroy. The other three alternatives will impact the portion of West Branch Llagas Creek improved under PL-566.</p>	1663-2080		<p>Page 3.8-31, under the Hollister Area Subbasin: Please note the recent name change of the Hollister Subbasin to the North San Benito Subbasin (3-003.05) due to a basin boundary modification approved by DWR that consolidated the Hollister Area and Bolsa subbasins, along with several others outside the project area. See the DWR SGMA Basin Prioritization dashboard. We suggest that the DEIR be updated to reflect the current basin name and boundary throughout.</p>
1663-2074			<p>Page 3.8-8: The second paragraph correctly states that SCVWD (now known as Valley Water) is the designated GSA for Santa Clara and Llagas subbasins and references the 2016 Groundwater</p>	1663-2081		<p>Table 3.8-9: In this table, please include a geologic unit for alluvium and corresponding groundwater conditions.</p>

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1663-2082 | **Table 3.8-11:** In the Llagas area, groundwater is the existing and sole drinking water supply source and also supplies more than 95% of all beneficial uses. It is not clear what is the distinction between existing and suitable. Please consider adding clarifying text about the meaning of "suitable".

1663-2083 | **Page 3.8-33, section titled Municipal Water Supply, first paragraph, first sentence:** Valley Water (formerly known as SCVWD) manages the Santa Clara and Llagas groundwater subbasins to provide water supply for all beneficial uses and is not limited to municipal water supply. Valley Water suggests revising this sentence.

1663-2084 | **Page 3.8-36, Table 3.8-14 Hydraulic Conditions of Existing Bridges and Overbank Areas in the Project Footprint:** This table has a footnote referencing certain existing flood zone information is actually based on future conditions after completion of the Upper Llagas Creek Flood Protection project. While in relation to the current timeline for High Speed Rail construction and in consideration that Phase 1 of the Upper Llagas Creek Flood Protection Project is under construction, this evaluation may be considered reasonable for those watercourses whose flood zones will change upon completion of Phase 1. However, some or all of the Upper Llagas Creek Flood Protection watercourses will not provide flood protection benefits or have their flood zones modified until completion of the entire Upper Llagas Creek Flood Protection Project, which is currently not fully funded or authorized yet, and a LOMR or Physical Map Revision is filed and accepted by FEMA. Therefore, it is possible that the existing condition at the time when High Speed Rail construction begins that the existing condition flood zones and flood conditions will be as they currently exist without the Upper Llagas Creek Flood Protection Project.

1663-2085 | **Page 3.8-46, Impact HYD#2: Permanent Impacts on Drainage Patterns and Stormwater Runoff during Construction:** The discussion should include possible changes to floodplains or flood patterns due to the wildlife crossings in areas where there is currently no path for flood flows to cross existing railroad embankments. HYD-IAMF#2 does not discuss the potential for the Project, including wildlife crossings, to induce flooding where there is currently no floodplain and provide appropriate mitigation measures to ensure existing floodplains are not expanded. Additionally, allowing up to 1 foot of flooding in areas where existing structures may have first floor elevations at the existing base flood elevation may subject those structures to flooding they otherwise may not have incurred. This section should also clarify the intent to evaluate the capacity of the receiving stormwater drainage systems. Many municipal stormwater drainage systems are designed to handle a 10-year event. These municipal stormwater drainage systems then discharge into surface waters, such as streams and creeks, which may have a different capacity. Valley Water's flood protection purview covers the receiving streams and creeks, and the Project should ensure that changes in runoff timing or quantity do not increase 100-year flows or runoff volume in receiving streams and creeks or exceed the existing capacity of receiving streams and creeks.

1663-2086 | **Section Impact HYD#8 – Temporary Impacts on Groundwater Quality and Volume during Construction, starting on page 3.8-72:** The document states that "...most excavations that may require dewatering would be widely spaced throughout the project corridor and relatively shallow such that dewatering large volumes of groundwater is generally not anticipated. Additionally, the impacts of dewatering would be temporary..." Shallow groundwater occurs in portions of the Santa Clara Subbasin, especially in downtown San Jose. Depending on the location, dewatering could be required permanently or frequently, and with large volume. For example, CalTrans has essentially permanent dewatering at various locations in San Jose because of the shallow groundwater. Shallow groundwater is also known to occur in the Coyote Valley and Llagas Subbasin. Valley Water recommends that a more detailed analysis of dewatering be conducted, including estimating dewatering volumes/durations and evaluating related impacts, including those on nearby wells.

1663-2087 | **Page 3.8-73, Section Impact HYD#8 – Temporary Impacts on Groundwater Quality and Volume during Construction, first complete paragraph of the page:** This paragraph describes treating water if it would substantially affect surface water quality. However, what would be done to treat groundwater that is contaminated with the commingled construction material, particularly if that groundwater does not affect surface water quality? This section does not adequately describe treating contaminated groundwater and we suggest adding additional clarification.

1663-2088 | **Page 3.8-73, Section Impact HYD#8 – Temporary Impacts on Groundwater Quality and Volume during Construction, second complete paragraph of the page:** This paragraph describes potential impacts on public drinking water supply wells, but neglects to mention the potential affect or remedy on the many domestic and agricultural wells in the project path. This paragraph also describes "...or permanently relocated..." public supply wells. Valley Water's concern is that relocating either public drinking water supply wells or domestic and agricultural wells could be very problematic in terms of finding suitable replacement locations and the considerable cost and potential reduction in water supply at the new locations. This specific comment supports Valley Water's general concerns above about wells.

1663-2089 | **Page 3.8-73, Section Impact HYD#8 – Temporary Impacts on Groundwater Quality and Volume during Construction, third complete paragraph of the page:** The statement "...the contractor would remediate known subsurface contamination in the project footprint that would be encountered by construction activity" does not seem realistic given the complexity and long time periods that may be required to remediate known contaminated groundwater sites.

1663-2090 | **Page 3.8-74, Section Impact HYD#8 – Temporary Impacts on Groundwater Quality and Volume during Construction, third complete paragraph of the page:** This paragraph describes a potential method of managing construction effects on groundwater by reinjecting collected tunnel inflows back into local aquifers. Any potential reinjection should be discussed with groundwater management agencies, RWQCBs, and others to ensure adequate groundwater protection.

1663-2091 | **Page 3.8-76, Table 3.8-23:** Valley Water notes some large increases in impervious surface in this table, especially for the Santa Clara and Llagas subbasins. As stated in the major comments, Valley Water has concerns that the large increases in impervious surfaces could have a substantial reduction to natural recharge, particularly in groundwater dependent areas. In particular, how much area in the Coyote Valley would be impacted? See general comments above.

1663-2092 | **Page 3.8-76, first complete paragraph:** The phrase "...providing managed groundwater recharge services for the Llagas Area subbasin" is not correct. These ponds are permitted discharge locations for the wastewater treatment plant and are not managed recharge facilities. Additionally, these ponds overlie a confining layer. Valley Water suggests correcting this text.

1663-2093 | **Page 3.8-76, first complete paragraph:** The sentence states "...a reduction in treatment capacity of the plant could potentially reduce the availability of recycled water, resulting in increased groundwater pumping in the Llagas Area groundwater subbasin." Valley Water suggests adding text to estimate the approximate magnitude of increased groundwater pumping that would occur.

1663-2094 | **Page 3.8-76, first complete paragraph:** The sentence states "...Alternative 1 and 2, these alternatives would impede sustainable management of the Llagas Area groundwater subbasin." The current percolation ponds overlie a confining unit and do not provide recharge to deeper, principal aquifers.

1663-2095 | **Page 3.8-77, first paragraph:** The EIR states "...the total area of impervious surfaces that would be built in recharge zones is minimal compared to the overall groundwater recharge zones." What is the

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1663-2095 | estimated percentage of reduction in the recharge zone? See the general comment above about water supply. Valley Water is concerned about incremental losses of natural recharge due to the cumulative effects of development in groundwater recharge areas.

1663-2096 | **Page 3.8-77, second complete paragraph:** The EIR states "...longitudinal earthen drainage ditches along at-grade and embankment profiles would provide additional opportunities for groundwater recharge." These drainage ditches should be designed to minimize the potential for pollutants to infiltrate to groundwater and have a negative effect on groundwater quality.

1663-2097 | **Page 3.8-77, third complete paragraph:** The EIR states: "The project would require the construction of subsurface structures that would permanently obstruct or impede groundwater flow..." but notes that "impacts from shallow subsurface structures are anticipated to be minimal." However, the EIR does not provide any analysis to support this. Valley Water believes the Authority needs to conduct additional study to evaluate if the depth or area of these subsurface structures would affect groundwater flow and potentially negatively impact public supply or agricultural wells or groundwater flow to streams or other groundwater dependent ecosystems. This specific comment supports our general comments above.

1663-2098 | **Page 3.8-78, first complete paragraph:** The DEIR states: "All four alternatives would require the protection of public drinking water supply wells during construction, as described in Impact HYD#8, and potentially the relocation of public drinking water supply wells." Given the high density of private wells in many project areas, this needs to be expanded to include the protection of privately owned wells used for domestic, agricultural, or industrial uses.

1663-2099 | **Page 3.8-79, first complete paragraph:** The DEIR states: "Prior to construction, the contractor would prepare a technical memorandum describing how construction activities would be coordinated with public utility providers, such as drinking water suppliers, to avoid or minimize service interruptions (PUE-IAMF#4)." The DEIR and the memo referenced should also address privately owned wells.

1663-2100 | **Page 3.8-80, first two bullets under the section Statement of Incomplete or Unavailable Information Regarding Tunneling Effects:** It appears that some of the tunneling would occur within lands overlying the Santa Clara and Llagas subbasins. If so, Valley Water has a lot of available data about aquifer conditions and existing hydrology information that may facilitate related analysis. This specific comment supports Valley Water's general comments above.

1663-2101 | **Page 3.8-82, Table 3.8-25:** This table is missing unconsolidated sediments. What is the expectation of groundwater conditions in the unconsolidated sediments? Valley Water recommend adding this to the table.

1663-2102 | **Page 3.8-90, first complete paragraph under the section Monitoring and Adjustment in Tunnel Design and Construction Methods:** The subsurface investigations and modeling described in this paragraph should be reviewed by groundwater management agencies. Valley Water has a lot of data and models that may support this effort. See general comments.

1663-2103 | **Page 3.8-90, first complete paragraph under the section Effect Evaluation Using Theoretical Approaches:** The DEIR states "...it is expected that the proposed HSR tunnel construction is likely to affect groundwater and surface water resources within a maximum distance of approximately 1 mile from the tunnel alignments. ...with the most effects occurring within 0.25 to 0.5 mile of the tunnel alignment...". Even with a radius of 0.25 to 0.5 mile, this could affect a lot of wells (potentially on the order of hundreds), especially in the Coyote Valley and Llagas Subbasin, and requires further evaluation. This specific comment supports Valley Water's general comments above about wells.

1663-2104 | **Page 3.8-91, Table 3.8-28:** Under Tunnel 1 (first row of the table), the Relative Risk of Effect is currently listed as 'Low'. The risk to privately owned wells (typically shallower and of much lower yield) could be more significant, even in areas with lower potential for inflow. Therefore, Valley Water suggests considering a higher ranking than 'low'.

1663-2105 | **Page 3.8-92, Figure 3.8-12:** It is difficult to see where the groundwater RSA is on this map and if it is correctly drawn. Valley Water suggests zooming this figure out to better see the groundwater RSA.

1663-2106 | **Page 3.8-99, last paragraph on the page:** This paragraph makes a statement about using stormwater treatment BMPs "...that reduce the quantity and improve the quality of stormwater runoff before runoff is discharged into a surface waterbody, where it would percolate into the groundwater table." To ensure that the stormwater is not contaminating the groundwater quality, the project should implement approved stormwater BMPs that address the protection of groundwater quality.

1663-2107 | **Page 3.8-102, HYD #15 Permanent Impacts on Floodplain Hydraulics During Construction and Table 3.8-29:** In accordance with the NFIP, a permit is required for all proposed construction or other development in the community...so that it may determine whether such construction or other development is proposed within floodprone areas. The NFIP defines "Development" as any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials. This section should include discussion of all aspects of the Project that will entail "Development" as defined by the NFIP in a floodprone area, not just within watercourses subject to flooding and then identify the impact of those developments to the floodprone areas, especially FEMA flood hazard areas and floodways.

1663-2108 | **Page 3.8-104:** The text states "Phase 2 of the PL-556 is planned to be advertised in mid-2020." However, there is currently a funding shortfall to complete Phase 2. Valley Water has plans to construct portions of Phase 2, but until additional funding is identified, projected completion of the entirety of Phase 2 is uncertain.

1663-2109 | **Page 3.8-113 and 3.8-114, Table 3.8-30 Specific Design Elements that would Minimize Permanent Floodplain Impacts:** Most of the mitigation identified in this table states that fill and cut in the floodplain will be balanced. This strategy may be valid for balancing flood plain storage volumes, but may not necessarily mitigate for adverse impacts to the floodplain or floodway resulting in increased water surface elevations, increases in the lateral extent of the floodplain or increases in the frequency of flooding (i.e. for example, increased runoff from the Project causes a 10-year flood to increase in severity from 200 cfs to 300 cfs). Refined hydraulic analysis must be performed when Project grading and infrastructure plans are refined to ensure there are no adverse impacts to the floodplain.

1663-2110 | **Page 3.8-115 and Table 3.8-31:** The text must be modified to include West Branch Llagas Creek as a PL-566 constructed channel that will require NRCS and Valley Water approval for modifications under Alternatives 1, 2 and 4. Any appropriate mitigation measures should be included, similar to those identified for the projects requiring Section 408 approval from the US Army Corps of Engineers.

1663-2111 | **Page 3.8-119:** Valley Water is pleased to read this statement that the GAMMP would be submitted and reviewed by various federal, state, and local agencies, including Valley Water. However, please note that in other sections of the DEIR, a similar statement is made, but does not include Santa Clara Valley Water District (Valley Water). For example, in section 3.7, under the Mitigation Measure BIO-MM#9, on page 3.7-138, Valley Water is not included as one of the listed agencies that the Authority would submit the GAMMP. Please add Valley Water to the list on page 3.7-138.

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1663-2112

Page 3.8-120, Baseline Inventory and Monitoring of Groundwater and Surface Water Resources:
As mentioned previously, Valley Water has extensive information on groundwater resources (as well as surface water). Valley Water suggests that the Authority consult with groundwater management agencies, such as Valley Water, to take advantage of existing information and data for this baseline inventory. See general comments.

We appreciate the opportunity to comment on the DEIR. Please provide a copy of the Final Environmental Impact Report (FEIR) to Valley Water when available.

If you have any questions, please contact Ms. Yvonne Arroyo at (408) 630-2319 or Mr. Kevin Thai at (408) 630-3157.

Sincerely,

DocuSigned by:


Usha Chatwani, P.E.
Community Projects Review Unit Manager
Community Projects Review Unit

cc: U. Chatwani, N. Nguyen, R. Blank, V. Gin, L. Bankosh, V. De La Piedra, D. Mody, T. Sexauer,
Y. Arroyo, C. Haggerty, K. Thai, File

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1663-2060

The analysis in the Draft EIR/EIS was based on a preliminary level of design that was only sufficient to understand the basic elements of the project. The specific locations requiring permanent dewatering would be determined by the design-build contractor during final design after the geotechnical investigation has been performed. As stated in Impact HYD#9, subsurface structures would be waterproofed to prevent the intrusion of groundwater, thereby minimizing the potential need for permanent dewatering operations. If required, permanent subsurface installations that could require dewatering are anticipated to be relatively shallow, such that if any groundwater were to leak into the structure dewatering would not substantially lower groundwater levels and groundwater supply wells would not experience reduced productivity. Furthermore, GEO-IAMF#1 would require the preparation of a construction management plan that would describe the methods by which the contractor would control groundwater withdrawal, including in areas with high groundwater levels, and GEO-IAMF#10 would require the contractor to prepare a memorandum describing how Caltrans' Field Guide to Construction Dewatering, which has a goal of minimizing water quality effects, has been incorporated into the project; refer to Section 3.9, Geology, Soils, Seismicity and Paleontological Resources, for more information on how these IAMFs may be applied to the project. While the Authority understands Valley Water's concerns about potential impacts on water supply and water quality from permanent dewatering operations, the Authority has provided preliminary qualitative analysis of project impacts on groundwater resources, including flow, water supply, and water quality from dewatering and subsurface installations, considering the commitments described above (i.e., waterproofing structures and minimizing groundwater withdrawal).

1663-2061

The Authority appreciates Valley Water's comments on the Draft EIR/EIS. Valley Water provided specific comments regarding groundwater recharge. Each of these specific comments is addressed below.

