Submission 728 (DeLu Ventures, April 18, 2020)

Bakersfield - Palmdale - RECORD #728 DETAIL

Status :	Action Pending
Record Date :	4/20/2020
Response Requested :	
Affiliation Type :	Business and/or Organization
Submission Date :	4/18/2020
Interest As :	Business and/or Organization
Submission Method :	Project Email
First Name :	DeLu
Last Name :	Ventures
Professional Title :	
Business/Organization :	
Address :	PO BOX 1129
Apt./Suite No. :	
City :	Culver City
State :	CA
Zip Code :	90232-9998
Telephone :	
Email :	deluleasing@gmail.com
Cell Phone :	323-238-5502
Email Subscription :	
Add to Mailing List :	
Stakeholder Comments/Issues :	

Hi CA High Speed Rail Bakersfield to Palmdale Project coordinators,
I hope all is well with you. I want to ask a few questions about the project.

728-221 1. I want to know how long this project will take?

728-222 2. What changes to traffic and businesses do you forsee?

728-223 3. With California Governor Newsom declaring a recession in California, how will that impact the completion of the project?

Thanks,

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DeLu Ventures LLC
Cell Phone: 323-238-5502
Fax: 323-389-6446
Mailing address: PO BOX 1129, Culver City, CA 90232-9998

EIR/EIS Comment : Yes

Response to Submission 728 (DeLu Ventures, April 18, 2020)

728-221

As discussed in Chapter 2 of this Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS), although the design/build contractor would set the actual schedule, the approximate schedule for construction would be approximately 8 years. A breakdown of estimated durations of activity is provided in Table 2-23 of the Final EIR/EIS.

728-222

Impacts of the Preferred Alternative related to transportation and traffic patterns are analyzed in detail in Section 3.2.6.3 in Section 3.2, Transportation, in this Final EIR/EIS. Impacts on businesses from implementation of the B-P Build Alternatives are addressed in detail in Section 3.12.6.3 in Section 3.12, Socioeconomics and Communities, in this Final EIR/EIS. The commenter did not provide sufficient information on the specific traffic and business impacts changes for which they would like additional information; therefore, it is not possible to provide a more detailed response.

728-223

The commenter asks about the duration of the project and potential impacts on traffic and businesses. The commenter also asks how the declaration of a recession in California would affect the funding and completion of the project. Section 2.8.3, General Approach, of this Final EIR/EIS discusses implementation of the construction plan for the project. It states that although the design-build contractor would set the actual schedule, the approximate schedule for construction would be approximately 8 years. Section 3.2, Transportation, discusses potential traffic impacts, and Section 3.12, Socioeconomics and Communities, discusses potential impacts on businesses.

As documented in the 2020 Business Plan (Authority 2020a), to advance the high-speed rail (HSR) program, the Authority's budget through 2030 is between $20.6 billion and $23.4 billion, depending on the available funding from the cap-and-trade auction market. At the lower end, the Authority assumes cap-and-trade will provide $500 million per year for the HSR program, and at the higher end, the Authority assumes cap-and-trade will provide $750 million per year. Since the enactment of Assembly Bill 398 (Statutes of 2017), the legislation that extended the cap-and-trade program to 2030, the Authority is receiving about $740 million annually for project development.

While this amount of funding is considerable, it is not enough to build the entirety of the Phase 1 HSR system connecting San Francisco to Los Angeles/Anaheim. However, the Authority's budget is sufficient to advance the mission of the voters when they passed Proposition 1A and to continue to make important investments in all regions of the state. With the estimated funding the Authority has committed to this project between now and 2030, the Authority will:

1. Complete the 119-mile Central Valley construction segment and lay track pursuant to its federal funding grant agreements with the Federal Railroad Administration (FRA).
2. Expand the 119-mile Central Valley segment to 171 miles of operable electrified HSR connecting Merced, Fresno, and Bakersfield, three of the fastest-growing areas in California.
3. Commence testing of electrified high-speed trains by 2025 and putting those trains in service by 2028-2029.
4. Environmentally clear all segments of the Phase 1 system between San Francisco and Los Angeles/Anaheim in the next 18 to 24 months.

Response to Submission 728 (DeLu Ventures, April 18, 2020) - Continued

728-223

5. Complete the “book-end” projects the Authority has committed funding to in Los Angeles and the Bay Area—projects valued at more than $3 billion.
6. Pursue additional funding opportunities to prospectively “close the gaps” between the “book-end” projects and expand electrified HSR service to the Bay Area and Los Angeles/Anaheim.