1663-2062

The Authority understands that the Santa Clara and Llagas Area subbasins supply the drinking water for thousands of residents within Santa Clara County, and the Authority is committed to protecting this drinking water supply during construction and long-term operation of the HSR system. The Authority has provided an analysis of project impacts on groundwater quality based on the preliminary (15%) design, which was sufficient to identify basic project features as well as avoidance, minimization, and mitigation measures. This analysis was completed in accordance with the requirements of CEQA and NEPA, and the Authority does not provide further analysis on these topics in the Final EIR/EIS. However, the Authority acknowledges that construction of the proposed tunnels has the potential to affect groundwater levels and water pollution (refer to Impact HYD#4 and Impact HYD#10). As a result, the Authority developed HYD-MM#1 that would address impacts on groundwater levels associated with tunneling. This mitigation measure would also avoid potential impacts on groundwater quality by requiring treatment of all groundwater inflows into the tunnel before this water is discharged into a creek where it could then percolate into aquifers. Additionally, please refer to the following IAMFs in Appendix 2-E, Project Impact Avoidance and Minimization Features, that have been incorporated into the project and would protect groundwater quality during construction and operations: HYD-IAMF#1, HYD-IAMF#3, HYD-IAMF#4, HYD-IAMF#5, GEO-IAMF#1, GEO-IAMF#5, HMW-IAMF#1, HMW-IAMF#4, HMW-IAMF#6, HMW-IAMF#7, HMW-IAMF#8, HMW-IAMF#9, and HMW-IAMF#10. These IAMFs are considered to be part of the project, and they would avoid or minimize substantial impacts on groundwater resources.

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1663-2063

The specific locations requiring both temporary and permanent dewatering would be determined by the design-build contractor during final design. During the final design phase, a geotechnical investigation would be conducted to, in part, identify groundwater levels and the specific locations that require dewatering. The geotechnical investigation would also provide information necessary to evaluate potential depths, durations, and volumes of dewatering necessary to construct and operate the project, which are the types of information needed to perform the detailed analysis that Valley Water is requesting. However, the Authority is committed to constructing and operating a project that avoids or minimizes impacts on existing water supply infrastructure. To that end, the Authority would waterproof subsurface installations and control and minimize groundwater withdrawal during and after construction to minimize the potential for the project to reduce groundwater levels. These features of project construction would avoid affecting water supply wells outside the project footprint, with the exception of tunneling activities for which mitigation on water supply wells would be provided by HYD-MM#1. Aside from certain project elements like viaduct foundations and the proposed tunnels, dewatering is expected to be done at relatively shallow depths typical of conventional construction projects. Considering that water supply wells typically extract groundwater from deeper aquifers, often several hundred feet below the ground surface, dewatering is not expected to affect water supply wells outside of the project footprint. Additional qualitative analysis regarding permanent impacts on groundwater conditions as a result of the project was added to Impact HYD#9 in the Final EIR/EIS.

1663-2064

If discovered during construction, the Authority would coordinate with Valley Water regarding the proper destruction of abandoned wells.

1663-2065

The Authority is pleased to hear that Valley Water is committed to protecting groundwater resources within Santa Clara County. The Authority is also committed to maintaining a positive working relationship with Valley Water and is looking forward to continuing to work with Valley Water during the final design. As stated in the responses to SJM-1663, comment 2060; SJM-1663, comment 2062; and SJM-1663, comment 2063, the Authority has provided an analysis of project impacts on groundwater supply and groundwater quality based on the preliminary (15%) design that was sufficient to identify basic project features as well as avoidance, minimization, and mitigation measures. This analysis was completed in accordance with the requirements of CEQA and NEPA, and the Authority does not provide further analysis on these topics in the Final EIR/EIS.

1663-2066

While the Authority understands Valley Water's desire to protect creeks, watershed assets, and operational activities, it would likely be impractical for the Authority to develop a design alternative that entirely avoids creeks while adhering to the statutory requirement to utilize existing transportation corridors for the project alignment as much as feasible. Furthermore, it would be financially infeasible to elevate the entire project corridor on aerial structures to avoid modifying existing or constructing new creek crossings within Valley Water's jurisdiction. However, in accordance with CEQA, NEPA, and the CWA, the Authority has evaluated all potential design alternatives and has selected a LEDPA that minimizes impacts on aquatic resources, including creeks within the jurisdiction of Valley Water. Where applicable, the Authority will coordinate with Valley Water to ensure the project does not substantially interfere with existing O&M activities for assets over which Valley Water has responsibility.

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1663-2067

The comment notes that the project should not encourage encampments in creeks. Section 3.11, Safety and Security, discusses potential impacts on criminal and terrorist activity. While the section does not specifically discuss risks from homeless encampments, it does analyze risks from criminal activity such as trespassing. As noted on the Wildlife Crossing Detail Sheets (GE-C0003 through GE-C0007), features such as boulders would be placed on the approach slopes and within undercrossings to deter trespassing. Where HSR would modify creek and waterway crossings, the Authority would coordinate with Valley Water to deter encampments during design, construction, and operation.

1663-2068

Both the Fact Sheet and Section 2.12, Permits, list federal, state, and regional permits, approvals, and consultations. Due to the 89-mile length of the project alignment, more specific and local approvals are not listed in the Draft EIR/EIS. The Authority will coordinate with Valley Water regarding modification to Valley Water facilities, and as a local agency partner with USACE, the United States Department of Agriculture, NRCS, and Reclamation.

The comment notes that NRCS approvals are also needed for modifications to the West Branch of Llagas Creek. To address this comment, West Branch Llagas Creek (Alternatives 1, 2, and 4) has been added to Table 2-18 of the Final EIR/EIS.

Approvals for flood map revisions by FEMA, which manages the NFIP, are included in Table 2-18.

1663-2069

Refer to Standard Response SJM-Response-PUE-1: Major and High-Risk Utilities/Utility Infrastructure.

The Authority understands that the Central Pipeline referred to in the comment is the 66-inch SCVWD pipeline at station 3022+23 (Alternative 4) along Emory Street in San Jose; this pipeline was identified in Appendix 3.6-A as being a potable water line that would be protected in place. The same pipeline was identified in Volume 3, Preliminary Engineering for Project Design Record, for Alternatives 1-3. New entries in Appendix 3.6-A have been added for Alternatives 1-3 corresponding to this 66-inch SCVWD line that was shown on the plans as protected in place. Although it was not identified using the name Pacheco Conduit, Appendix 3.6-A, Public Utilities and Energy Facilities, in the Draft EIR/EIS identified the need to relocate the Pacheco Conduit between 3270+50 to 3305+00 for all four alternatives.

As discussed under Impact PUE#1 in Section 3.6, Public Utilities and Energy, of the Draft EIR/EIS, established practices of utility identification and project design features (IAMFs) would effectively minimize utility interruptions. For example, the contractor would identify critical facilities planned to be interrupted during final engineering design and construction and would notify and coordinate with utility service providers concerning interruption of critical facilities. Thus, no substantial interruptions on Valley Water's water supply infrastructure and service are anticipated to occur, and no mitigation is required because this impact is identified as less than significant under CEQA.

Response to Submission 1663 (Rita Khosla, Santa Clara Valley Water District, June 23, 2020) - Continued

1663-2070

Please refer to the response to submission SJM-1663, comment 2069.

SCVWD facilities are identified in Volume 3, Preliminary Engineering for Project Design Record, of the Draft EIR/EIS and have been analyzed along with other major utilities. With the incorporation of project features (IAMFs), Impact PUE#1 and Impact PUE#3 are less than significant and do not require mitigation.

As described for PUE#4, through effective coordination in the planning and implementation of major utilities relocations, conflicts between project construction and major linear non-fixed utilities would be minimized and would not result in lengthy and harmful interruption of service impacts on utility service providers or customers other than impacts on the [SCRWA WWTP] utility property for Alternative 1 and Alternative 2. There is no nexus between impacts on SCRWA WWTP and mitigation for SCVWD facilities; therefore, none is provided.

Further coordination for relocations, requirements for shutdowns (or service disruptions), maintenance of access, etc. will be conducted as part of Detailed Design Post-ROD.

1663-2071

In Section 3.6.7, Mitigation Measures, of the Final EIR/EIS, PUE-MM#1 has been revised to clarify the timeframe for implementation of this mitigation measure. Under PUE-MM#1, the replacement percolation ponds would be of equivalent functional capacity and would be commissioned and placed into service prior to closure of the existing percolation ponds. The Authority acknowledges the commenters concern regarding agency review and approval of percolation ponds. Accordingly, PUE-MM#1 discusses investigations and monitoring studies that would be carried out to develop a preliminary design and construction plans and coordination with appropriate agencies.

1663-2072

The Authority has added text about Valley Water's responsibility for review and approval as a local sponsor to the discussion of the Rivers and Harbors Act of 1899 in the Final EIR/EIS per the comment.

1663-2073

The Authority has added text about Valley Water's responsibility for review and approval as a local sponsor to the discussion of the Watershed Protection and Flood Prevention Act in the Final EIR/EIS per the comment.

1663-2074

The Authority has added text about the 2019 GSP alternative approval to Section 3.8.2.2, State, subsections Senate Bill 1168, Assembly Bill 1739, and Senate Bill 1319, Sustainable Groundwater Management Act of the Final EIR/EIS per the comment.

1663-2075

Refer to Standard Response SJM-Response-OUT-2: Consultation with Local Agencies and Consistency with Local Regulations.

1663-2076

The Authority has revised the subbasin areas in Table 3.8-8 of the Final EIR/EIS per the comment suggestion.

1663-2077

Per Valley Water's comment, the Authority reviewed the 2020 Annual Groundwater Report in order to respond to this comment. After a review of this report, the Authority determined that the information contained in the report would not affect any of the conclusions presented in the Draft EIR/EIS. While the Authority notes this is a valuable source of information regarding groundwater conditions in Santa Clara County, no data within the Draft EIR/EIS is attributable to either Valley Water's 2020 Annual Groundwater Report or reports from previous years. Accordingly, this document was not included in the data sources table (Table 3.8-3).

Response to Submission 1663 (Rita Khosla, Santa Clara Valley Water District, June 23, 2020) - Continued

1663-2078

The Authority has added text to the Final EIR/EIS about the presence of percolation ponds, recharge facilities, and artesian conditions to Section 3.8.5.4, Groundwater, subsection Santa Clara Valley Basin, per the comment.

1663-2079

The Authority has added text to the Final EIR/EIS about the presence of percolation ponds, recharge facilities, and artesian conditions to Section 3.8.5.4, Groundwater, subsection Llagas Area Subbasin, per the comment.

1663-2080

The Authority has implemented revisions into the text and tables of Section 3.8.5.4, Groundwater, of the Final EIR/EIS that account for the basin boundary modification that was approved by DWR. These revisions included modifying the boundary of the RSA to be consistent with the North San Benito Subbasin.

1663-2081

Table 3.8-9 provides information regarding groundwater conditions that may be encountered during tunneling. The proposed tunnels in the Pacheco Pass Subsection would not pass through alluvium. Therefore, the table was not revised to include the information that was requested. Instead the text preceding the table was revised to state that the tunnels would not pass through alluvium or alluvial aquifers.

1663-2082

In their respective Water Quality Control Plans (or Basin Plans), RWQCBs designate beneficial uses for groundwaters. The Llagas Area subbasin is within the jurisdiction of the Central Coast RWQCB. The Central Coast RWQCB's Basin Plan states that all groundwater within its jurisdiction (except for one subbasin) is considered to be "suitable" for municipal and domestic water supply, including the Llagas Area subbasin. This designation is given based on SWRCB Resolution 88-63. Other RWQCBs, including the San Francisco Bay and Central Valley regions, use different designations, such as "existing," "potential," and "potentially suitable" but these terms have no bearing on the Llagas Area subbasin. The Central Coast RWQCB's Basin Plan is already cited as a source for this table, and therefore additional clarifying text was not incorporated into the Final EIR/EIS.

1663-2083

The Authority has revised this sentence per the comment. Refer to Section 3.8.5.4, Groundwater, subsection Municipal Water Supply, in the Final EIR/EIS.

1663-2084

During the early stages of developing the Draft EIR/EIS, the Authority coordinated with Valley Water to obtain hydraulic models for waterways within Santa Clara County that are within the RSA and specifically those that could be affected by the project. In response to this data request, Valley Water provided the Authority with hydraulic models representing the proposed condition of the Llagas Creek watershed assuming full implementation of PL-556, including both Phase 1 and Phase 2. These models do not contain information about the proposed interim hydraulic conditions of the Llagas Creek watershed between implementation of Phase 1 and Phase 2 of PL-556. Furthermore, the Authority believes the Draft EIR/EIS includes reasonable assumptions about the condition of the Llagas Creek watershed applicable to the construction of the San Jose to Merced Project Section of HSR. No changes were made to the Final EIR/EIS pursuant to this comment.

Response to Submission 1663 (Rita Khosla, Santa Clara Valley Water District, June 23, 2020) - Continued

1663-2085

As stated in HYD-IAMF#1 in Appendix 2-E, Project Impact Avoidance and Minimization Features, the capacity of receiving stormwater drainage systems would be evaluated during final design to determine whether they can accommodate project runoff, including storm drain systems that are located within 100-year floodplains. As necessary, on-site stormwater management measures or selected upgrades to the receiving system would be designed to ensure the capacity of receiving drainage systems are not overwhelmed and to comply with the design standards in the latest version of Authority Technical Memorandum 2.6.5 Hydraulics and Hydrology Guidelines.

Preliminary hydraulic analysis shows that, in general, existing 100-year water surface elevations would be maintained by the project's floodplain crossings within Santa Clara County. As stated in HYD-IAMF#2 in Appendix 2-E, the design-build contractor would prepare a flood protection plan that would allow the project to remain operational during the 100-year flood or 200-year flood depending on location as well as minimize development within floodplains and design floodplain crossings to minimize increases in 100-year water surface elevations. The flood protection plan would be developed using detailed hydraulic analysis. The Authority will be coordinating the contents of the flood protection plan with Valley Water during the final design phase. Given the current minimal impacts in the preliminary design, the result of this coordination between the Authority and Valley Water during final design would ensure the project would not cause substantial adverse effects on flooding conditions within Santa Clara County or elsewhere within the RSA.

1663-2086

The Authority is aware of the shallow groundwater conditions within portions of the RSA, including within the City of San Jose. The detailed analysis Valley Water is requesting in the comment would require the results of the geotechnical investigation. The geotechnical investigation would be performed in subsequent phases of the project and the specific locations requiring temporary and permanent dewatering would be determined by the design-build contractor during final design. Accordingly, the geotechnical and design information needed to perform the analysis requested by Valley Water is not yet available. However, as stated in Impact HYD#9, subsurface structures would be waterproofed to prevent the intrusion of groundwater, thereby minimizing the potential need for permanent dewatering operations. If required, permanent subsurface installations that could require dewatering are anticipated to be relatively shallow, such that if any groundwater were to leak into the structure dewatering would not substantially lower groundwater levels and groundwater supply wells would not experience reduced productivity. Furthermore, GEO-IAMF#1 would require the preparation of a construction management plan that would describe the methods by which the contractor would control groundwater withdrawal during construction, including in areas with high groundwater levels, and GEO-IAMF#10 would require the contractor to prepare a memorandum describing how Caltrans' Field Guide to Construction Dewatering, which has a goal of minimizing water quality effects, has been incorporated into the project; refer to Section 3.9, Geology, Soils, Seismicity and Paleontological Resources, for more information on how these IAMFs may be applied to the project.

Response to Submission 1663 (Rita Khosla, Santa Clara Valley Water District, June 23, 2020) - Continued

1663-2087

The specific methods by which the design-build contractor will manage and discharge water is not known at this time. However, as stated in Section 3.8, Hydrology and Water Resources, the Authority expects that all groundwater encountered in excavations that poses a risk to water quality in waterways, including water that is commingled with construction material, would be either off-hauled to a publicly-owned treatment works or treated on-site prior to discharge into a waterway. All dewatering operations, and particularly the method of on-site treatment and discharge into waterways, would be performed in compliance with the Construction General Permit, 401 Water Quality Certification, a Waste Discharge Requirement (if needed), and the Caltrans Field Guide to Dewatering Manual. Following these regulatory requirements and project features, groundwater will not be discharged into a waterway if it exceeds effluent limits. This would also protect groundwater by avoiding the potential for percolation of contaminated water into the ground. These regulatory requirements and project features would ensure that construction of the project would not cause groundwater contamination. Refer to Impact HYD#4 for more information on dewatering operations and water treatment during construction.

1663-2088

The Authority understands the complexity of relocating public drinking water supply wells, especially wells that are deep and require high rates of productivity. The Authority would ensure replacement wells would be constructed and functional before abandoning and demolishing the existing wells in order to prevent disruptions to the water supply. The locations where public water supply wells would be relocated are shown on the Roll Plots in Volume 3 of the Final EIR/EIS. The specific locations of private wells would be determined during final design. However, if a privately owned well and/or associated surface equipment is located within the permanent HSR right-of-way, the Authority will not cut off access to the well until the Authority and property owner have verified that a functioning replacement well has been provided and is fully operational. If a well must be replaced, the Authority will pay for the cost of the replacement well. Text has been added to Impact HYD#9 in Section 3.8, Hydrology and Water Resources, of the Final EIR/EIS describing that the Authority would replace privately owned wells within the permanent HSR right-of-way.

1663-2089

The Authority has clarified the text in Impact HYD#8 of the Final EIR/EIS regarding the approach to managing subsurface contamination during construction. The intent of this text was to state that the Authority would manage any contamination encountered during construction using BMPs, such as storing and treating contaminated groundwater, rather than to state that all subsurface contamination within the footprint would be remediated. The Authority does not intend to remediate all known contamination within the project footprint.