The Authority will invest the identified funds in some of the infrastructure necessary for HSR operations, including the construction of grade-separated track bed and track and required roadway modifications, as well as implementation of the associated environmental commitments and right-of-way and relocation costs. Ridership and revenue forecasts show that the initial line from San Francisco to Bakersfield through the Silicon Valley will produce revenue that can help fund construction from the Central Valley southward to the Los Angeles Basin (Authority 2018d). As shown in the February 2020 Capital Outlay and Expenditure Report (Authority 2020b), funds have been appropriated for project development and for preliminary right-of-way for the Bakersfield to Palmdale Project Section. To date, the Authority has not appropriated funds for construction of the Bakersfield to Palmdale Project Section but remains committed to completing the project development process (including environmental review and permitting), so when funds are appropriated for construction, the construction process can be initiated efficiently regardless of macroeconomic conditions.

Submission 747 (Rudy Niederer, March 13, 2020)

Bakersfield - Palmdale - RECORD #747 DETAIL

Status :	Action Pending
Record Date :	4/22/2020
Response Requested :	No
Affiliation Type :	Business and/or Organization
Submission Date :	3/13/2020
Interest As :	Business and/or Organization
Submission Method :	Email
First Name :	Rudy
Last Name :	Niederer
Professional Title :	
Business/Organization :	
Address :	
Apt./Suite No. :	
City :	Gresham
State :	OR
Zip Code :	0000
Telephone :	971-274-0082
Email :	cascadiahighspeedrail@gmail.com
Cell Phone :	
Email Subscription :	
Add to Mailing List :	Yes
Stakeholder Comments/Issues :	

747-58

The Question is about the Tehachapi Pass CHSR corridor.

2.8% of grades are very steep for HSR trains; they will require additional traction motor axles to negotiate the sustained incline, so why not use a better corridor route with a grade of less than 1%?

Can your company view the alternative, please see the proposal https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.cascadiahighspeedrail.com%2Fbakersfieldlancaster.html&data=02%7C01%7Cmark.ashley%40tylin.com%7C5e61d9ce98fa4cac2bfe08d7c9bb7926%7Cffa1e51c7cbc49398cb093c3775db5f1%7C1%7C0%7C637199679335608913&sdata=u9WXJ%2FBaa9pcixKkVw9lBTuju%2Ffp2hZOHlM%2BMfqj0Eo%3D&reserved=0

Not posted are the seismic fault lines, and a solution traversing fault zones in tunnels which I have.

Is there a way to convince the political apparatus to learn functional CHSR corridor designs and then urge them to make the needed changes?

This website also recommends additional alternative corridors and solutions. You will also find the complete CHSR corridor sections from Vancouver BC to northern California.

I like to see T-Y-LIN being very successful in their endeavor to build functional, economic benefiting, and power conserving HSR corridors here in the USA.

Rudy Niederer
Gresham OR
971-274-0082

EIR/EIS Comment : Yes

Response to Submission 747 (Rudy Niederer, March 13, 2020)

747-58

The commenter expresses concerns about the grades through the Tehachapi Pass. The commenter proposes a corridor route that he claims has a grade of less than 1 percent. The commenter requests that a linked document (https://www.cascadiahighspeedrail.com/uploads/4/8/9/8/48982907/bakersfield_lancaster_div_00.pdf) be reviewed. The linked document was reviewed. It provides a high-level view of two different HSR routes through California: one that travels along a similar route to the B-P Build Alternatives, through Tehachapi; and one that travels south from Bakersfield along the State Route (SR) 99 corridor before cutting through the mountains north of Lebec. The commenter seems to suggest SR 99 south would be preferable for this project section.

As discussed in Chapter 2 of this Final EIR/EIS, the HSR Statewide Programmatic EIR/EIS considered and eliminated similar alignments due to the lengthy run adjacent and parallel to the San Andreas fault zone; additionally, these options would require long, deep tunneling through the Garlock fault zone with associated high costs that would make these options impracticable. See Figure 2-33 in this Final EIR/EIS.

Submission 703 (Paul Tecson, 3-D Capital Realty Investments, LLC, March 18, 2020)

Bakersfield - Palmdale - RECORD #703 DETAIL

Status :	Action Pending
Record Date :	3/18/2020
Response Requested :	Yes
Affiliation Type :	Individual
Submission Date :	3/18/2020
Interest As :	Individual
Submission Method :	Project Email
First Name :	Paul
Last Name :	Tecson
Professional Title :	CEO/Managing Partner
Business/Organization :	3-D Capital Realty Investments, LLC
Address :	
Apt./Suite No. :	
City :	
State :	
Zip Code :	0000
Telephone :	
Email :	paultecson8@gmail.com
Cell Phone :	
Email Subscription :	
Add to Mailing List :	
Stakeholder Comments/Issues :	

703-257 I have question regarding how my property will be affected with this project. I own a 5-acre land parcel zoned light industrial on Ave P-12 and 12th Street East in Palmdale. It looks like it's about a mile east of the PALMDALE Transportation Station. I would like to know more about the city plans affecting my property and future value if I decide to build on my land.