1663-2090

As a project that traverses the jurisdiction of several RWQCBs, the Authority will be coordinating with and seeking review and approval of the project from the SWRCB for activities that may affect the quality of surface waters and groundwater, including any reinjection of groundwater that may be required by HYD-IAMF#5. Therefore, ultimate review and approval of any reinjection would be at the discretion of the SWRCB. However, the Authority is committed to working cooperatively with local government agencies, including Valley Water, and the Authority will coordinate with Valley Water regarding project activities that may affect groundwater in Valley Water's jurisdiction.

1663-2091

The Authority has revised Impact HYD#9 and Table 3.8-23 in the Final EIR/EIS to include the percent of Valley Water's designated recharge zones that would be occupied by proposed impervious surfaces by subsection and alternative.

1663-2092

The Authority has revised the text per the comment suggestion under Impact HYD#9 of the Final EIR/EIS. Additionally, the Authority has revised some of the conclusions that were presented in Sections 3.8.7, Mitigation Measures, and 3.8.9, CEQA Significance Conclusions, of the Draft EIR/EIS with respect to considering these percolation ponds as managed recharge facilities.

Response to Submission 1663 (Rita Khosla, Santa Clara Valley Water District, June 23, 2020) - Continued

1663-2093

The potential increase in pumping would be associated with a loss of percolation ponds and treatment capacity at the South County Regional Wastewater Authority treatment facility near Gilroy, and this was qualitatively described in Section 3.6, Public Utilities and Energy, and Section 3.8, Hydrology and Water Resources, of the Draft EIR/EIS. The loss in treatment capacity associated with the project alternatives was not quantified in terms of volume of water that would become unavailable for use (and may subsequently be replaced by groundwater pumping), but it was determined that 51 acres of the percolation ponds would be closed under Alternatives 1 and 2. However, mitigation was incorporated into the Draft EIR/EIS to ensure that treatment capacity would be maintained at the treatment facility and that there would not be an associated increase in groundwater pumping under Alternatives 1 and 2. Considering the mitigation that was proposed in the Draft EIR/EIS to ensure that impacts on the treatment facility would be compensated by constructing replacement ponds, incorporating the pumping estimates Valley Water requested would not affect the conclusions presented in the Draft EIR/EIS.

1663-2094

The Authority has deleted this text per the revisions in Impact HYD#9 in the Final EIR/EIS. Additionally, the Authority has revised some of the conclusions that were presented in Sections 3.8.7, Mitigation Measures, and 3.8.9, CEQA Significance Conclusions, of the Draft EIR/EIS with respect to considering these percolation ponds as managed recharge facilities.

1663-2095

As stated in response to SJM-1663, comment 2091, the Authority has revised Impact HYD#9 and Table 3.8-23 to include the percent of Valley Water's designated recharge zones that would be occupied by proposed impervious surfaces by subsection and alternative.

1663-2096

The Roll Plots presented in Volume 3 of the Draft EIR/EIS include typical cross-sections that show the basic design of these drainage ditches. Additional design details of these ditches would be determined by the design-build contractor during the final design phase. While these drainage ditches would not be specifically designed to filter pollutants, they would likely be vegetated per requirements of the Construction General Permit and SWPPP (HYD-IAMF#3). Additionally, it is expected that some of these ditches would be designed to function as stormwater treatment facilities given the quantities of impervious surfaces that would be constructed by the project and the subsequent need for stormwater treatment. In this way, some of the ditches may have pollutant filtration functions in addition to drainage functions.

1663-2097

The analysis in the Draft EIR/EIS was based on a preliminary level of design, and therefore the specific depths of subsurface structures, like foundations, and geotechnical data needed to support the analysis Valley Water is requesting are not available at this time. However, the Authority has provided additional qualitative analysis in Impact HYD#9 of the Final EIR/EIS in order to respond to Valley Water's concern.

1663-2098

The memo required by PUE-IAMF#4 is specifically about public utilities. Therefore, the memo would not be expanded to include privately owned water supply wells. However, if a privately owned well and/or associated surface equipment is located within the permanent HSR right-of-way, the Authority would not cut off access to the well until the Authority and property owner have verified that a functioning replacement well has been provided and is fully operational. If a well must be replaced, the Authority would pay for the cost of the replacement well. Text has been added to Impact HYD#9 describing that the Authority would replace privately owned wells within the permanent HSR right-of-way.

Response to Submission 1663 (Rita Khosla, Santa Clara Valley Water District, June 23, 2020) - Continued

1663-2099

As stated in Valley Water's SJM-1663, comment 2098, the memo would not be expanded to include privately owned water supply wells. However, if a privately owned well and/or associated surface equipment is located within the permanent HSR right-of-way, the Authority would not cut off access to the well until the Authority and property owner have verified that a functioning replacement well has been provided and is fully operational. If a well must be replaced, the Authority would pay for the cost of the replacement well.

1663-2100

The comment is noted and does not raise any issue with any of the conclusions of the Draft EIR/EIS. The Authority will coordinate with Valley Water to obtain existing aquifer and hydrology information during preparation of the GAMMP as needed.

1663-2101

Table 3.8-25 provides information regarding groundwater conditions that were encountered during construction of the Reclamation's Central Valley Project tunnels, and these same geologic formations may be encountered during construction of the project's tunnels. The source document used to obtain this information did not describe groundwater conditions within unconsolidated sediment. However, based on the current geotechnical investigation work plan and tunnel profiles and as described in Impact HYD#10, the proposed tunnels in the Pacheco Pass Subsection would not pass through alluvium or alluvial aquifers. However, the Authority acknowledges there is potential for perched water tables within unconsolidated sediment overlying bedrock formations, and these unconsolidated sediments may be encountered at tunnel portals. Text has been added to Impact HYD#10 in the Final EIR/EIS to this effect.

1663-2102

As stated in HYD-MM#1, the Authority will coordinate the contents of the GAMMP with various federal, state, and local agencies, including Valley Water, once it is developed during the final design phase. The GAMMP would include a description of the hydrogeologic model prepared to predict where groundwater and surface water impacts are likely to occur based on the results of the subsurface geotechnical and surface hydrologic investigations. If needed, the Authority would coordinate with Valley Water to obtain additional data/models that may support preparation of the GAMMP. The Authority would consider comments from local agencies on the contents of the GAMMP, and the Authority would make revisions to the GAMMP pursuant to these comments at its discretion.

1663-2103

The Authority understands that rural areas overlying and near the proposed tunnels are reliant on groundwater supplies for drinking water and agricultural supplies, and the proposed mitigation measure (HYD-MM#1) was developed with the intent of ensuring that no nearby property owners would have their water supplies cut off. This would either be achieved by modifying the wells or providing supplemental water to property owners until existing conditions have been restored or other long-term measures are implemented. The Authority is confident that the analysis performed was of sufficient detail to identify appropriate measures to minimize and mitigate impacts on water supply wells from tunneling. Refer to HYD-IAMF#5 in Appendix 2-E, Project Impact Avoidance and Minimization Features, and HYD-MM#1 in Section 3.8.7, Mitigation Measures, for the proposed minimization and mitigation measures associated with tunneling.

Response to Submission 1663 (Rita Khosla, Santa Clara Valley Water District, June 23, 2020) - Continued

1663-2104

Based on existing data, Tunnel 1 is expected to have relatively small rates of groundwater inflow (relative to portions of Tunnel 2), and these low inflow rates are expected to be related to observed impacts on adjacent resources. While the Authority acknowledges that Tunnel 1 has potential to substantially affect groundwater resources, including wells, the rating of "low" is relative to those portions of Tunnel 2 that may experience much higher rates of inflow and more severe impacts as a result of tunneling. As stated in the response to SJM-1663, comment 2103, the Authority is confident that the analysis performed was of sufficient detail to identify appropriate measures to minimize and mitigate impacts on all water supply wells from tunneling, including those wells near Tunnel 1. Refer to HYD-IAMF#5 in Appendix 2-E, Project Impact Avoidance and Minimization Features, and HYD-MM#1 in Section 3.8.7, Mitigation Measures, for the proposed minimization and mitigation measures associated with tunneling.

1663-2105

The groundwater RSA was added to the inset map on the series of figures depicting the proposed tunnels. The groundwater RSA can also be viewed in Figure 3.8-2.

1663-2106

The stormwater management and treatment plan required by HYD-IAMF#1, which is described in Appendix 2-E, Project Impact Avoidance and Minimization Features, would comply with the treatment requirements of the Phase II MS4 permit within the Authority's right-of-way. Within the portions of the Authority's right-of-way that are also within the jurisdiction of the Central Coast RWQCB, most stormwater treatment facilities would be designed to promote infiltration, particularly into deeper aquifers where they overlie a groundwater basin in its recharge area. All stormwater treatment BMPs within the Authority's right-of-way would be selected and designed according to the requirements of the Phase II MS4 permit and region-specific requirements, and these design requirements are considered to be protective of surface water and groundwater quality by providing water quality treatment prior to infiltration. Outside of the Authority's right-of-way, stormwater treatment facilities would be selected and designed in accordance with local MS4 permits or applicable CWA Section 402 NPDES permits.

1663-2107

For a linear project crossing 90 miles, three counties, and numerous floodplains, it was not possible to include descriptive discussion of each project activity that would occur within a floodplain in the main text of the Draft EIR/EIS. To do so would result in a document that would be so large and unwieldy that it would not serve its information value. For this reason, and consistent with the focus of both CEQA and NEPA that an EIR/EIS serve as an informational tool for the public and decision makers, the impact analysis in Impact HYD#14, Impact HYD#15, and Impact HYD#16 of the Draft EIR/EIS includes summarized technical information sufficient to allow a full assessment of the project's significant impacts on floodplains. Impact HYD#14 includes summarized information about construction activities that would occur within floodplains, such as storage of equipment and materials in staging areas as well as the use of temporary concrete precasting sites that would be within floodplains. Impact HYD#15 describes the project's elements that have potential to result in significant permanent impacts on floodplains, such as the construction of bridges, viaducts, embankments, and roadways in floodplains. Impact HYD#16 describes how operating the HSR system could create impacts on floodplains. During final design, the contractor would prepare a flood protection plan that would describe how development in floodplains would be minimized to avoid substantial permanent impacts on floodplains, and the contents of this document would be coordinated with Valley Water (refer to HYD-IAMF#2 in Appendix 2-E, Project Impact Avoidance and Minimization Features, for a description of the flood protection plan).

Response to Submission 1663 (Rita Khosla, Santa Clara Valley Water District, June 23, 2020) - Continued

1663-2108

During the early stages of developing the Draft EIR/EIS, the Authority coordinated with Valley Water to obtain hydraulic models for waterways within Santa Clara County that are within the RSA and specifically those that could be affected by the project. In response to this data request, Valley Water provided the Authority with hydraulic models representing the proposed condition of the Llagas Creek watershed assuming full implementation of PL-556, including both Phase 1 and Phase 2. These models do not contain information about the proposed interim hydraulic conditions of the Llagas Creek watershed between implementation of Phase 1 and Phase 2 of PL-556. Furthermore, the Authority believes the Draft EIR/EIS includes reasonable assumptions about the condition of the Llagas Creek watershed applicable to the construction of the San Jose to Merced Project Section of HSR.

1663-2109

Refined hydraulic analysis would be performed during the final design phase. During the final design phase, the design-build contractor would prepare a flood protection plan (required by HYD-IAMF#2; refer to Appendix 2-E, Project Impact Avoidance and Minimization Features, for a complete description) that would minimize development within floodplains and design floodplain crossings to maintain a 100-year floodwater surface elevation of no greater than 1 foot above current levels, or as required by state or local agencies, and project features within the floodway itself would not increase existing 100-year floodwater surface elevations in FEMA-designated floodways, or as otherwise agreed upon with the county floodplains manager. Within Santa Clara County, the content of the flood protection plan would be coordinated with Valley Water.

1663-2110

The text of Impact HYD#15, including Table 3.8-31, in the Final EIR/EIS were revised as requested. Alternatives 1 and 4 would only require minimal development within the West Branch Llagas Creek floodplain, and this development would be associated with electrical utility improvements. While these changes were not modeled, the Authority believes they would not substantially affect the hydrology and hydraulics of the floodplain, because the improvements would be made to existing infrastructure. Alternative 2 would depress Fitzgerald/Masten Avenue such that it would cross below the embankment and Monterey Road. During the 100-year flood, this depressed roadway section has potential to become flooded by flows from West Branch Llagas Creek. Flooding of the depressed roadway section would not cause an increase in the water surface elevations of the floodway or floodplain, and existing patterns of flooding would be maintained. However, the depressed roadways would become flooded. In addition, any potential impacts on the water surface elevations of the West Branch Llagas Creek floodplain would be addressed in the flood protection plan required by HYD-IAMF#2, which is described in Appendix 2-E, Project Impact Avoidance and Minimization Features, of the Draft EIR/EIS. The contents of the flood protection plan would be coordinated with Valley Water.

1663-2111

As stated in HYD-MM#1, the Authority will coordinate the contents of the GAMMP with various federal, state, and local agencies, including Valley Water, once it is developed during the final design phase. Furthermore, the Authority would consider comments from local agencies on the contents of the GAMMP, and the Authority would make revisions to the GAMMP pursuant to these comments at its discretion. However, the SWRCB will have the ultimate ability to approve the GAMMP and project activities that may affect surface water and groundwater quality, because the project traverses the jurisdiction of multiple RWQCBs.

Response to Submission 1663 (Rita Khosla, Santa Clara Valley Water District, June 23, 2020) - Continued

1663-2112

The Authority will continue to coordinate with SCVWD as the project progresses into final design and during preparation of the Groundwater Adaptive Management and Monitoring Program required by HYD-MM#1. Thank you.

Submission 1674 (Amanda Marino, Santa Cruz County Regional Transportation Commission, June 23, 2020)



SANTA CRUZ COUNTY REGIONAL TRANSPORTATION COMMISSION
1523 Pacific Ave., Santa Cruz, CA 95060-3911 • (831) 460-3200 FAX (831) 460-3215 EMAIL info@sccrtc.org

June 9, 2020

Attn: San Jose to Merced Project Section: Draft EIR/EIS
00 Paseo de San Antonio, Suite 300
San Jose, CA 95113
Via Email: san.jose_merced@hsr.ca.gov

RE: San Jose to Merced Project Section: Draft EIR/EIS Comment

Thank you for the opportunity to review the San Jose to Merced Project Section: Draft EIR/EIS. On behalf of the Santa Cruz County Regional Transportation Commission (SCCRTC), I would also like to thank you and your team for your efforts, and your commitment to developing a statewide framework for passenger and freight rail service. The SCCRTC offers the following comments for your consideration:

1674-2119

Transit connection for Santa Cruz County to the Northern California mega-region: We appreciate that the Draft EIR/EIS recognizes that residents of the Santa Cruz County Area have a demand for increased connectivity with the greater San Jose Area. Creating high-quality transit options, in light of current congested highway capacity constraints, will generate economic and quality of life benefits for our residents. Specifically, transportation disadvantaged communities of Pajaro/ Watsonville will be have provided better access to employment, education, health care centers, and tourism opportunities.

1674-2120

Creating a mutually supportive multimodal transit network: While more urbanized areas will see clear benefits from a rail transit system, more rural areas of California will continue to rely on bus transit for daily travel as well as connection to the rail transit system. It is necessary to connect passenger rail service to other modes creating an accessible multimodal transportation network serving transportation disadvantaged communities. This includes bus connections between San Jose and Santa Cruz County via Highway 7 and bus connections between Gilroy and the City of Watsonville via Highways 129 and 101. This integration of modes advances the “smart” mobility goals established by the state legislature and local communities.

1674-2121

Increase efficiency and capacity in the intercity and county transportation system: We support the project’s emphasis on an interconnected multimodal system that meets the future growth in demand for reliable transportation. Reducing reliance on the private automobile and mitigating traffic congestion will accommodate the transportation needs of transportation disadvantaged communities in Pajaro/ Watsonville. Individuals in Santa Cruz County will greatly

1674-2121

benefit from this interregional rail connection to the Bay Area, the rest of California, and beyond.

The San Jose to Merced Project Section: Draft EIR/EIS, will revitalize a range of key multimodal projects and greatly assist California in reaching its aggressive sustainability goals. If you have any questions regarding these comments or rail in Santa Cruz County, feel free to contact staff at 831-460-3200 or info@sccrtc.org. We look forward to working with the State to enhance rail service for Santa Cruz County.

Sincerely,

Guy Preston
Executive Director

Response to Submission 1674 (Amanda Marino, Santa Cruz County Regional Transportation Commission, June 23, 2020)

1674-2119

Thank you for your comment in support of the project.

1674-2120

The comment is noted and does not indicate any specific concern regarding any of the conclusions in the Draft EIR/EIS. The Authority supports the integration of the project with supporting and complementary bus service and a fully functional multimodal transit network.

1674-2121

Thank you for your comment in support of the project.