Thanks for your help and I look forward to hearing from you.

Paul Tecson
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PAUL C. TECSON
CEO/Managing Partner
3-D Capital Realty Investments, LLC

"Helping Build Your Wealth & Retirement Through Real Estate Tax-Free"

EIR/EIS Comment : Yes

Response to Submission 703 (Paul Tecson, 3-D Capital Realty Investments, LLC, March 18, 2020)

703-257

The commenter asks what the City of Palmdale's plans are for properties in proximity to the proposed Palmdale Station. The commenter's property is outside the B-P Build Alternatives footprint, including the Preferred Alternative; however, the parcel is within the Palmdale Transit Station Area Plan (PTSAP; City of Palmdale 2020). Though this is not a final determination of relocation, per the permanent and temporary footprint shown on the Bakersfield to Palmdale Project Section Footprint Mapbook, Appendix 3.1-C of this Final EIR/EIS, the address described by the commenter would not be acquired during implementation of the B-P Build Alternatives. Additionally, per Impact LU #5 in this Final EIR/EIS, "operation of the Palmdale Station site would not result in any permanent conflicts with adjacent land uses because it would be designed to complement surrounding land uses. Over time, vacant land surrounding the Palmdale Station site is anticipated to develop with dense TOD [transit-oriented development] style development projects that would maximize the accessibility benefits related to their close proximity to the new station."

Studies indicate that residential and commercial property values near transportation system stations typically increase and are valued higher than similar properties not in the vicinity of such stations due to improved accessibility (both of residents to regional jobs and of employers to a larger labor pool). This effect is likely to occur in the vicinity of the Palmdale Station. Section 6.8.3.1, Long-term Impact on Property Values, in the Community Impact Assessment Technical Report (Authority 2018c) summarizes the potential property value impacts of the project. Because studies regarding the impacts of HSR lines are limited, the analysis included a literature review of studies related to both rail and HSR stations.

According to the literature review, the impact of proximity to a rail station on commercial and residential property values vary. Factors can include, but are not limited to, quality of the rail station facility, level of service of the station, whether a station has parking facilities, distance to other stations, and socioeconomic factors of the surrounding community. Studies (Garrett 2004; Cervero et al. 2002) agree that commercial and residential properties within 0.25 mile of a rail station generally experience property appreciation. While these effects are experienced by commercial properties closest to the station, residential properties may experience property value appreciation farther than 0.25 mile from the station. Property value increases can also result from the

703-257

associated intensification of development that can occur around station locations.

The literature review included studies analyzing light, commuter, and heavy rail impacts on property values rather than HSR. However, successful HSR station area development (and related real estate price effects) in countries with HSR systems were shown to be linked to a number of factors, including robust local economic conditions, strong travel demand, and links to other forms of transit. It is difficult to extrapolate from studies conducted in the high-density urbanized areas of Japan, Korea, and Europe to predict property value effects in U.S. communities that are more dispersed. Still, the studies show that the potential exists for the values of residential and commercial properties near HSR stations to increase as a result of new access to the transportation system and the associated development that can occur around stations.

For more information on property value impacts of the HSR project, please see the Community Impact Assessment Technical Report (Authority 2018c).

Owners who believe they have suffered a loss of property value as a result of the project may file a claim with the State of California's Government Claims Program. More information on filing a claim may be obtained online at the following link: https://www.dgs.ca.gov/ORIM/Services/Page-Content/Office-of-Risk-and-Insurance-Management-Services-List-Folder/File-a-Government-Claim#@ViewBag.JumpTo.

The 2020 PTSAP details the benefits applicable to communities in the station area. The City of Palmdale, in partnership with the Authority, is undertaking station area planning around a future High-Speed Rail Multimodal Transit Station near downtown Palmdale. As a part of the project, the City's PTSAP will complement the planning and design of the HSR systems and transportation planning efforts by the City and regional agencies. The undertaking is a collaboration between the Authority, regional partners, stakeholders, community members, and developers.

The study area for the PTSAP is bounded by Rancho Vista Boulevard, Avenue R, SR 14 and 15th Street East, and includes the Palmdale Airport (approximately 2 miles northeast of the existing Palmdale Transportation Center). The primary focus area is approximately 0.5 mile around the future multimodal HSR station. The commenter's

Response to Submission 703 (Paul Tecson, 3-D Capital Realty Investments, LLC, March 18, 2020) - Continued

703-257

property is within the PTSAP study area. The PTSAP and Initial Study/Negative Declaration were adopted by the City of Palmdale's City Council in December 2020. Information about the PTSAP can be found on the City of Palmdale's website: https://cityofpalmdale.org/426/Palmdale-Multimodal-High-Speed-Rail-Stat.