Submission 1429 (Christina Watson, Transportation Agency for Monterey County, June 22, 2020)



TRANSPORTATION AGENCY FOR MONTEREY COUNTY

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1429-1370

June 19, 2020

The Honorable Brian Kelly
California High-Speed Rail Authority
770 L Street, Suite 620
Sacramento, CA 95814

Via email to: san.jose_merced@hsr.ca.gov

Subject: Comments on the San Jose to Merced Draft Environmental Documents

Dear Mr. Kelly:

1429-1369

On behalf of the Transportation Agency for Monterey County (TAMC), I am writing to provide comments on the High-Speed Rail project's San Jose to Merced section Draft Environmental Impact Report/ Statement (EIR/S). TAMC supports the preferred alignment (#4) that would have high-speed trains stopping in downtown Gilroy, which would facilitate connections with regional and local transit services and increase ridership on the connecting passenger rail system in Gilroy.

The three-county Monterey Bay Area had a population of 776,000 in 2018 and is projected to reach over a million residents by the year 2030. Our growing population needs an alternative means of getting to jobs, health care, entertainment and shopping around the region and across the state. Increased access to the rail network and connectivity to the high-speed rail system in Gilroy will help the region be more sustainable economically, environmentally and socially.

TAMC is the lead agency planning for an extension of passenger rail service to Monterey County from the Bay Area via the Gilroy station. Our hope is that a downtown Gilroy High-Speed Rail station will complement and connect with the existing and future extended Caltrain system.

1429-1370

TAMC has been coordinating with Caltrain engineering and operations staff to plan for extending the existing Caltrain service at Gilroy to Salinas. Our project includes track improvements at the Gilroy station that are currently at 75% design, pending comments from Union Pacific Railroad, and could be ready to construct as soon as 2021. Our designs extend the Gilroy station track southward across 10th Street to connect to the Coast Mainline tracks. This track extension will enable trains to continue southward from the downtown Gilroy station to Salinas and would also provide the opportunity for through trains, such as the Amtrak Coast Starlight, to stop at Gilroy.

The fully-funded Monterey County Rail Extension project is not envisioned to be a shuttle service at any point in time, but a through service integrated into the existing network, so that a

<https://tamcmonterey.sharepoint.com/Shared Documents/Correspondence/2020/Outgoing/Kelly - HSR Valley-Valley EIR-EIS comments.docx>

The Honorable Brian Kelly
June 19, 2020
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passenger may board in Salinas and stay on the train all the way to San Francisco. Even in the future, when Caltrain service is fully electrified and running on the electrified High-Speed Rail tracks north of Gilroy, the Salinas service could still operate as an extension of Caltrain service using bi-modal equipment running on electricity north of Gilroy and switching to diesel on the freight line south of Gilroy. The currently proposed High-Speed Rail track designs at the downtown Gilroy station do not appear to enable that extension.

The specific conceptual plans that show the track connections in question are:

1. Alternative 4, Book 4A composite plan, profile and cross-sections, sheets 21 and 22; and
2. Book 4 C Stations, sheets 67-68.

TAMC requests that the High-Speed Rail Authority revise these conceptual plans to show how the Caltrain trains can cross over from the High-Speed Rail tracks to the relocated Union Pacific Coast Mainline tracks, with minimal disruption to passenger rail operations. TAMC staff and consultants are available to discuss the requested changes with your staff.

Thank you for your consideration of our comments. We appreciate the opportunity to comment on this exciting project.

Sincerely,

Debra L. Hale
Executive Director

<https://tamcmonterey.sharepoint.com/Shared Documents/Correspondence/2020/Outgoing/Kelly - HSR Valley-Valley EIR-EIS comments.docx>

Response to Submission 1429 (Christina Watson, Transportation Agency for Monterey County, June 22, 2020)

1429-1369

Comment noted. Thank you.

1429-1370

The comment notes that Caltrain service is planned to extend from Gilroy to Salinas. The Caltrain storage tracks south of 10th Street are provided to support to the future Monterey County Rail Extension. The Authority will coordinate with Caltrain and TAMC during Detailed Design Post-ROD to integrate HSR with the Monterey County Rail Extension.

24 LOCAL AGENCY COMMENTS (Part 2)

Submission 2129 (Margaret Sohagi, City of Brisbane, June 9, 2021)

San Jose - Merced - RECORD #2129 DETAIL	
Status :	Unread
Record Date :	6/9/2021
Submission Date :	6/9/2021
Interest As :	Local Agency
First Name :	Margaret
Last Name :	Sohagi
Attachments :	50546_210609CityofBrisbaneCommentLetter-SanJosetoMercedSectionRevised-SupplementalDraftEIR-EISComment.PDF (79 kb)

Stakeholder Comments/Issues :

Attached please find comments on behalf of the City of Brisbane, California on the Revised/Supplemental Draft EIR/EIS for the San José to Merced Section of the California High-Speed Rail Project.

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June 9, 2021

VIA EMAIL AND SUBMISSION TO THE HSR WEBSITE

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**REVISED SUPPLEMENTAL DRAFT EIR/EIS COMMENT
SAN JOSÉ TO MERCED PROJECT SECTION**

100 Paseo de San Antonio, Suite 300
San José, CA 951413

Re: Comments by the City of Brisbane, California, on the Revised/Supplemental Draft Environmental Impact Report/Environmental Impact Statement for the San José to Merced Section of the California High-Speed Rail Project

To Whom It May Concern:

The California High-Speed Rail Authority (Authority) has issued what it refers to as a "limited revision" to its previously published Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) for the San José to Merced Project Section of the California High-Speed Rail Project. On behalf of the City of Brisbane, California (City), we hereby submit comments on the Revised Draft Environmental Impact Report/Supplemental Environmental Impact Statement (Revised Draft EIR/EIS) for Project under the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

The Draft EIR/EIS that the Authority is attempting to revise fails to disclose the fact that the proposed Gilroy Maintenance of Way Facility (MOWF) is intended to balance and supplement the functions of a light maintenance facility (LMF) the Authority proposes to construct in Brisbane.

The San José to Merced Project Section Draft EIR/EIS assumes a MOWF in Gilroy. As further discussed in the City's September 2020 comments on the Draft EIR/EIS for the San Francisco to San José Section, the Authority fails to disclose the interrelationship between the proposed Gilroy and Brisbane maintenance facilities, resulting in a failure to properly address potential alternatives. The Authority makes the same error in the Draft EIR/EIS for the San José to Merced Section. Evidence of the intended interrelationship of the system's maintenance activities between the San José to Merced and the San José to San Francisco segments of the system, along with the Authority's alternatives analysis pertaining to the Gilroy and Brisbane maintenance facilities is included in Appendix 2-G of the San José to Merced Draft EIR/EIS and Appendix 2-F of the San Francisco to San José Draft EIR/EIS, both of which include as appendices the Authority's March 14, 2016 "Summary of Requirements for Maintenance

2129-6419

Submission 2129 (Margaret Sohagi, City of Brisbane, June 9, 2021) - Continued

**REVISED SUPPLEMENTAL DRAFT EIR/EIS COMMENT
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Facilities.” However, neither Draft EIR/EIS appears to consider the Gilroy and Brisbane maintenance facilities activities and alternatives recommended in the Authority’s *Summary of Requirements for Maintenance Facilities.*

2129-6420

Therefore, both the Draft EIR/EIS and the Revised Draft EIR/EIS for the San José to Merced segment are fatally flawed for the following reasons:

- While the Draft EIR/EIS analyzed alternative *locations* for the Gilroy maintenance facility, it did not analyze alternatives for the *activities* that could occur at the Gilroy maintenance facility.
- As a result, the Revised Draft EIR/EIS fails to adequately analyze night lighting and operations impacts of potential Level III maintenance activities on wildlife adjacent to each of the alternative Gilroy MOWF sites.

2129-6421

The Draft EIR/EIS Fails to Adequately Analyze Alternatives for the Gilroy Maintenance Facility.

The *Summary of Requirements for Maintenance Facilities* identifies potential light maintenance facility sites for the entire statewide high-speed rail network based on its criteria and recommended the following rolling stock facilities:

- Brisbane, LMF
- Gilroy, LMF
- Central Valley, LMF
- Antelope Valley, LMF
- Los Angeles, West Yard LMF
- Los Angeles, Montebello Yard LMF
- Anaheim, LMF

Although the Authority envisioned only one location within the northern section route (between San Francisco and Merced) for a Level III LMF, the *Summary of Requirements for Maintenance Facilities* identifies two potential locations, Gilroy and Brisbane, both of which are identified in Table 1 and Table 2 of that report, portions of which are provided below.

From *Summary of Requirements for Maintenance Facilities*, Table 1: Summary of HMF, LMFs

Facility Location/ Type	No. Tracks	Level	YR 2025 Proj. Fleet of 19 Train Sets (TS)		YR 2034 Proj. Fleet of 19 Train Sets (TS)		YR 2059 Proj. Fleet of 19 Train Sets (TS)	
			Total	AM	Total	AM	Total	AM

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			TS	TS	TS	TS	TS	TS
Brisbane LMF	13 Yd 2 or 8 Shop	III (or I)	8-10	6-8	14-17	10-13	16-21	12-17
Gilroy LMF	10 Yd 8 or 2 Shop	I (or III)	8-10 (See Note)	6- 8 (See Note)	13-15	10-14	13-17	12-16

The critical note to this table presented in the *Summary of Requirements for Maintenance Facilities* states:

- **Maximum maintenance level at Brisbane could be lowered to Level I if the facility in Gilroy is built with the Level III capability.**” (emphasis added)

From *Summary of Requirements for Maintenance Facilities*, Table 2: HMF, LMF, MOI Locations

Proposed Facility	Miles (from SF Transbay)	Approximate location name	Comment
LMF	5.00	Brisbane	<ul style="list-style-type: none"> • Level III facility to support train servicing and start up and close-down of service at San Francisco. • Corresponds to location of proposed LMF. • This site could also function as a Level I site on a smaller footprint to support service for the San Francisco terminals.
LMF	60.00	Coyote (between San José and Morgan Hill)	<ul style="list-style-type: none"> • Level I facility to support train servicing and start up and close-down of service at San José, Gilroy and Merced. Will need to clear a level III facility at this location based on the availability of the Brisbane site or the phasing requirements of the project. • Corresponds to the most likely of several alternative site already being considered for an LMF. • Co-location of this facility with the nearby MOIF is possible.
MOIF	80.00	Just South of Gilroy Station	<ul style="list-style-type: none"> • Corresponds to location of previously proposed MOIF. • Co-location of this facility with the nearby LMF is possible.

The *Summary of Requirements for Maintenance Facilities* specifies that maintenance facilities at Brisbane and Gilroy are “envisioned to work together” and that “[w]hichever location is finally determined for Level III activity” would need the other location to support lower level activities as a Level I facility.

The Authority’s own *Summary of Requirements for Maintenance Facilities*, which is included as an appendix to both the San José to Merced and the San José to San Francisco Draft EIR/EIS documents, clearly demonstrates the Authority’s acknowledgement of the potential feasibility of:

- Locating a Level III facility in Gilroy and a Level I facility in Brisbane, or
- Locating a III Level in Brisbane and a Level I facility in Gilroy.

Submission 2129 (Margaret Sohagi, City of Brisbane, June 9, 2021) - Continued

REVISED SUPPLEMENTAL DRAFT EIR/EIS COMMENT
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The Authority’s *Summary of Requirements for Maintenance Facilities* recommends that maintenance facilities in both Gilroy and Brisbane be designed and provided with environmental clearance for Level III maintenance activities (quarterly inspections, including wheel truing), and states that whichever facility ultimately provides Level III maintenance, the other location would still be required for Level I (daily inspections, pre-departure cleaning and testing) and level II (monthly inspection) activities (e.g., a Level III LMF in Gilroy with a smaller Level I facility in Brisbane).

Although the *Summary of Requirements for Maintenance Facilities* presents compelling evidence and a recommendation for the San José to Merced Draft EIR/EIS to analyze Level III maintenance facilities at Gilroy and the interrelationship between the proposed Gilroy and Brisbane maintenance facilities, the Draft EIR/EIS makes no mention of this recommendation, presents no such alternatives analysis. The Draft EIR/EIS fails to provide the environmental clearance or any degree of analysis of impacts associated with Gilroy maintenance level alternatives as described and recommended in the *Summary of Requirements for Maintenance Facilities*.

2129-6422

In violation of the CEQA Guidelines Section 15126.6(a) requirement to address a reasonable range of potentially feasible alternatives, the Draft EIR/EIS did not include any alternatives wherein a Level III LMF would be located in the vicinity of Gilroy and a Level I facility located between San Francisco and San José¹. The failure of the San José to Merced Draft EIR/EIS to heed the Authority’s own recommendation created a fatal flaw not only in the San José to Merced Draft EIR/EIS, but also in the San José to San Francisco Draft EIR/EIS.

2129-6423

Further, a Level III LMF located in the Gilroy area could be co-located with other planned infrastructure such as the proposed Gilroy MOWF, increasing operational efficiencies. Thus, by neglecting to analyze alternatives for the Gilroy maintenance facility that would provide for Level III maintenance activities, the Authority created fatal flaws in the Draft EIR/EIS documents for both the San José to Merced and San José to San Francisco segments².

2129-6424

¹ Development of a Level III maintenance facility in Gilroy would permit the proposed Brisbane LMF to be downsized to a Level I facility (+/- 40 acres). The ability to downsize the Brisbane LMF by constructing a Level III LMF in Gilroy would have reduced the impacts of the proposed Brisbane LMF and also provided for additional potentially feasible sites outside of Brisbane to be identified and evaluated.

2129-6425

² As stated in Table 1 and Table 2 of the *Summary of Requirements for Maintenance Facilities*:

- “Maximum maintenance level at Brisbane could be lowered to Level I if the facility in Gilroy is built with the Level III capability.”
- The Brisbane LMF site “could also function as a level I site on a smaller footprint to support service for the San Francisco terminals.”

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The Revised Draft EIR/EIS fails to adequately analyze night lighting impacts of potential Level III maintenance activities on wildlife adjacent to each of the alternative Gilroy MOWF sites.

As discussed above, the Authority must evaluate the alternatives associated with a Level I or Level III light maintenance facility in Gilroy along with a corresponding reduced size light maintenance facility in Brisbane. Because the San José to Merced Draft EIR/EIS analyzed only alternative locations for a Gilroy MOWF, the Revised Draft EIR/EIS concludes “Continuous sources of operations lighting would have little potential to affect wildlife, including mountain lion, because lighting would be directed toward the site and is predominantly of a fairly low intensity (approximately 5 lux for security lighting and approximately 20 to 50 lux at stations and the MOWF)³.” The Revised Draft EIR/EIS thus fails to analyze the effects of night lighting of a 24-hour per day Level III LMF in Gilroy and thereby understates impacts associated with potentially feasible project alternatives for the Gilroy maintenance facility.

2129-6427

Because the Authority has failed to analyze an alternative of a Level III LMF in Gilroy, the Authority similarly understates potential impacts to wildlife that could occur from such a facility. Specifically, in comparing the various alternatives for the San José to Merced Draft EIR/EIS that were analyzed, the Revised Draft EIR/EIS understates impacts associated with project alternatives for the Gilroy maintenance facility, including impacts associated with the 24-hour daily operations of the recommended alternative of a Level III LMF in Gilroy:

- Impact BIO#44, Intermittent Noise Disturbance of Wildlife Using Corridors during Operations states, for example, “Impacts under Alternative 4 would be similar to but slightly greater than those under Alternatives 1 and 2 because of the presence of the MOWF at the edge of the Soap Lake 10-year floodplain. (Revised Draft EIR/EIS pg. 3.7-32).

2129-6425

- A Coyote Valley Level I facility would “support train servicing and start up and close down of service at San José, Gilroy and Merced.” This site could also operate as a level III facility but would need environmental clearance for a level III facility at this location based on the availability of the Brisbane site or the phasing requirements of the project.”

Within the *Summary Requirements Operations Maintenance Facilities* report, the Authority determined that maximum maintenance levels at Brisbane could be lowered to Level I if the facility in Gilroy would be constructed with the Level III capacity. The Authority identified several LMF site alternatives in the vicinity of Gilroy with likely alternative sites in the vicinity of Morgan Hill. The site size requirements for a Level III LMF could be better suited to be placed in an area which was not within a highly developed urban area.

³ Revised Draft EIR/EIS pg. 3.7-19.

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Submission 2129 (Margaret Sohagi, City of Brisbane, June 9, 2021) - Continued

**REVISED SUPPLEMENTAL DRAFT EIR/EIS COMMENT
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- Impact BIO#47: Intermittent and Permanent Lighting Disturbance of Wildlife and Wildlife Using Corridors during Operations. Impacts under Alternative 3 would be greater than under the other three alternatives because it would cross agricultural areas east of Gilroy at grade, would cross more of the Santa Cruz Mountains to Diablo Range wildlife linkage, and would include the East Gilroy MOWF and Station in areas that currently experience low light levels. (Revised Draft EIR/EIS pg. 3.7-33).