Submission 804 (Michelle Ouellette, Best Best & Kreiger LLP, April 27, 2020)

Bakersfield - Palmdale - RECORD #804 DETAIL	
Status :	Action Pending
Record Date :	5/5/2020
Affiliation Type :	Business and/or Organization
Submission Date :	4/27/2020
Interest As :	Business and/or Organization
Submission Method :	Letter
First Name :	Michelle
Last Name :	Ouellette
Professional Title :	
Business/Organization :	Best Best & Kreiger LLP
Address :	3990 University Avenue
Apt./Suite No. :	
City :	Riverside
State :	CA
Zip Code :	92502
Telephone :	951-826-8373
Email :	michelle.ouellette@bbklaw.com
Cell Phone :	
Email Subscription :	
Add to Mailing List :	Yes
EIR/EIS Comment :	Yes
Attachments :	Best Best Krieger- Bakersfield to Palmdale Project Section.pdf (9 mb)

Indian Wells (760) 568-2611
Irvine (949) 263-2600
Los Angeles (213) 617-8100
Manhattan Beach (310) 643-8448

BEST BEST & KRIEGER LLP
ATTORNEYS AT LAW
3390 University Avenue, 5th Floor, P.O. Box 1028, Riverside, CA 92502
Phone: (951) 686-1450 | Fax: (951) 686-3083 | www.bbklaw.com

Ontario (909) 989-8584
Sacramento (916) 325-4000
San Diego (619) 525-1300
Walnut Creek (925) 977-3300
Washington, DC (202) 785-0600

Michelle Ouellette
(951) 826-8373
michelle.ouellette@bbklaw.com
File No. 31273.00001

April 27, 2020

VIA E-MAIL BOARDMEMBERS@HSR.CA.GOV
VIA OVERNIGHT MAIL

Vice-Chairman Tom Richards and Members of the High-Speed Rail Authority Board of Directors
California High Speed Rail Authority
Bakersfield to Palmdale Draft EIR/EIS Comment
770 L Street, Suite 620 MS-1,
Sacramento, California 95814

Re: Comments on Bakersfield to Palmdale Project Section Draft Project EIR/EIS

Vice-Chairman Richards and Honorable Board Members:

804-711 CalPortland Company (CalPortland), the owner of the CalPortland Mojave Cement Plant and Quarries in Mojave, California, has retained Best Best & Krieger LLP to evaluate the California High-Speed Rail Authority (HSRA) Bakersfield to Palmdale Project Section Draft Project Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS). As we alerted the HSRA in detail in October of 2018, the Preferred Alternative in the Draft EIR/EIS, also referred to as Alternative 2, is a route that crosses CalPortland's private land holdings, moving through the middle of its current and future limestone, shale and pozzolan mining operations. (See Attachment 1, October 15, 2018 Letter from BBK to HSRA.) CalPortland and its consultants have conducted a detailed review of the Draft EIR/EIS and, as detailed below, have identified significant adverse unanalyzed and unmitigated financial, engineering/safety, and environmental issues raised by the Preferred Alternative, resulting in violations of the California Environmental Quality Act (CEQA) and the National Environmental Protection Act (NEPA). Therefore, CalPortland requests that, after engaging in direct dialogue with CalPortland representatives, the HSRA revise and recirculate the Draft EIR/EIS to comply with applicable law.

The Draft EIR/EIS Does Not Comply With CEQA and NEPA

804-712 The Bakersfield to Palmdale Project Section of the High-Speed Rail Project cannot be approved until the HSRA, as the lead agency under CEQA, certifies an EIR for the Section and, until the HSRA, which pursuant to the Memorandum of Understanding with the Federal Railroad

Submission 804 (Michelle Ouellette, Best Best & Kreiger LLP, April 27, 2020) - Continued

804-712 Administration is lead agency under NEPA, issues a Record of Decision regarding the Proposed Action considered in the EIS. However, as detailed below, neither can occur without HSRA first revising and recirculating the Draft EIR/EIS, as the document is deeply flawed and fails to comply with either CEQA or NEPA.

The Draft EIR/EIS Fails As An Informational Document

804-713 When preparing an EIR, sufficient information must be provided to allow decision-makers and the public to understand the environmental consequences of a project. *(In re Bay-Delta Programmatic Envt'l Impact Report Coordinated Proceedings* (2008) 43 Cal.4th 1143, 1175.) Similarly, an EIS must "provide for broad dissemination of relevant environmental information" and adequately identify adverse environmental effects. (*Robertson v Methow Valley Citizens Council* (1989) 490 U.S. 332, 351.) In violation of CEQA and NEPA, this Draft EIR/EIS fails as an informational document by withholding access to essential information necessary to understand the environmental consequences of the Project.