2129-6428

As documented above, both the Draft EIR/EIS and the Revised Draft EIR/EIS for the San José to Merced segment are fatally flawed. Pursuant to the requirements of CEQA and NEPA, the Draft EIR/EIS, as revised in April 2021, must be thoroughly reworked to address impacts associated with Level III maintenance facilities in Gilroy as recommended in the Authority's March 14, 2016 *Summary of Requirements for Maintenance Facilities*.

2129-6429

The Authority Must Conduct a Project-Level Analysis of the Proposed Maintenance Facilities at Gilroy and Brisbane

The lack of a CEQA-compliant analysis of potentially feasible alternatives for a light maintenance facility in Gilroy operating in lieu of, or in conjunction with, a reduced size LMF in Brisbane can only be remedied through preparation of a specific analysis of the maintenance interrelationships between the high-speed rail's San José to Merced and San José to San Francisco segments, including analysis of:

- A Level III LMF at each of the proposed MOWF sites in Gilroy in lieu of a light maintenance facility in Brisbane;
- A Level III LMF at each of the proposed MOWF sites in Gilroy in conjunction with a Level I maintenance facility in Brisbane; and
- A Level I LMF at each of the proposed MOWF sites in Gilroy in conjunction with a reduced-size Level III maintenance facility in Brisbane.

To address their fatal flaws and provide for analysis of the maintenance interrelationships between the San José to Merced and San José to San Francisco segments, this analysis must be prepared in the form of a supplement to the Draft EIR/EIS for both high-speed rail segments and recirculated for public review.

Very truly yours,



MARGARET M. SOHAGI
THE SOHAGI LAW GROUP, PLC

**REVISED SUPPLEMENTAL DRAFT EIR/EIS COMMENT
SAN JOSÉ TO MERCED PROJECT SECTION**

June 9, 2021
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CC: Brisbane City Council
Clay Holstine, City Manager
John Swiecki, Community Development Director

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Response to Submission 2129 (Margaret Sohagi, City of Brisbane, June 9, 2021)

2129-6419

The comment asserts that the Authority failed to disclose that the proposed maintenance of way facility (MOWF) south of Gilroy is proposed to function in connection with an LMF at one of the Brisbane Baylands sites analyzed in the San Francisco to San Jose Project Section EIR/EIS (Authority 2020c), as discussed in the Authority's 2016 Summary of Requirements for Maintenance Facilities (Authority 2016d, as cited in Section 3.2, Transportation, of the Draft EIR/EIS). The comment also asserts that the Draft EIR/EIS should have analyzed LMF alternatives noted in the 2016 Summary of Requirements for Maintenance Facilities. While a multiple LMF facility approach was envisioned as part of the Authority's 2016 Business Plan, the HSR delivery approach evolved through successive updates to the business plan, and an LMF south of San Jose is no longer needed to support the Valley-to-Valley approach. The Authority's 2016 Business Plan (Authority 2016a, as cited in Section 3.2, Transportation, of the Draft EIR/EIS) indicated that San Jose Diridon Station would be a temporary terminal station for the Silicon Valley to Central Valley (Valley-to-Valley) initial start of service. Under this Valley-to-Valley approach, an LMF would be located in the San Jose to Merced Project Section, with another LMF constructed closer to the San Francisco terminus once the San Francisco to San Jose Project Section was completed, thus introducing the concept of multiple LMF sites in Northern California operating together. The Authority's 2016 Summary of Requirements for Maintenance Facilities was prepared at a time when the project delivery was contemplating an initial northern terminus in San Jose. The Valley-to-Valley approach was modified in the 2018 Business Plan (Authority 2018a, as cited in Chapter 1, Project Purpose, Need, and Objectives, of the Draft EIR/EIS), which directed that initial service would be provided between San Francisco and Gilroy, followed by a Valley-to-Valley connection to the Central Valley. This decision meant that San Francisco would be both the interim and the permanent terminal station city for the Northern California portion of the HSR system. There was no more functional need to have an LMF in Gilroy. The concept of having both an LMF in Gilroy and in Brisbane would add undesirable operational complexity to the system, have more overall environmental impacts due to the multiple locations, and add more cost to the project. With the terminal station located in San Francisco, the LMF was incorporated into the San Francisco to San Jose Project Section.

The comment is correct that maintenance facilities provided for the HSR statewide system are intended to function in concert with other facilities along the system. This is made clear in Appendix 2-G, Summary of Requirements for Operations and

2129-6419

Maintenance Facilities (located in Volume 2, Technical Appendices, of the Draft EIR/EIS). However, the functions of the LMF and the MOWF (Maintenance of Way Facility) are materially different, and so their location requirements are different. As discussed in Chapter 2, Alternatives, in the Draft EIR/EIS, for the San Jose to Merced Project Section, the MOWF near Gilroy "would provide for equipment, materials, and replacement parts storage as well as support quarters and staging areas for the HSR system rail subdivision maintenance personnel. Each subdivision would cover about 150 miles; the MOWF would be centrally located in the subdivision."

Furthermore, a MOWF in the San Francisco to San Jose Project Section (including at Brisbane) would not be centrally located in the Northern California subdivision, and thus alternatives with a MOWF were not considered for that project section. In contrast, as discussed in Chapter 2, Alternatives, in the Draft EIR/EIS for the San Francisco to San Jose Project Section (Authority 2020c), the LMF in Brisbane would "support the San Francisco terminal station operations by dispatching freshly inspected and serviced trains and crews to begin revenue service throughout the day, along with providing daily, monthly, and quarterly maintenance of HSR trainsets. Maintenance activities would include train washing, interior cleaning, wheel truing, testing, and inspections. These activities may occur between runs or as a pre-departure service at the start of the revenue day. Additionally, the LMF would be used as a service point for any trains in need of emergency services."

Please see further discussion in a new Appendix 2-M: Gilroy LMF Option Consideration and Elimination.

Also, see response to submission SJM-2129, comment 6421 regarding the potential for a LMF between San Jose and Gilroy and the environmental, operational, and cost reasons why such an alternative was not advanced and for discussion of the potential for two separate LMFs providing different levels of maintenance with one in Brisbane and one in Gilroy and the environmental, operational, and cost reasons why such an alternative was not advanced.

Response to Submission 2129 (Margaret Sohagi, City of Brisbane, June 9, 2021) - Continued

2129-6420

The comment asserts that the Draft EIR/EIS and Revised/Supplemental Draft EIR/EIS should have considered alternative activities at the Gilroy facility, including an alternative with a Level I to Level III LMF located between Gilroy and San Jose. Please see responses to submission SJM-2129, comments 6419 and 6421. A Gilroy LMF is not required to meet the operational needs of the HSR system with the San Francisco northern terminus as discussed in the response to submission SJM-2129, comment 6419, and it would result in unacceptable operational deficiencies and secondary effects as discussed in response to submission SJM-2129, comment 6421. Therefore, a Gilroy LMF was not evaluated as part of the project in the Draft EIR/EIS. Because such an alternative is not proposed or considered, there is no requirement to analyze the potential effects of such an alternative on night lighting or wildlife in the Draft EIR/EIS or the Revised/Supplemental Draft EIR/EIS.

2129-6421

The comment asserts that the Draft EIR/EIS fails to adequately analyze alternatives for the Gilroy maintenance facility. It states that the maximum maintenance level at the Brisbane LMF could be lowered to Level I if a Level III LMF were constructed between San Jose and Gilroy, referencing Appendix 2-G, Summary of Requirements for Operations and Maintenance Facilities (located in Volume 2, Technical Appendices, of the Draft EIR/EIS). The comment also asserts that maintenance facilities in Brisbane and Gilroy are envisioned to work together and that, regardless of which location is determined for Level III maintenance facilities, the HSR system would require the other facility to support Level I maintenance but that the Draft EIR/EIS fails to present this analysis of alternatives. As discussed in response to submission SJM-2129, comment 6419, due to a change in project delivery and phasing, there is no longer a requirement for an LMF (for Level I, II, or III maintenance) between San Jose and Gilroy. Appendix 2-G was prepared in 2016, at a time when the Authority was considering a permanent northern terminus in San Jose, but due to changes in subsequent Business Plans, the Authority is now considering an interim northern terminus only in San Francisco. As such, the current proposal is to conduct Level I, II, and III maintenance at a single facility in Brisbane. As discussed in new Appendix 2-M, Gilroy LMF Option Consideration and Elimination (located in Volume 2 of the Final EIR/EIS), upon release of the 2018 Business Plan, the LMF was removed from the San Jose to Merced Project Section in order to reduce the effects on location-specific environmental impacts. The Gilroy LMF options were located in the Soap Lake area, which is documented as a floodplain, wildlife corridor, farmland, and Native American cultural resource. In contrast, the LMF proposed for Brisbane is not in an area of Important Farmland, is previously disturbed, and provides more limited habitat value compared to Coyote Valley or areas surrounding Gilroy and, unlike Soap Lake, is not in an extensive floodplain.

Regarding the concept that there could be a single LMF facility providing Level I, II, and III maintenance activities between San Jose and Gilroy, such a concept is operationally deficient. While a site in Coyote Valley or a site south of Gilroy would be proximate to the mainline tracks and could accommodate a double-ended facility, the distance from such an LMF site between San Jose and Gilroy to the San Francisco terminal station would increase the number of miles a non-revenue-generating train would travel. Establishing a single LMF site in Gilroy would require an additional 27 deadhead trains per day to be added to the 124 revenue trains per day to be scheduled on the Caltrain

Response to Submission 2129 (Margaret Sohagi, City of Brisbane, June 9, 2021) - Continued

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corridor, to account for transportation from the facility to the terminal station in San Francisco for the start of daily services and back to the facility at the end of daily service. This represents nearly a 25 percent increase in the number of high-speed train movements on the entire Caltrain corridor. This would extend the hours of operation, increase the risk for train-to-vehicle interfaces at all 70 grade crossings, and therefore reduce operational reliability. As deadhead moves generally occur at the start and end of the operating day, having longer distances from the terminal station and hence longer travel times would result in either shorter windows for undertaking maintenance of the track and systems, or a shorter operational window to protect the maintenance times. Increasing the number of trains, however, would increase wear and tear of the system and increase the need for maintenance. This may also impact the blended operations schedule, due to the reduction of track capacity. Capacity is limited on the Caltrain corridor, which is predominantly a two-track railway with limited passing opportunities. The extra train slots required by these movements would also absorb the limited capacity on the two-track railway corridor between Gilroy and San Francisco. This capacity would not be available for increasing passenger service to meet today's and future needs. Cost impacts associated with the increased distance to the terminal station would include: Increased costs of train maintenance, operating crews, traction power supply, track maintenance, train control, and overhead catenary maintenance. These extra costs are estimated to be approximately \$4.7 million per year. The concept of a single LMF between San Jose and Gilroy providing Level I, II, and III maintenance activities would also result in substantial additional environmental impacts, above and beyond the impacts disclosed for project alternatives analyzed in detail in the Draft EIR/EIS for the San Jose to Merced Project Section and the Draft EIR/EIS for the San Francisco to San Jose Project Section (Authority 2020c). These effects would be avoided with a single LMF providing Level I, II, and III maintenance facilities in Brisbane. Due to the additional costs, operational deficiencies, and additional operational environmental effects of a single LMF providing Level I, II, and III maintenance activities between San Jose and Gilroy, such an alternative was not advanced for further analysis in the EIR/EIS for the San Jose to Merced Project Section or the Draft EIR/EIS for the San Francisco to San Jose Project Section (Authority 2020c). Please also see further discussion in new Appendix 2-M (located in Volume 2 of the Final EIR/EIS).

The concept of two separate LMFs, one in Brisbane and one in Gilroy, was also not

2129-6421

advanced for detailed analysis because it would result in additional cost, operational inefficiencies, and additional environmental effects compared to a single LMF in Brisbane, as discussed below. There would need to be additional footprint for two LMFs. The construction of two LMF facilities (either a Level III in Brisbane and a Level I between San Jose and Gilroy or a Level I in Brisbane and a Level III between San Jose and Gilroy) would result in substantial additional construction period effects and permanent effects. A single LMF facility that provides Level I, II, and III maintenance results in a smaller overall footprint than two LMFs, with one providing Level III maintenance and the other providing only Level I maintenance. As discussed in Appendix 2-G, both facilities require approach and exit tracks, and double-ended facilities operate far more optimally than stub-ended facilities. Both facilities would also require storage tracks for trains: (1) a Level I facility requires sufficient storage tracks to accommodate the trains to be supplied for the next morning's service at the HSR stations supported by the facility. As discussed in the Draft EIR/EIS for the San Francisco to San Jose Project Section (Authority 2020c), 10 storage tracks would be required for an LMF providing Level I daily maintenance. (2) a Level II or III facility requires from 2 to 8 maintenance shop tracks, depending on level. Both facilities would require a maintenance building with shop areas and office space, parking areas for staff, power substations, storage facilities, internal roadways, and roadway access to adjacent public roadways. As such, if there were separate Level I and Level III facilities, the total footprint would be much larger than a combined LMF providing Level I, II, and III maintenance. This would result in additional construction activity and effects due to the construction of additional facilities (such as additional track, storage, roads, and buildings) that would be avoided with construction of a single facility. Two LMFs would also require additional employees, since two facilities would be operated on a continual basis, which would result in higher operational costs. Although Level III maintenance activities are nominally monthly activities for a single train, Level III maintenance activities are done on a rolling basis for different trains, such that the Level III LMF would always be operating, resulting in additional staff dedicated to each facility. In contrast, a single facility allows for efficiencies in staff use so that staff can work on Level I, II, and III maintenance as necessary. For the reasons articulated above, a Level I LMF or a single LMF providing Level I, II, and III maintenance activities located between San Jose and Gilroy is not considered logistically desirable given the Authority's operational requirements, would result in additional operational cost, and would result in greater

Response to Submission 2129 (Margaret Sohagi, City of Brisbane, June 9, 2021) - Continued

2129-6421

operational environmental impacts due to overnight deadhead train moves compared to the proposed LMF in Brisbane. For these reasons, alternatives with a Level I LMF in Brisbane combined with a Level III LMF between San Jose and Gilroy were dismissed from further consideration.

2129-6422

Please see the response to submission SJM-2129, comment 6421, which explains why an alternative suggested by the comment was not carried forward for evaluation in the Draft EIR/EIS. The LMF alternatives analyzed in the San Francisco to San Jose Project Section Draft EIR/EIS (Authority 2020c) reflect more than a decade of alternatives development and LMF site evaluations based on the constraints and criteria necessary for an LMF.

2129-6423

Please see the response to submission SJM-2129, comment 6421, which explains that a co-located LMF with the proposed MOWF in Gilroy would result in additional construction and environmental effects compared to the proposed alternatives with an LMF in Brisbane analyzed in the San Francisco to San Jose Project Section Draft EIR/EIS (Authority 2020c) and an MOWF in Gilroy analyzed in the San Jose to Merced Project Section Draft EIR/EIS.

2129-6424

Please see the response to submission SJM-2129, comment 6421, which explains that a co-located Level III LMF with the proposed MOWF in Gilroy would result in additional construction and environmental effects compared to the proposed approach of the LMF in Brisbane and the MOWF in Gilroy.

The comment suggests the potential downsizing of the proposed Brisbane LMF to Level I facility would reduce the size to 40 acres, but it does not substantiate how the size of 40 acres was derived. As explained in the response to submission SJM-2129, comment 6421, even a Level I LMF in Brisbane would require substantial acreage for the approach and exit tracks for a double-ended facility, extensive storage tracks, parking for staff and visitors, shop area, storage, internal roads, and connection to adjacent public roadways. While shop tracks could nominally be reduced in a Level I facility compared to a Level III facility, any reduction in the Brisbane LMF footprint would come at the expense of an expansion of the MOWF footprint in an area that contains important farmland and more sensitive biological resources than the Brisbane LMF footprint, and it would be located in the Soap Lake floodplain. In addition to this increased in adverse environmental impacts, this suggested alternative involves greater operational inefficiencies and additional cost impacts as described in submission SJM-2129, comment 6421. Therefore, this alternative was dismissed from further evaluation for Brisbane or any other potential site between San Francisco and San Jose.

2129-6425

Please see responses to submission SJM-2129, comments 6419, 6421, and 6424.

2129-6426

As described in the responses to submission SJM-2129, comments 6419, 6421, and 6424, alternatives including an LMF facility between San Jose and Gilroy were dismissed from further consideration and not analyzed in the Draft EIR/EIS due to environmental, operational, and cost considerations. Therefore, contrary to the commenter's assertion, the Draft EIR/EIS and the Revised/Supplemental Draft EIR/EIS were not required to analyze the potential impacts of such a facility on lighting, wildlife movement, or other resources.

Response to Submission 2129 (Margaret Sohagi, City of Brisbane, June 9, 2021) - Continued

2129-6427

As described in responses to submission SJM-2129, comments 6419, 6421, and 6424, alternatives including an LMF facility between San Jose and Gilroy were dismissed from further consideration and not analyzed in the Draft EIR/EIS due to environmental, operational, and cost considerations. Therefore, the Draft EIR/EIS and the Revised/Supplemental Draft EIR/EIS were not required to analyze the potential impacts of such a facility on lighting, wildlife movement, or other resources.