First, the Draft EIR/EIS repeatedly relies on documents – including all of the Technical Reports upon which the Draft EIR/EIS is based – that are **not** available for review online, and which **cannot** be obtained without making a special request for them from the HSRA office in Sacramento. Chapter 10, EIR/EIS Distribution, incorrectly states that "[t]he entire EIR/EIS, appendices, and supporting reports are available on the California High-Speed Rail Authority's website" and states that "[c]opies of the full document and supporting appendices also may be accessed through [project vicinity] library computers." (Draft EIR/EIS, Chapter 10, EIR/EIS Distribution, p. 10-1.) There is simply no computer, as to the date of this letter, that has online access to the Technical Reports upon which the Draft EIR/EIS is based. While technical reports may be prepared in volumes separate from the body of the EIR/EIS, they must be readily available for public examination and must be submitted to all clearinghouses that assist with public review. (CEQA Guidelines §15147; see also *N. Idaho Community Action Network v. U.S. Dept. of Transportation* (9th Cir. 2008) 545 F.3d 1147, 1153 [NEPA requires "that the relevant information will be made available to the larger public audience"].)

804-714 Further, the Draft EIR/EIS repeatedly relies on the 2005 Statewide Program EIR/EIS, the 2008 Bay Area to Central Valley Program EIR/EIS, and the 2012 Partially Revised Final Program EIR for the HRS Project, **none** of which are available for review online, and which **cannot** be obtained without making a special request for them from the HSRA office in Sacramento. (*See e.g.* Chapter 3.17, Cultural Resources, p. 3-.17-37.) Ironically, the HSRA's website has posted webpages for each of these environmental documents, with links for each chapter of these documents, but all of them are now inoperable, or "dead" links. As well, the HSRA's website states that other documents that are key to evaluating the Draft EIR/EIS **cannot** be obtained without submitting a **Public Records Act request**, such as the HSRA's "Project Level Environmental Analysis Methodology Guidelines." While an EIR may incorporate by

804-714 reference all or portions of other documents that are generally available to the public, the HSRA has not made these documents generally available, even removing the links to the program EIR/EIS from its website! (Pub. Resource Code §21061; CEQA Guidelines §15150(a); *N. Idaho Community Action Network v. U.S. Dept. of Transportation* (9th Cir. 2008) 545 F.3d 1147, 1153.)

804-715 Finally, other documents do not seem to be available at all. For instance, mitigation measure AQ-MM#1 provides that that HSRA will mitigate air quality impacts in part via implementation of a 2014 Memorandum of Understanding with the San Joaquin Valley Air Pollution Control District (SJVAPCD) regarding a Voluntary Emission Reduction Agreement (VERA). It asserts that the VERA will mitigate impacts by offsetting to net zero the project's actual emissions from construction equipment and provide funds for the SJVAPCD's Emission Reduction Incentive Program to fund grants for projects that achieve emission reductions, with preference given to highly affected communities, thus offsetting project-related impacts on air quality. (Draft EIR/EIS Chapter 3.3, Air Quality and Global Climate Change, p. 3.3-140.) However, **nowhere** in the Draft EIR/EIS, or (after a lengthy search) on the HSRA's website is there a copy of, or direction on how to obtain a copy of, the Memorandum of Understanding with the SJVAPCD, or of the VERA. This is yet another violation of the requirement that referenced documents be generally available to the public. (Pub. Resource Code §21061; CEQA Guidelines §15150(a); *N. Idaho Community Action Network v. U.S. Dept. of Transportation* (9th Cir. 2008) 545 F.3d 1147, 1153.)

804-716 As detailed above, the Draft EIR/EIS violates CEQA by failing to make available basic technical reports that are needed to understand the environmental consequences of the Project and by repeatedly referencing and relying on documents that are not readily available to the public. Indeed, as of the date of this letter, the entire State of California is under Shelter-In-Place Orders due to the novel coronavirus. This makes it difficult, if not impossible, for the public to 1) review even those portions of the Draft EIR/EIS that are available online if they do not have access to a computer with internet service at home, and 2) to obtain the rest of the documents relied upon by the Draft EIR/EIS, as they are only accessible – if available at all - in Sacramento, a location where most of the State cannot travel.

The Draft EIR/EIS Improperly Treats Mitigation Measures As Part of the Project

804-717 In violation of CEQA, the Draft EIR/EIS repeatedly relies on so-called "impact avoidance and minimization features" (IAMF). The Draft EIR states that the IAMFs "are incorporated into the project design and construction that would avoid or minimize the environmental or community impacts. The description of each measure details the means and effectiveness of the measure in avoiding or minimizing impacts, as well as the environmental benefits of implementing the measure." (See e.g. Chapter 3.17, Cultural Resources, p. 3-.17-37 [emphasis added].) But a review of just the titles of some of the IAMFs confirms that they are

Submission 804 (Michelle Ouellette, Best Best & Kreiger LLP, April 27, 2020) - Continued

804-717 not part of the project's design, they are in fact mitigation measures designed to avoid significant impacts: "AQ-IAMF#3: Renewable Diesel," "AQ-IAMF#4: Reduce Criteria Exhaust Emissions from Construction Equipment," "AQ-IAMF#5: Reduce Criteria Exhaust Emissions from On-Road Construction Equipment" and "AQ-IAMF#6: Reduce the Potential Impact of Concrete Batch Plants." (Draft EIR/EIS, Chapter 3.3, Air Quality and Global Climate Change, p. 3.3-19.)