2129-6428

The comment states that the Draft EIR/EIS and the Revised/Supplemental Draft EIR/EIS are flawed and must be revised to analyze an alternative with an LMF for Level III maintenance facilities in Gilroy instead of in Brisbane. Please see the response to submission SJM-2129, comment 6419 regarding the relationship of maintenance facilities at the Gilroy MOWF and the Brisbane LMF and the response to submission SJM-2129, comment 6421 regarding consideration of alternatives that would involve a Level III maintenance facility in the San Jose to Merced Project Section (including near Gilroy). Please see response to submission SJM-2129, comments 6426 and 6427 explaining there is not a need for lighting and wildlife impacts of an LMF alternative between San Jose and Gilroy.

2129-6429

This comment summarized prior comments regarding LMF alternatives. Please see responses to submission SJM-2129, comments 6419, 6421, 6424, 6426, and 6427.

Submission 2127 (Gerry Haas, Santa Clara Valley Habitat Agency, June 8, 2021)

San Jose - Merced - RECORD #2127 DETAIL

Status : Unread
Record Date : 6/8/2021
Submission Date : 6/8/2021
Interest As : Local Agency
First Name : Gerry
Last Name : Haas
Attachments : HSR_RDEIR_SDEIS_Comment_Letter.pdf (3 mb)

Stakeholder Comments/Issues :

Hello,

Please accept the attached comment letter on the High Speed Rail San Jose to Merced Project Revised Draft EIR/Supplemental Draft EIS. Thank you for the opportunity to comment.

Sincerely,

Gerry Haas

Conservation Planner
Santa Clara Valley Habitat Agency
669-253-6127 Mobile: 530-401-0721
www.scv-habitatagency.org<<http://www.scv-habitatagency.org/>>

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June 8, 2021

Attn: Draft San Jose to Merced Project Section EIR/EIS
100 Paseo de San Antonio, Suite 300
San Jose, CA 95113

Via e-mail: san_jose_merced@hsr.ca.gov

RE: Revised Draft EIR/Supplemental EIS Comment

To Whom it May Concern,

The Santa Clara Valley Habitat Agency (Habitat Agency) and Pathways for Wildlife (Pathways) respectfully submit the following comments on the Revised Draft EIR/Supplemental Draft EIS for the San Jose to Merced Section of the California High Speed Rail Project (RDEIR/SDEIS). The Habitat Agency and Pathways have reviewed the RDEIR/SDEIS. Although the Project is not covered by the Habitat Plan for impacts to special status species and habitats, it occurs within the Habitat Plan Permit Area and will result in significant impacts to terrestrial and aquatic species, natural resources and habitats as discussed in the document.

This comment letter does not replace the June 23, 2020 comment letter provided by the Habitat Agency and Pathways during the public comment period for the original DEIR/DEIS. The comments below are focused on the new information presented in the RDEIR/SDEIS and should be considered in addition to the original comment letter.

The RDEIR/SDEIS provides new biological resources analysis that was not included in the Draft EIR/EIS. In total, there are four primary areas of revision to the Biological Resources Chapter that required new or additional analysis and mitigation. These consist of the following:

1. New Special Status Species – Southern California/Central Coast Mountain Lion
2. New Special Status Species – Western Monarch Butterfly
3. Impacts of Construction and Operational Noise on Wildlife
4. Impacts of Construction and Operational Light on Wildlife

The following comments reflect the concerns and recommendations of the Habitat Agency/Pathways upon review of the revised sections of the RDEIR/SDEIS

Submission 2127 (Gerry Haas, Santa Clara Valley Habitat Agency, June 8, 2021) - Continued

2127-6323

1. Southern California/Central Coast Mountain Lion Candidate Listing for the California Endangered Species Act by the California Fish and Game Commission

On May 1, 2020, the California Fish and Game Commission published a notice of findings to designate the southern California/Central Coast population of the mountain lion as a candidate species under the California Endangered Species Act. The petition cites that both sub-populations have low genetic diversity and effective population sizes. As stated in the RDEIR/SDEIS, although low population size alone is a cause for conservation concern, habitat loss and fragmentation due to roads and development have led to extreme levels of isolation and high mortality rates. Understandably, the effects of construction and operation of a new rail line will have significant impacts on a species which requires extensive unfragmented habitat for hunting and breeding. Linear features such as roads and railways are particularly challenging for mountain lion, which is a highly mobile species. The RDEIR/SDEIS recognizes to this impact and identifies mitigation measures for short-term construction and long-term operational impacts to mountain lion habitat and also to connectivity between sub-species that is critical to their genetic diversity.

The importance of the candidate listing of mountain lion is that it is now considered a special status species and mitigation measures must be tailored specifically for direct and cumulative effects to the species that could result from the project. Several of the original mitigation measure were modified to address the candidate listing of mountain lion because, as stated in the RDEIR/SDEIS, mountain lion habitat and connectivity impacts analysis was included in the DEIR/DEIS, which relied on the Wildlife Connectivity Analysis (WCA) (Appendix C of the *Biological and Aquatic Resources Technical Report*) prepared for the High Speed Rail Authority (HSRA). The mitigation measures included in the DEIR/DEIS were, therefore, carried forth into the RDEIR/SDEIS with some modifications. Four new measures (MM#86 - MM#89) were introduced in the RDEIR/SDEIS, with three of them specifically addressing additional mountain lion impacts.

Most of the mitigation measures designed to reduce impacts on mountain lions are focused on minimization of construction time impacts, conducting of surveys and monitoring and compensatory mitigation. In large part, the Habitat Agency and Pathways are supportive of the measures.

However, one has not been modified to effectively address concerns raised by the Habitat Agency and Pathways in the June 2020 comment letter and also in previous and subsequent meetings with HSRA. MM#78 includes a requirement for wildlife crossings through the 2.5-mile section of embanked rail line. The wildlife crossings are necessary because without them, the embanked length of extending from Casa de Fruta to the east would be a complete barrier to wildlife movement. Although it is encouraging that HSRA has proposed culverts to support wildlife movement every 0.3-mile, the culverts would only assist small wildlife species such as foxes, badgers, etc. Large mammals such as mountain lion and deer are not inclined to use culverts for passage as they move between landscapes. In addition, tule elk, will not use culverts at all. For this species and, to a lesser degree also for deer and mountain lion, a 2.5-mile length of raised earth rail line will be a significant impact to the movement these species require.

2127-6323

Comment 1

Please revise MM#78 to include an analysis of, and potential commitment to replacing multiple culverts with short segments of open-span bridge or elevated rail in the embankment sections of the alignment in the west slope of Pacheco Pass. Megafauna such as mountain lion, tule elk and deer are much less likely to use culverts than they are to use open spans of undercrossing.

2127-6324

In addition to the candidate listing of mountain lion, the RDEIR/SDEIS acknowledges Pathways' recently completed study – *Wildlife Permeability and Hazards across Highway 152 Pacheco Pass: Establishing a Baseline to Inform Infrastructure and Restoration 2020* (Permeability Study). The Permeability Study documents and highlights that the Habitat Agency's Pacheco Creek Reserve is a heavily utilized site for breeding, foraging, hunting and landscape movement for numerous wildlife species, including mountain lion. Several mountain lions have been photographed throughout the PCR, most of which are concentrated in the PCR's westernmost parcel outlined in yellow in the image below. The orange circles denote specific locations of passage of either mountain lion or tule elk, another species being noticed more frequently in the area.



The importance of this image is that the concentration of documentation of megafauna through the PCR to date indicates that the SR 152 bridge over Pacheco Creek at the downstream end of the PCR is a key feature on the landscape which provides safe access beneath SR 152 and connects the Gavilan/Santa Cruz Mountain ranges to the south and west with the Diablo range to the north. The Permeability Study demonstrates that of the five primary culverts and bridges that provide safe wildlife crossings in the Study's reach of Pacheco Pass, this particular bridge is the most frequently used with 845 documented wildlife passages in a single year.

Submission 2127 (Gerry Haas, Santa Clara Valley Habitat Agency, June 8, 2021) - Continued

Study Site	Total Wildlife Passages Recorded from July 2018-July 2019.
Pacheco Creek Bridge	845
Pacheco Reserve Dual Box Culvert	720
Firestation Bridge	700
Cedar Creek Bridge	485
Elephanthead Dual Box Culvert	375
Grand Total	3,125

2127-6324

2127-6324

The importance of this bridge as a safe passage beneath the busy highway that connects large areas of open space has led to the development of infrastructure plans by the Habitat Agency, Pathways and the California Department of Transportation (Caltrans) to increase the functionality of the bridge for safe highway crossings. When the creek beneath the bridge is inundated with water, there is a corresponding increase in wildlife mortality on the highway above. These infrastructure features will include a new dirt pathway under the bridge and on top of the rip-rap armoring at the headwalls to facilitate movement of species during high flow events, culvert clearing and passage improvements. In addition to improving passage beneath the bridge and through culverts, the Study concluded that directional fencing on both sides of SR 152 would encourage wildlife species to utilize existing bridges and culverts instead of crossing over the highway and thus would reduce localized roadkill. Caltrans is very supportive of this improvement and has offered financial assistance to the Habitat Agency to conduct the work. These improvements, funded by a Local Assistance Grant, Habitat Agency funding and additional assistance from Caltrans may be constructed as early as fall 2021.

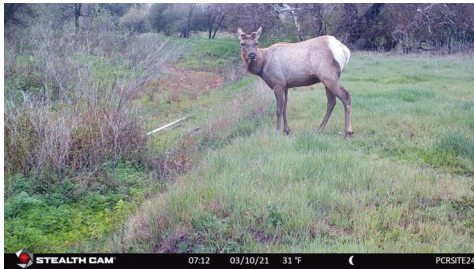


While the bridge at the PCR is clearly a critical connectivity point between the two mountain ranges, it also provides access up and downstream for many other species that rely on the creek for habitat. Until the Permeability Study was completed, the extent of species activity and habitat use on this site and specifically beneath this bridge was not fully understood. The bridge is especially important to deer, mountain lion and tule elk as they generally do not utilize culverts of any size and prefer open spans of bridge to cross beneath linear structures. These megafauna are much more likely to cross over highways where conflict with motorized traffic is common in the Pacheco Pass. All three of these species have been documented in the PCR in the vicinity of the bridge and beneath it. Now its importance to wildlife is clear and the steps the Habitat Agency will take in the coming years will be focused on further protecting and enhancing wildlife use of this critical feature.



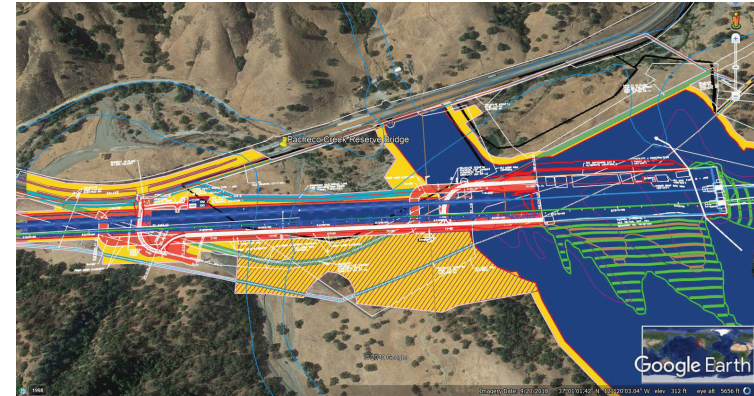
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Submission 2127 (Gerry Haas, Santa Clara Valley Habitat Agency, June 8, 2021) - Continued



2127-6324

As it relates to the mountain lion, the PCR provides both habitat and an important connection point for the species between mountain ranges. For this reason, the proposed use of the site for a tunnel entrance for High Speed Rail and an embanked and elevated length of track just a few hundred feet from this bridge will have significant short and long term effects on mountain lion use of the site. Below is a representation of the land cover impacts that will result from the construction of the HSR alignments through a portion of the PCR. The image shows its proximity to this highly used bridge.



2127-6324

Impact BIO#42 identifies temporary disruption to wildlife and wildlife movement. Please note that the Habitat Plan considers temporary impacts to last no longer than one year in duration with an additional one year for the site to return to pre-existing conditions. All other impacts are considered permanent. The Habitat Agency understands that definitions of “temporary” may vary and for the purpose of CEQA/NEPA, the definition can be considered in the context of the project as a whole. However, the construction activity at the tunnel entrance on the Pacheco Creek Reserve (PCR) may last at least three, and as many as five years in duration. There will be extensive noise, light, heavy equipment and vehicular traffic introduced into the PCR, where existing conditions include only the traffic noise from the adjacent Pacheco Pass Highway. The further one travels southward from the highway, the less audible/visible and more muted is the traffic noise and light.

Construction activity at the PCR for a period of 3-5 years will be a significant impact as noted in the RDEIR/SDEIS, but what was overlooked is that this construction period has the very real potential to completely scare away mountain lion, deer and elk (as well as other species) from the PCR for generations. The effects of multiple years of construction activity could cause mountain lions to change their movement and dispersal patterns and there could be a corresponding decrease in the use of the bridge at the PCR, possibly negating the expense and effort the Habitat Agency and Pathways have contributed to the careful management of the site, the ongoing monitoring and the pending infrastructure improvements.

Following the extensive and highly disruptive construction window, the use of the tunnel, embankment and elevated sections of rail will continue to impact mountain lion, which are typically shy and avoid human activity and development. The direct effects of construction activity on the PCR will result in a permanent change to a critical landscape linkage that is currently utilized by mountain lions, which will be compounded by the immediate initiation of a new use, the high-speed rail line. This sequence of new uses and impacts to the site will undoubtedly affect the future use of the site by mountain lion and will

Submission 2127 (Gerry Haas, Santa Clara Valley Habitat Agency, June 8, 2021) - Continued

2127-6324

likely result in a “dead zone” of mountain lion hunting, breeding and, most importantly, movement between the high-speed rail alignment and the nearby Pacheco Pass Highway.

While compensatory mitigation may be appropriate for direct on-site impacts to species and habitat, it is insufficient for construction and long-term operational impacts on wildlife connectivity in the region. Only one mitigation measure attempts to address the loss of permeability due to construction of the rail line and the barriers it represents. MM#79 focuses on offsetting permeability impacts through the entire San Jose to Merced alignment. But it only addresses impacts from the maintenance of way facility (MOWF) and is only focused on the Santa Cruz Mountains and the Soap Lake floodplain. It consists of, at best, land to be set aside as mitigation with some enhancement. The significant cumulative impacts to mountain lion connectivity that will radiate outward from the PCR need to be mitigated in the Pacheco Pass area because that is where the critical mountain lion linkage will be most directly affected.

As stated above, the Habitat Agency and Pathways do not consider compensatory land acquisition alone to be sufficient mitigation for these impacts. Nor are the design features and minimization measures adequate to address the scale of impacts to the local mountain lion population. This is because these collective measures do not reduce the impact to zero and there will still be a net loss of habitat and permeability. At least one land bridge to replace the lost function of the well-established PCR bridge in facilitating movement of highly mobile mountain lion (and also deer and tule elk) should be constructed over SR 152 in the Pacheco Pass area. This would be considered by the Habitat Agency and Pathways to be a means to address the significant loss of permeability, connectivity and the challenges that a development of this scale represent to the mountain lion.

Comment 2

The Final EIR/EIS should include a mitigation measure committing the High-Speed Rail Authority to provide 100% of the funding and resources necessary to fully design and permit a minimum of one land bridge spanning SR 152 in the Pacheco Pass area. Additionally, the High-Speed Rail Authority should commit to providing 50% of the construction cost of one or more land bridges in Pacheco Pass. The remaining construction funding will be met by the Habitat Agency and may include funding from other sources (partners, grants, etc.)

2127-6325

The proposed method for locating mountain lion dens in the project area, as specified in MM#87, is not likely to be successful. Mountain lion dens are extremely difficult to locate, even for qualified biologists. Leading mountain lion expert Chris Wilmers, PhD., who was consulted on this issue, stated that the only way to locate mountain lion natal dens is by using GPS collar data. (Please see attached letter from Chris Wilmers, UCSC Puma Project.)

Comment 3

How does HSRA plan to include effective methods for finding and locating mountain lion dens? Will GPS collar studies be incorporated into this methodology, requiring radio collaring expertise and permitting?

2127-6326

In MM#88, the proposed compensatory mitigation ratio for permanent impacts to breeding/foraging habitat and high priority foraging and dispersal habitat is of 2:1. The proposed mitigation ratio for

2127-6326

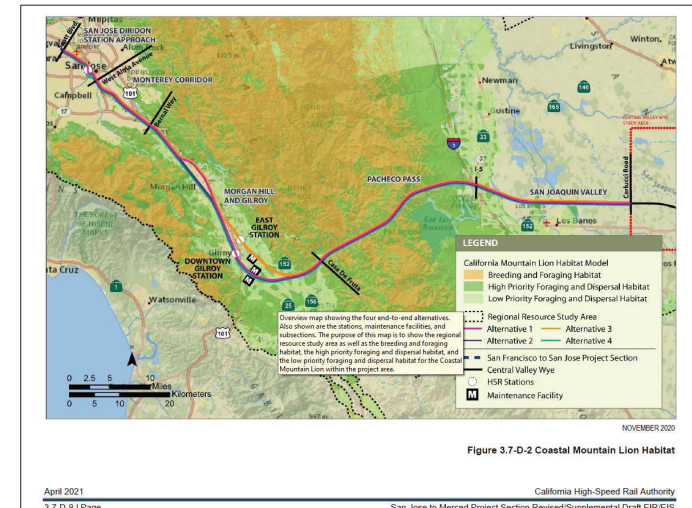
permanent impacts to low priority foraging and dispersal habitat is 1:1. The Habitat Agency and Pathways consider both of these mitigation ratios to be too low.