The Court of Appeal has expressly found that EIRs use of "project design features," like the IAMFs here, violates CEQA. In *Lotus v. Department of Transportation* (2014) 223 Cal.App.4th 645, 645 ("*Lotus*") an EIR evaluated a highway realignment project through a redwood forest. It concluded the project's impact on root systems of old growth redwood trees would be insignificant, and referred vaguely to "avoidance, minimization and/or mitigation measures." (*Id.*, at pp. 654 – 655.) The Court in *Lotus* acknowledged that the "distinction between elements of a project and measures designed to mitigate impacts of the project may not always be clear," but found that the measures treated as project design "were plainly mitigation measures and not part of the project itself." (*Id.*, at p. 656, fn. 8.) *Lotus* affirmed that, for each significant effect, an EIR must identify specific mitigation measures; where several potential mitigation measures are available, each should be discussed separately, and the reasons for choosing one over the others should be stated. (*Id*, at p. 654-655; Pub. Resources Code § 21100(b).) The Court held that it is improper for an EIR to incorporate mitigation measures into its description of the project and that an EIR must discuss the significance of the environmental impacts **apart** from any mitigation measures so that the public can be informed as to whether other possible mitigation measures would be more effective. (*Id.*; Pub. Resource Code §§ 21081, 21100(b); CEQA Guidelines §§ 15126, 15091.)

The HSRA has violated CEQA through its attempt to incorporate IAMFs into the design of the project, as it must discuss the significance of the environmental impacts apart from any mitigation measures so that the public can be informed as to whether other possible mitigation measures would be more effective. This violation runs throughout the Draft EIR/EIS and can only be cured by fully revising and recirculating the document (see below for discussion of recirculation).

The Draft EIR/EIS Fails to Disclose the Inefficacy and Illusory Nature of Mitigation Measures

804-718 Under CEQA, an EIR must propose mitigation measures that will minimize a project's significant impacts by reducing or avoiding them. (Pub. Resources Code §§21002, 21100.) When the effectiveness of a mitigation measure is not apparent, the EIR must include facts and analysis supporting its characterization of the expected result. (*Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 522.) Mitigation measures that are unrealistic and unlikely to be implemented create an illusory analysis and should not be included in an EIR. (*Cleveland Nat'l Forest Found. v. San Diego Ass'n of Gov'ts* (2017) 17 Cal.App.5th 413, 433.) Further, while a

804-718 lead agency is not precluded from adopting a mitigation measure that might not be effective in minimizing a significant effect, it must acknowledge this uncertainty and disclose that the mitigation measure might not be successful. (*Citizens for Open Gov't v. City of Lodi* (2012) 205 Cal.App.4th 296, 322.)

NEPA requires that an EIS discuss measures to mitigate adverse environmental effects. See *S. Fork Band Council of Western Shoshone of Nevada v. U.S. Dep't. of Interior*, (9th Cir. 2009) 588 F.3d 718, 727 ["Though NEPA, of course, does not require that [significant environmental] harms actually be mitigated, it does require that an EIS discuss mitigation measures, 'with sufficient detail to ensure that environmental consequences have been fairly evaluated.'"], quoting *Robertson v. Methow Valley Citizens Council*, (1989) 490 U.S. 332, 352.) Although an EIS need not contain a complete mitigation plan, an EIS cannot "omit a reasonably thorough discussion of mitigation measures because to do so would undermine the action-forcing goals of [NEPA]." (*Carmel by-the-Sea v. U.S. Dept. of Transportation* (9th Cir. 1997) 123 F.3d 1142, 1154.)

804-719 While Draft EIR/EIS, Chapter 3.16, Aesthetics and Visual Quality, describes Impact AVQ #3: Permanent Impacts Related to Construction of a Large High-Speed Rail Structure Intersection of 34th Street and L Street to Oswell Street as a significant and unavoidable impact it also improperly identifies Mitigation Measure F-B LGA AVR-MM#2a as an enforceable and effective mitigation measure to address this impact. (Draft EIR/EIS, Chapter 3.16, Aesthetics and Visual Quality p. 3.16-152.) This measure provides that the HSRA "will coordinate with local jurisdictions on the design of these facilities so that they are designed appropriately to fit in with the visual context of the areas near them" via a "local consultation process." (*Id.*, at 3.16-141.) But nowhere in the Draft EIR/EIS does the HSRA acknowledge that, by only requiring that it "coordinate" with local jurisdictions, there is nothing requiring the HSRA to take actual measures to ensure appropriate design to reduce the significant aesthetic impacts of the project. Further, nowhere in the Draft EIR/EIS does the HSRA disclose what the specific impacts could result from the lack of efficacy of Mitigation Measure F-B LGA AVR-MM#2a. This is a violation of CEQA and NEPA.