The Pacheco Pass area that will be permanently impacted consists both of high priority and low priority foraging and dispersal habitat. Please see revised HSR DEIR Figure 3.7-D-2 Coastal Mountain lion habitat below. Chris Wilmers has also noted in his comment letter that the current HSR design and proposed mitigation measures will have a significant effect on the genetic status for mountain lions in the Pacheco Pass linkage area.

We echo Chris Wilmers comments that the proposed mitigation ratios are inadequate for ensuring genetic connectivity and the health of this region’s mountain lion population, which is currently under review as a candidate species for listing due to the low genetic effective population size and heterozygosity.

Comment 4

Will HSRA include adequate mitigation ratios for permanent impacts to both high and low priority foraging and dispersal habitat for mountain lion in the FEIR/FEIS?



Submission 2127 (Gerry Haas, Santa Clara Valley Habitat Agency, June 8, 2021) - Continued

2127-6327

2. Monarch Butterfly Candidate Listing for the Federal Endangered Species Act

On December 15, 2020, the monarch butterfly became a candidate for listing under the FESA. Monarch butterfly do not overwinter within the project area but are known to migrate through and even breed in the area. Several locations along the rail alignment within the Habitat Plan permit area include milkweed and suitable foraging and breeding habitat. This is certainly true for the Pacheco Creek Reserve. Compensatory mitigation along the entire alignments through the Habitat Plan permit area for permanent impacts to monarch butterfly breeding/foraging habitat as described in MM#86 should include language that accurately describes the permanent impacts. Specifically, future O&M activities adjacent to the tracks and especially vegetation management should be considered the “footprint” of the permanent project impacts. Surveys for milkweed should be conducted to determine potential for monarch butterfly in advance of construction activities on all new sections of rail.

Comment 5

Please revise and strengthen MM#86 to require an accurate assessment of the permanent impacts of the project for the purpose of determining an appropriate compensatory mitigation figure for impacts to monarch butterfly. MM#86 should clearly state that the permanent impacts include all permanent development plus a vegetation management buffer that is equal to the anticipated area of vegetation management in the future. In addition to compensatory mitigation, we believe HSR should contribute monies to a Monarch butterfly pollinator habitat restoration fund designed to facilitate the creation and restoration of pollinator habitat within the NCCP permit area.

2127-6328

3. Noise and Vibration Disturbances to Wildlife

The noise analysis prepared for the Biological Resources Chapter 3.7 identifies construction noise, propulsion or machinery noise from electric motors, mechanical noise from the wheels on the track and aerodynamic noise resulting from airflow moving past the train. These noise sources do not reference “tunnel boom”, which is a sonic boom that can be caused when a train enters a tunnel at high speed. Section 3.4 *Noise* only provides a brief explanation of potential avoidance or minimization of a shock wave:

“Based on the current tunnel design, roughly half of the sound generated in the tunnel would pass out through the portal, and the other half would propagate into the interior. The effect would be a rapid rise in sound level as the train leaves the tunnel and portal, forewarned by a propagating wave ahead of the train. Depending on the shape of the portal, shape of the train nose, and blockage ratio, the rate of pressure rise associated with rapid train movement can be substantial. The pressure wave front rate of rise is reduced by friction between the moving air column and tunnel wall, so that the pressure wave does not easily develop into a shock wave. This portal noise effect has been studied theoretically and experimentally and is well understood. However, as described in Chapter 2, Alternatives, attenuation of the portal noise will be achieved with long, flared portals and low blockage ratios. In-tunnel cross-passages and vents may also be utilized to reduce pressure magnitudes and rates of rise, though passage of these vents may generate additional propagating and steepening wave fronts. These tunnel and tunnel portal design features will be used to attenuate additional noise associated with the train entering or exiting a tunnel.”

This language does not seem to imply that tunnel boom or shock waves will not be experienced at the portals, but that they will be minimized through portal design features. Intermittent and repeated shock

2127-6328

waves or sonic booms would be highly disruptive to nearly all forms of wildlife occurring at the PCR or near either of the portals of the tunnel section beginning at Casa de Fruta.

Comment 6

Please confirm the tunnel portal at the Pacheco Creek Reserve will not experience shock waves or “tunnel boom” when trains enter or exit the portal.

2127-6329

As mentioned in the RDEIR/SDEIS, the impacts of construction and operational noise on wildlife is significant, and mitigation measures are proposed to reduce these impacts, including construction of a sound barrier in various segments of the rail alignment where operational noise would be more impactful on existing development or wildlife. However, the Habitat Agency and Pathways do not feel that a sound barrier, as proposed in MM #77b, and which would be a minimum of 17 feet tall and stretching for considerable distances, is a good solution. Even with culverts installed beneath the wall for wildlife access, the walls will be a significant visual and physical barrier. In the HCP-NCCP permit area where terrestrial movement is critical, especially in the Pacheco Pass SR 152 area, sound barriers should not be considered.

Comment 7

The Habitat Agency and Pathways do not support the use of sound walls in any locations of the rail alignment through the Habitat Plan area that support terrestrial wildlife movement.

2127-6330

4. Lighting and Visual Disturbance Effects on Wildlife

The RDEIR/SDEIS includes an analysis of artificial light at night (ALAN) impacts on various wildlife species. The new analysis concludes that construction lighting will be subject to a lighting plan to ensure all lighting is directed in toward the work area and only the minimum required. Operationally, the impacts of train headlights will be significant, but short duration, with the greatest impacts at locations where the train is at grade or on an embankment. Other light impacts are limited to the safety lighting of the track, which is proposed to be minimal and only directed inward and downward on the track itself.

Light impacts are further addressed in MM#77b and are proposed to be partially mitigated through the construction of light and sound barrier. Specifically, the 17-foot tall opaque walls that are intended to screen noise and light from adjacent sensitive receptors. Again, the Habitat Agency and Pathways consider such walls to result in additional impacts and should not be incorporated into designs in areas where terrestrial wildlife movement occurs. In our opinion, it would be better for wildlife to habituate to the noise.

To address the impacts of light, short screening walls could be installed adjacent to the track in at-grade or embankment sections. A mitigation measure to ensure minimal or no light trespass onto adjacent natural lands should also be implemented.

Comment 8

All lighting at the portals and along the rail alignment within the Habitat Plan permit area must be directed inward toward the track and not be allowed to spill onto adjacent land cover or upward into

Submission 2127 (Gerry Haas, Santa Clara Valley Habitat Agency, June 8, 2021) - Continued

2127-6330

the sky. There should be a requirement to minimize or restrict light spillage onto adjacent natural landscapes. HSRA should demonstrate that all exterior lighting at all facilities complies with the International Dark Sky Association's Dark Sky Standards.

Comment 9

2127-6331

All lighting at fixed facilities like maintenance areas, corporation yards, switching stations or unmanned buildings should not be illuminated, or should only be minimally illuminated only for security purposes. Light should not be allowed to spill onto adjacent land cover or upward into the sky.

The Habitat Agency and Pathways fully expect that the HSRA will act in good faith with regard to the discussions and commitments made between the two parties thus far. In this respect, these comments on the RDEIR/SDEIS are intended to provide an opportunity for the HSRA to correct the administrative record and strengthen its position on biological and aquatic resource impacts mitigation.

We look forward to having our comments addressed in the Final EIR/EIS and welcome any engagement on behalf of HSRA to ensure that its responses to our comments are sufficiently vetted and provide adequate mitigation for project impacts in the eyes of the Habitat Agency.

Thank you for your time,

Sincerely,



Edmund Sullivan, Executive Officer
Santa Clara Valley Habitat Agency

Attachments:

- 1- Comment Letter from Christopher Wilmers, Phd. on project impacts and mitigation for mountain lion

UNIVERSITY OF CALIFORNIA, SANTA CRUZ

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SANTA BARBARA • SANTA CRUZ

email: cwilmers@ucsc.edu
voice: 831-459-3001
fax: 831-459-4015

May 17, 2021

Dear High Speed Rail Authority,

I am writing to comment on the recently revised mountain lion EIR for the high speed rail section crossing the Pacheco Pass and Coyote Valley. These areas are important habitat for mountain lions providing genetic connectivity for mountain lions. This is especially important given the low genetic heterozygosity of mountain lions in this area and their recent proposed listing as a threatened species in California. The proposed mitigation measures are insufficient to insure genetic connectivity and the health of mountain lion populations in this area.

In particular measure BIO-MM#87 is insufficient to finding and mitigating the impact on mountain lion nursery sites (i.e. dens). Finding mountain lion nursery sites is like finding a needle in a haystack. The only scientifically substantiated way of finding nursery sites is to use tracking data from female mountain lions fitted with GPS collars. Even with GPS location data indicating that a nursery site might exist within a 10 meter diameter circle, it can take trained biologists up to half an hour to locate the den. Scaling this up to the tens of square kilometers that you are proposing, without the aid of GPS instrumented animals, would be a fool's errand.

Additionally, I would like to request that adequately sized over- or under-crossings be provided in order to allow safe passage of mountain lions across the rail lines. The current proposed culverts are too long and narrow to be suitable as a mountain lion crossing.

Sincerely,



Christopher Wilmers
Professor

Response to Submission 2127 (Gerry Haas, Santa Clara Valley Habitat Agency, June 8, 2021)

2127-6323

Refer to Standard Response SJM-Response-BIO-8: Impact on Wildlife Movement in the Western Pacheco Pass Region.

2127-6324

Refer to Standard Response SJM-Response-BIO-8: Impact on Wildlife Movement in the Western Pacheco Pass Region.

2127-6325

The commenter asserts that pre-construction surveys for mountain lion required under BIO-MM#87 are insufficient. The Authority acknowledges that there are technical challenges surrounding the identification of mountain lion dens, as noted by the commenter. However, there are also no existing survey protocols that have been developed to date for mountain lions. Consequently, the Authority determined that surveys for mountain lion dens would represent a “best effort” to find and avoid dens if possible, absent other options. Additionally, with respect to GPS collar data, the Authority has modified BIO-MM#87 in the Final EIR/EIS to note that GPS collar data may also be used to help identify mountain lions and their dens.

2127-6326

Refer to Standard Response SJM-Response-BIO-8: Impact on Wildlife Movement in the Western Pacheco Pass Region.

Please also see the response to submission SJM-2134, comment 6245, which discusses mitigation ratios for mountain lions and the overall mitigation strategy for addressing impacts on genetic connectivity/wildlife movement.

2127-6327

The commenter generally summarizes the status and biology of the monarch butterfly. The commenter also asserts that compensatory mitigation for impacts should accurately describe the “footprint” of permanent project impacts (i.e., all areas subject to future operations and maintenance activities within the right-of-way). The commenter also notes that surveys should be conducted in advance of project construction activities. Lastly, the commenter suggests an additional mitigation measure to contribute money to a monarch butterfly pollinator habitat restoration fund.

The Authority notes that BIO-MM#14 in the Revised/Supplemental Draft EIR/EIS already requires surveys for host plants and adult butterflies as suggested by the commenter. With respect to permanent habitat impacts, the Authority has already considered all areas within the HSR right-of-way as permanently affected for the purposes of the impact assessment. Operations and maintenance activities that could result in vegetation removal and habitat disturbance would also occur in this corridor. Table 3.7-13 in the Revised/Supplemental Draft EIR/EIS outlines the amount of permanent and temporary potential habitat impacts from the proposed project. However, the Authority also notes that not all potential habitat would be occupied by monarch butterfly or its host or nectar plants. Consequently, BIO-MM#86 requires compensatory mitigation for permanent impacts on occupied breeding and foraging habitat (i.e., occupied habitat identified under BIO-MM#14). Lastly, the Authority has considered the commenter’s suggestion to contribute funds to a monarch butterfly pollinator habitat restoration fund; however, no such fund currently exists, and therefore such a measure is not feasible.

2127-6328

The Authority confirms that the tunnel portal at the Pacheco Creek Reserve would not experience shock waves or “tunnel boom” when trains enter or exit the portal based on project design features included in Section 2.4.4.5, Tunnel Profile, of the EIR/EIS, including long, flared portals and low blockage ratios and use of in-tunnel cross-passages and vents to reduce noise pressure magnitudes and rates of rise, and the analysis presented in Impact NV#5 in Section 3.4, Noise and Vibration, of the Draft EIR/EIS as quoted by the commenter.

Response to Submission 2127 (Gerry Haas, Santa Clara Valley Habitat Agency, June 8, 2021) - Continued

2127-6329

The Authority understands the comment and the concern. Revisions to the Final EIR/EIS in BIO-MM#80 clarify that the noise/visual barriers proposed for the western Pacheco Pass area would be installed on viaduct structures, not on at-grade or embankment sections. Consequently, they would not affect terrestrial wildlife movement because the viaduct would continue to allow species movement under the structure.

2127-6330

The commenter summarizes the Revised/Supplemental Draft EIR/EIS analysis and mitigation provided to address ALAN impacts and again notes that commenter does not support the noise/visual barriers proposed under BIO-MM#80 because they assert that the barriers will have impacts on terrestrial wildlife movement. Please see response to submission SJM-2127, comment 6329 regarding the placement of the noise/visual barriers. The barriers would not affect terrestrial wildlife movement.

The commenter also suggests additional mitigation measures requiring the direction of light sources to avoid “spill over” into adjacent natural landscapes and suggests that all exterior lighting should comply with the International Dark Sky Association’s Dark Sky Standards. The Authority has clarified in the Final EIR/EIS in Chapter 2, Alternatives, that lighting sources would be required for safety and security at some project facilities. Chapter 2 in the Final EIR/EIS also clarifies that all exterior lighting sources would be shielded and directed downward and would use the minimum amount of lights necessary to ensure safety and security and to be consistent with OSHA standards. The Authority notes that these clarifications are generally consistent with the International Dark Sky Association’s Dark Sky Standards, which focus on only lighting the area required, only lighting when needed, being no brighter than necessary, minimizing blue light emissions, and being shielded to point downward.

2127-6331

The Authority notes that lighting at some project facilities is required to ensure safety and security and/or to facilitate emergency access. BIO-MM#89 requires the Authority to include outdoor lighting at operations facilities using the minimum OSHA requirements so that excess lighting is not inadvertently installed. The Authority has also clarified in the Final EIR/EIS in Section 2.4.3.2, Station Facilities Building, that fixed lighting sources would be designed to direct light downward, using shielding and other methods, minimizing light spillover into adjacent areas. Lastly, the Authority notes that BIO-IAMF#12 in the Draft EIR/EIS would also require the Authority to reduce horizontal or skyward illumination using shielding. Collectively, these project design, impact avoidance, and mitigation measures would minimize or avoid the spilling of light onto adjacent lands or into the sky.

Submission 2132 (Rita Khosla, Santa Clara Valley Water District, June 9, 2021)

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San Jose - Merced - RECORD #2132 DETAIL	
Status :	Unread
Record Date :	6/9/2021
Submission Date :	6/9/2021
Interest As :	Local Agency
First Name :	Rita
Last Name :	Khosla
Attachments :	Letter_13665_-_Revised_Supplemental_Draft_EIR_EIS_Focused_on_Biological_Resources_Analysis_Content.pdf (411 kb)

Stakeholder Comments/Issues :

Thank you,
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Clean Water • Healthy Environment • Flood Protection

File: 32244
Various

June 9, 2021

California High-Speed Rail Authority
 Northern California Regional Office
 Attn: San Jose to Merced Project Section: Revised/Supplemental Draft EIR/EIS Comment
 100 Paseo de San Antonio, Suite 300
 San Jose, CA 95113

Subject: Revised/Supplemental Draft EIR/EIS Focused on Biological Resources Analysis Content

Dear California High-Speed Rail Authority:

Santa Clara Valley Water District (Valley Water) staff has reviewed the San Jose to Merced Project Section: Revised/Supplemental Draft Environmental Impact Report/Environmental Impact Statement (DEIR/DEIS) for the California High Speed Rail Project (Project). Valley Water is a special district with jurisdiction throughout Santa Clara County. Valley Water acts as the county's groundwater management agency, principal water resources manager, flood protection agency and is steward for its watersheds, dams and creeks, and underground aquifers.

This letter transmits comments that focus on the areas of interest and expertise of Valley Water.

Specific Comments:

2132-6236

Page 3.7-27: The described install of noise/visual barriers along high-speed rail (HSR) in upper Pacheco Creek (all HSR alternatives) would introduce movement barrier to wildlife including listed and/or special-status amphibian, reptile, and mammal species (e.g. California red-legged frog, California tiger salamander, Western pond turtle, mountain lion).

2132-6237

Appendix 3.7-E: The dedicated wildlife crossings included in Appendix 3.7-E would likely be effective for mountain lion but would likely not be effective for amphibian and reptile species, as the noise barriers apparently extend several hundred feet without wildlife crossings near Pacheco Creek, see Appendix 3.7-E, Figure 3.

We appreciate the opportunity to comment on the DEIR. Please provide a copy of the Final Environmental Impact Report (FEIR) to Valley Water when available.

If you have any questions, please contact me at (408) 630-3157 or Ms. Yvonne Arroyo at (408) 630-2319.

Sincerely,
Kevin Thai

Kevin Thai, CFM
 Assistant Engineer II
 Community Projects Review Unit

cc: U. Chatwani, R. Blank, J. Bourgeois, L. Bankosh, V. De La Piedra, D. Mody, T. Sexauer, Y. Arroyo, C. Haggerty, K. Thai, File



Response to Submission 2132 (Rita Khosla, Santa Clara Valley Water District, June 9, 2021)

2132-6236

The commenter asserts that the noise/visual barriers in the upper Pacheco Creek area will result in a new barrier to movement of terrestrial wildlife species. Mitigation measure BIO-MM#80 has been revised in the Final EIR/EIS to clarify that the noise/visual barriers in upper Pacheco Creek would be located on a section of viaduct. Consequently, the barriers would be elevated on the viaduct itself and would not result in a new movement barrier to terrestrial wildlife such as suggested by the commenter.

2132-6237

Please see the response to submission SJM-2132, comment 6236. The noise/visual barriers within the upper Pacheco Creek area are proposed to be located on a section of viaduct and therefore would not affect terrestrial species movement at that location.

Submission 2133 (Cheron McAleece, The Sohagi Law Group, PLC on behalf of the City of Brisbane, June 9, 2021)

San Jose - Merced - RECORD #2133 DETAIL

Status : Unread
Record Date : 6/9/2021
Submission Date : 6/9/2021
Interest As : Local Agency
First Name : Cheron
Last Name : McAleece
Attachments : 210609 City of Brisbane Comment Letter - San Jose to Merced Section Revised-Supplemental Draft EIR-EIS Comment.PDF (79 kb)

Stakeholder Comments/Issues :

Attached please find comments on behalf of the City of Brisbane, California on the Revised/Supplemental Draft EIR/EIS for the San José to Merced Section of the California High-Speed Rail Project.

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Submission 2133 (Cheron McAleece, The Sohagi Law Group, PLC on behalf of the City of Brisbane, June 9, 2021) - Continued

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June 9, 2021

VIA EMAIL AND SUBMISSION TO THE HSR WEBSITE

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**REVISED SUPPLEMENTAL DRAFT EIR/EIS COMMENT
SAN JOSÉ TO MERCED PROJECT SECTION**

100 Paseo de San Antonio, Suite 300
San José, CA 95143

Re: Comments by the City of Brisbane, California, on the Revised/Supplemental Draft Environmental Impact Report/Environmental Impact Statement for the San José to Merced Section of the California High-Speed Rail Project

To Whom It May Concern:

2133-6430

The California High-Speed Rail Authority (Authority) has issued what it refers to as a “limited revision” to its previously published Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) for the San José to Merced Project Section of the California High-Speed Rail Project. On behalf of the City of Brisbane, California (City), we hereby submit comments on the Revised Draft Environmental Impact Report/Supplemental Environmental Impact Statement (Revised Draft EIR/EIS) for Project under the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

The Draft EIR/EIS that the Authority is attempting to revise fails to disclose the fact that the proposed Gilroy Maintenance of Way Facility (MOWF) is intended to balance and supplement the functions of a light maintenance facility (LMF) the Authority proposes to construct in Brisbane.

The San José to Merced Project Section Draft EIR/EIS assumes a MOWF in Gilroy. As further discussed in the City’s September 2020 comments on the Draft EIR/EIS for the San Francisco to San José Section, the Authority fails to disclose the interrelationship between the proposed Gilroy and Brisbane maintenance facilities, resulting in a failure to properly address potential alternatives. The Authority makes the same error in the Draft EIR/EIS for the San José to Merced Section. Evidence of the intended interrelationship of the system’s maintenance activities between the San José to Merced and the San José to San Francisco segments of the system, along with the Authority’s alternatives analysis pertaining to the Gilroy and Brisbane maintenance facilities is included in Appendix 2-G of the San José to Merced Draft EIR/EIS and Appendix 2-F of the San Francisco to San José Draft EIR/EIS, both of which include as appendices the Authority’s March 14, 2016 “*Summary of Requirements for Maintenance*

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**REVISED SUPPLEMENTAL DRAFT EIR/EIS COMMENT
SAN JOSÉ TO MERCED PROJECT SECTION**

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Facilities.” However, neither Draft EIR/EIS appears to consider the Gilroy and Brisbane maintenance facilities activities and alternatives recommended in the Authority’s *Summary of Requirements for Maintenance Facilities*.

Therefore, both the Draft EIR/EIS and the Revised Draft EIR/EIS for the San José to Merced segment are fatally flawed for the following reasons:

- While the Draft EIR/EIS analyzed alternative *locations* for the Gilroy maintenance facility, it did not analyze alternatives for the *activities* that could occur at the Gilroy maintenance facility.
- As a result, the Revised Draft EIR/EIS fails to adequately analyze night lighting and operations impacts of potential Level III maintenance activities on wildlife adjacent to each of the alternative Gilroy MOWF sites.

The Draft EIR/EIS Fails to Adequately Analyze Alternatives for the Gilroy Maintenance Facility.

The *Summary of Requirements for Maintenance Facilities* identifies potential light maintenance facility sites for the entire statewide high-speed rail network based on its criteria and recommended the following rolling stock facilities:

- Brisbane, LMF
- Gilroy, LMF
- Central Valley, LMF
- Antelope Valley, LMF
- Los Angeles, West Yard LMF
- Los Angeles, Montebello Yard LMF
- Anaheim, LMF

Although the Authority envisioned only one location within the northern section route (between San Francisco and Merced) for a Level III LMF, the *Summary of Requirements for Maintenance Facilities* identifies two potential locations, Gilroy and Brisbane, both of which are identified in Table 1 and Table 2 of that report, portions of which are provided below.

From *Summary of Requirements for Maintenance Facilities*, Table 1: Summary of HMF, LMFs

Facility Location/ Type	No. Tracks	Level	YR 2025 Proj. Fleet of 19 Train Sets (TS)		YR 2034 Proj. Fleet of 19 Train Sets (TS)		YR 2059 Proj. Fleet of 19 Train Sets (TS)	
			Total	AM	Total	AM	Total	AM

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Submission 2133 (Cheron McAleece, The Sohagi Law Group, PLC on behalf of the City of Brisbane, June 9, 2021) - Continued

**REVISED SUPPLEMENTAL DRAFT EIR/EIS COMMENT
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			TS	TS	TS	TS	TS	TS
Brisbane LMF	13 Yd 2 or 8 Shop	III (or I)	8-10	6-8	14-17	10-13	16-21	12-17
Gilroy LMF	10 Yd 8 or 2 Shop	I (or III)	8-10 (See Note)	6- 8 (See Note)	13-15	10-14	13-17	12-16

The critical note to this table presented in the *Summary of Requirements for Maintenance Facilities* states:

- **Maximum maintenance level at Brisbane could be lowered to Level I if the facility in Gilroy is built with the Level III capability.** (emphasis added)

From *Summary of Requirements for Maintenance Facilities, Table 2: HMF, LMF, MOI Locations*

Proposed Facility	Miles (from SF Transbay)	Approximate location name	Comment
LMF	5.00	Brisbane	<ul style="list-style-type: none"> • Level III facility to support train servicing and start up and close-down of service at San Francisco. • Corresponds to location of proposed LMF. • This site could also function as a Level I site on a smaller footprint to support service for the San Francisco terminals.
LMF	60.00	Coyote (between San José and Morgan Hill)	<ul style="list-style-type: none"> • Level I facility to support train servicing and start up and close-down of service at San José. Gilroy and Merced. Will need to clear a level III facility at this location based on the availability of the Brisbane site or the phasing requirements of the project. • Corresponds to the most likely of several alternative site already being considered for an LMF. • Co-location of this facility with the nearby MOIF is possible.
MOIF	80.00	Just South of Gilroy Station	<ul style="list-style-type: none"> • Corresponds to location of previously proposed MOIF. • Co-location of this facility with the nearby LMF is possible.

The *Summary of Requirements for Maintenance Facilities* specifies that maintenance facilities at Brisbane and Gilroy are “envisioned to work together” and that “[w]hichever location is finally determined for Level III activity” would need the other location to support lower level activities as a Level I facility.

The Authority’s own *Summary of Requirements for Maintenance Facilities*, which is included as an appendix to both the San José to Merced and the San José to San Francisco Draft EIR/EIS documents, clearly demonstrates the Authority’s acknowledgement of the potential feasibility of:

- Locating a Level III facility in Gilroy and a Level I facility in Brisbane, or
- Locating a III Level in Brisbane and a Level I facility in Gilroy.

**REVISED SUPPLEMENTAL DRAFT EIR/EIS COMMENT
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The Authority’s *Summary of Requirements for Maintenance Facilities* recommends that maintenance facilities in both Gilroy and Brisbane be designed and provided with environmental clearance for Level III maintenance activities (quarterly inspections, including wheel truing), and states that whichever facility ultimately provides Level III maintenance, the other location would still be required for Level I (daily inspections, pre-departure cleaning and testing) and level II (monthly inspection) activities (e.g., a Level III LMF in Gilroy with a smaller Level I facility in Brisbane).

Although the *Summary of Requirements for Maintenance Facilities* presents compelling evidence and a recommendation for the San José to Merced Draft EIR/EIS to analyze Level III maintenance facilities at Gilroy and the interrelationship between the proposed Gilroy and Brisbane maintenance facilities, the Draft EIR/EIS makes no mention of this recommendation, presents no such alternatives analysis. The Draft EIR/EIS fails to provide the environmental clearance or any degree of analysis of impacts associated with Gilroy maintenance level alternatives as described and recommended in the *Summary of Requirements for Maintenance Facilities*.

In violation of the CEQA Guidelines Section 15126.6(a) requirement to address a reasonable range of potentially feasible alternatives, the Draft EIR/EIS did not include any alternatives wherein a Level III LMF would be located in the vicinity of Gilroy and a Level I facility located between San Francisco and San José¹. The failure of the San José to Merced Draft EIR/EIS to heed the Authority’s own recommendation created a fatal flaw not only in the San José to Merced Draft EIR/EIS, but also in the San José to San Francisco Draft EIR/EIS.

Further, a Level III LMF located in the Gilroy area could be co-located with other planned infrastructure such as the proposed Gilroy MOWF, increasing operational efficiencies. Thus, by neglecting to analyze alternatives for the Gilroy maintenance facility that would provide for Level III maintenance activities, the Authority created fatal flaws in the Draft EIR/EIS documents for both the San José to Merced and San José to San Francisco segments².

¹ Development of a Level III maintenance facility in Gilroy would permit the proposed Brisbane LMF to be downsized to a Level I facility (+/- 40 acres). The ability to downsize the Brisbane LMF by constructing a Level III LMF in Gilroy would have reduced the impacts of the proposed Brisbane LMF and also provided for additional potentially feasible sites outside of Brisbane to be identified and evaluated.

² As stated in Table 1 and Table 2 of the *Summary of Requirements for Maintenance Facilities*:

- “Maximum maintenance level at Brisbane could be lowered to Level I if the facility in Gilroy is built with the Level III capability.”
- The Brisbane LMF site “could also function as a level I site on a smaller footprint to support service for the San Francisco terminals.”

Submission 2133 (Cheron McAleece, The Sohagi Law Group, PLC on behalf of the City of Brisbane, June 9, 2021) - Continued

REVISED SUPPLEMENTAL DRAFT EIR/EIS COMMENT SAN JOSÉ TO MERCED PROJECT SECTION

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The Revised Draft EIR/EIS fails to adequately analyze night lighting impacts of potential Level III maintenance activities on wildlife adjacent to each of the alternative Gilroy MOWF sites.

As discussed above, the Authority must evaluate the alternatives associated with a Level I or Level III light maintenance facility in Gilroy along with a corresponding reduced size light maintenance facility in Brisbane. Because the San José to Merced Draft EIR/EIS analyzed only alternative locations for a Gilroy MOWF, the Revised Draft EIR/EIS concludes “Continuous sources of operations lighting would have little potential to affect wildlife, including mountain lion, because lighting would be directed toward the site and is predominantly of a fairly low intensity (approximately 5 lux for security lighting and approximately 20 to 50 lux at stations and the MOWF).”³ The Revised Draft EIR/EIS thus fails to analyze the effects of night lighting of a 24-hour per day Level III LMF in Gilroy and thereby understates impacts associated with potentially feasible project alternatives for the Gilroy maintenance facility.

Because the Authority has failed to analyze an alternative of a Level III LMF in Gilroy, the Authority similarly understates potential impacts to wildlife that could occur from such a facility. Specifically, in comparing the various alternatives for the San José to Merced Draft EIR/EIS that were analyzed, the Revised Draft EIR/EIS understates impacts associated with project alternatives for the Gilroy maintenance facility, including impacts associated with the 24-hour daily operations of the recommended alternative of a Level III LMF in Gilroy:

- Impact BIO#44, Intermittent Noise Disturbance of Wildlife Using Corridors during Operations states, for example, “Impacts under Alternative 4 would be similar to but slightly greater than those under Alternatives 1 and 2 because of the presence of the MOWF at the edge of the Soap Lake 10-year floodplain. (Revised Draft EIR/EIS pg. 3.7-32).

- A Coyote Valley Level I facility would “support train servicing and start up and close down of service at San José, Gilroy and Merced.” This site could also operate as a level III facility but would need environmental clearance for a level III facility at this location based on the availability of the Brisbane site or the phasing requirements of the project.”

Within the *Summary Requirements Operations Maintenance Facilities* report, the Authority determined that maximum maintenance levels at Brisbane could be lowered to Level I if the facility in Gilroy would be constructed with the Level III capacity. The Authority identified several LMF site alternatives in the vicinity of Gilroy with likely alternative sites in the vicinity of Morgan Hill. The site size requirements for a Level III LMF could be better suited to be placed in an area which was not within a highly developed urban area.

³ Revised Draft EIR/EIS pg. 3.7-19.

REVISED SUPPLEMENTAL DRAFT EIR/EIS COMMENT SAN JOSÉ TO MERCED PROJECT SECTION

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- Impact BIO#47: Intermittent and Permanent Lighting Disturbance of Wildlife and Wildlife Using Corridors during Operations. Impacts under Alternative 3 would be greater than under the other three alternatives because it would cross agricultural areas east of Gilroy at grade, would cross more of the Santa Cruz Mountains to Diablo Range wildlife linkage, and would include the East Gilroy MOWF and Station in areas that currently experience low light levels. (Revised Draft EIR/EIS pg. 3.7-33).

As documented above, both the Draft EIR/EIS and the Revised Draft EIR/EIS for the San José to Merced segment are fatally flawed. Pursuant to the requirements of CEQA and NEPA, the Draft EIR/EIS, as revised in April 2021, must be thoroughly reworked to address impacts associated with Level III maintenance facilities in Gilroy as recommended in the Authority’s March 14, 2016 *Summary of Requirements for Maintenance Facilities*.

The Authority Must Conduct a Project-Level Analysis of the Proposed Maintenance Facilities at Gilroy and Brisbane

The lack of a CEQA-compliant analysis of potentially feasible alternatives for a light maintenance facility in Gilroy operating in lieu of, or in conjunction with, a reduced size LMF in Brisbane can only be remedied through preparation of a specific analysis of the maintenance interrelationships between the high-speed rail’s San José to Merced and San José to San Francisco segments, including analysis of:

- A Level III LMF at each of the proposed MOWF sites in Gilroy in lieu of a light maintenance facility in Brisbane;
- A Level III LMF at each of the proposed MOWF sites in Gilroy in conjunction with a Level I maintenance facility in Brisbane; and
- A Level I LMF at each of the proposed MOWF sites in Gilroy in conjunction with a reduced-size Level III maintenance facility in Brisbane.

To address their fatal flaws and provide for analysis of the maintenance interrelationships between the San José to Merced and San José to San Francisco segments, this analysis must be prepared in the form of a supplement to the Draft EIR/EIS for both high-speed rail segments and recirculated for public review.

Very truly yours,



MARGARET M. SOHAGI
THE SOHAGI LAW GROUP, PLC

Submission 2133 (Cheron McAleece, The Sohagi Law Group, PLC on behalf of the City of Brisbane, June 9, 2021) - Continued

**REVISED SUPPLEMENTAL DRAFT EIR/EIS COMMENT
SAN JOSÉ TO MERCED PROJECT SECTION**

June 9, 2021

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CC: Brisbane City Council
Clay Holstine, City Manager
John Swiecki, Community Development Director

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Response to Submission 2133 (Cheron McAleece, The Sohagi Law Group, PLC on behalf of the City of Brisbane, June 9, 2021)

2133-6430

Comment noted. This submission duplicates submission SJM-2129. To avoid redundancy and confusion, comments were delimited and responded to in responses to submission SJM-2129 only.