804-720 Draft EIR/EIS, Chapter 3.3, Air Quality and Global Climate Change, identifies 3 significant and unavoidable carbon monoxide (CO) impacts to air quality during construction – Impact AQ-1, Regional Air Quality Impacts During Construction, Impact AQ#2, Compliance with Air Quality Plans During Construction, and Impact AQ#8, Cumulative Impacts during Construction. To mitigate each of these significant impacts, the Draft EIR/EIS recommends AQ-MM#1: "Offset Project Construction Emissions through Off-Site Emission Reduction Programs." (Draft EIR/EIS Chapter 3.3, Air Quality and Global Climate Change, pp. 3.3-140-141.) AQ-MM#1 calls, in part, for the HSRA to "enter into an agreement with the Antelope Valley Air Quality Management District (AVAQMD) and Eastern Kern Air Pollution Control

Submission 804 (Michelle Ouellette, Best Best & Kreiger LLP, April 27, 2020) - Continued

804-720 District (EKAPCD) to mitigate (by offsetting) to net zero (to the extent that offsets are available) the project's actual emissions from construction equipment and vehicle exhaust emissions of VOC, NOX, PM10 and PM2.5." (*Id.* at p. 3.3-141, [emphasis added].) Nowhere in the Draft EIR/EIS does the HSRA acknowledge that, as separate and independent agencies, AVAQMD and EKAPCD, are not obligated to enter into agreements with the HSRA, or to enter into the precise agreements that the HSRA requests, making an essential element of AQ-MM-#1 both illusory and ineffective. Further, nowhere in the Draft EIR/EIS does the HSRA disclose what the specific impacts could result from the lack of efficacy of Mitigation Measure AQ-MM#1. Finally, given that the agreements do not currently exist, AQ-MM#1 improperly defers the formulation of the actions that will need to be taken to reduce or avoid this significant impact, and provides no performance criteria that would information the public what future actions might be taken. (CEQA Guidelines §15126.4(a)(1)(B); *see Sacramento Old City Ass'n v. City Council* (1991) 229 Cal.App.3d 1011; *Carmel by-the-Sea v. U.S. Dept. of Transportation* (9th Cir. 1997) 123 F.3d 1142, 1154.)

804-721 Draft EIR/EIS, Chapter 3.14, Agricultural Farmland and Forest Land, identifies 3 significant and unavoidable impacts: Impact AG#5 related to the conversion of important farmland, Impact AG#6 related to permanent indirect impacts to farmland from parcel severance and Impact AG#7 related to permanent impacts to important farmland under Williamson Act and other conservation contracts . However, the only mitigation that the HSRA proposes to reduce these significant impacts is AG-MM#1, which states that the HSRA 1) has entered into an agreement with the Department of Conservation California Farmland Conservancy Program to implement agricultural land mitigation for the Project under which it will fund the California Farmland Conservancy Program's work to identify suitable agricultural land for mitigation of impacts, and fund the purchase of agricultural conservation easements from willing sellers. (Draft EIR/EIS, Chapter 3.14, Agricultural Farmland and Forest Land, p. 3.14-54.) However, no copy of this agreement is available on the HSRA's website. Further, a review of the resolutions adopted by the HSRA shows that the Board has only authorized an interagency agreement with the California Department of Conservation's California Farmland Conservancy Program for agricultural conservation easements for the Merced to Fresno, Fresno to Bakersfield, and San Jose to Merced Sections – not the Bakersfield to Palmdale Section – which is the subject of the Draft EIR/EIS. (HSRA Resolution #12-29.) Absent substantial evidence of an agreement with Department of Conservation California Farmland Conservancy Program regarding the Bakersfield to Palmdale Section, AG-MM#1 is illusory, and the HSRA cannot conclude that it addresses to any degree the Project's significant impacts to agriculture resources.

804-722 Finally, Draft EIR/EIS, Chapter 3.4, Noise and Vibration, improperly rejects mitigation necessary to reduce significant noise impacts based on unsupported financial grounds. While a mitigation measure may be found infeasible on economic grounds, findings of economic infeasibility must be supported by relevant economic evidence. (See e.g. *Uphold Our Heritage*

804-722 *v. Town of Woodside* (2007) 147 Cal.App.4th 587, 601 [findings of economic infeasibility of alternatives to demolition were not supported by data comparing the cost of building new home with cost of rehabilitating existing historic home on site].) The Draft EIR/EIS does not comply with these requirements. It merely states that "[p]ursuant to the Noise Mitigation Guidelines, recommended sound barriers must meet the following criteria to be considered a reasonable and feasible mitigation measure: Achieve a minimum of 5 decibels (dB) of noise reduction; The minimum number of affected sites should be at least 10; The length should be at least 800 feet; Must be cost-effective." (Draft EIR/EIS, Chapter 3.4, p. 3.4-54.) It then concludes:

> In order to reduce long-term operational noise impacts, a total of 20 noise barriers were considered throughout the Bakersfield to Palmdale Project Section. All 20 noise barriers were determined to be feasible (a minimum noise level reduction of 5 A-weighted decibels [dBA]) at the maximum height of 14 feet, whereas only 15 noise barriers were determined to be reasonable and cost-effective. The remaining five noise barriers were determined to be cost-effective.

(*Id*, at p. 3,4-2 [emphasis added].) Appendix 3.4-B, Noise and Vibration Mitigation Guidelines states that the "cost limit for a noise barrier would be set at $95,000 (2018 dollars) per benefited residence." (Draft EIR/EIS, Appendix 3.4-B, p. 3.4-B-1.) But, absent substantial evidence of economic infeasibility, CEQA precludes the HSRA from simply decreeing how much it wants to spend on noise barriers and then, on that basis, refuse to mitigate significant noise impacts.

The Draft EIR/EIS Fails to Disclose Significant Impacts

804-723 Identification of a project's significant environmental effects is one of the primary purposes of an EIR and it is necessary under CEQA to implement the stated public policy that agencies should not approve projects if there are feasible mitigation measures or project alternatives available to reduce or avoid significant environmental impacts. (Pub. Resources Code §§21002, 21002.1(a).) Similarly, NEPA "places upon an agency the obligation to consider every significant aspect of the environmental impact of a proposed action." (*Vermont Yankee Nuclear Power Corp. v. NRDC* (1978) 435 U.S. 519, 553.) Here, in violation of CEQA and NEPA, nowhere in the Draft EIR/EIS does HSRA disclose that the Preferred Alternative, Alternative 2, will result in significant environmental impacts, including, as detailed below, Mineral Resource, and Safety and Security impacts.

Mineral Resources Impacts

804-724 The CalPortland Mojave Cement Plant and Quarries have been in operation since 1955, and currently mine multiple mineral resources, including limestone, shale and pozzolan. Its

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location and the scope of its activities are no secret, indeed they have been repeatedly disclosed to the HSRA, including in an October 15, 2018 letter to the HSRA) that detailed the significant impacts the Preferred Alternative would have to mineral resources. (See Attachment 1, October 15, 2018 Letter from BBK to HSRA.)

But the Draft EIR/EIS repeatedly misleads and fails to disclose to the public and decision-makers the significant mineral resources impacts of the Preferred Alternative, as well as Alternatives 1, 3 and 5 (which are also considered in the Draft EIR/EIS). The Draft EIR/EIS repeatedly asserts that the Preferred Alternative alignment "would pass just west of the CalPortland Company limestone quarry in a 9,500-foot tunnel" and claims, without support, that the Preferred Alternative would "avoid future mining areas." (See Draft EIR/EIS, Chapter 5, Summary, p. 5-38, Chapter 8 "Preferred Alternative and Station Sites," pp. 8-2, 8-6, 8-17, Chapter 9, "Geology, Soils, Seismicity, and Paleontological Resources," p. 3.9-55, Chapter 19, "Cumulative Impacts," 3.19-51 [emphasis added].) In fact, the summary of "Bakersfield to Palmdale Project Section Alternative Benefits and Impacts expressly states that "[i]mplementation of the B-P Build Alternatives or design options [Alternatives 1, 2, 3 and 5] would not prevent any mineral extraction opportunities." (Chapter 5, Summary, p. 5-31.)

Confusingly, having asserted that there will be no impact to future mineral extraction opportunities, the Draft EIR/EIS admits that construction of the new Section will encroach on the CalPortland Mojave Cement Plant and Quarries, stating: "The Authority would acquire legal rights to the property within a 220-foot exclusion zone around the B-P Build Alternatives' tunnel structures to provide a buffer from CalPortland Company drilling and blasting excavation activities." (Draft EIR/EIS, Chapter 9, "Geology, Soils, Seismicity, and Paleontological Resources," p. 3.9-55.)

Review of Draft EIR/EIS Chapter 9, "Geology, Soils, Seismicity, and Paleontological Resources," confirms that, based on the misleading descriptions of the Preferred Alternative, the Draft EIR/EIS failed to disclose the significant impacts of the Preferred Alternative to mineral resources. As detailed in Appendix G to the CEQA Guidelines (14 California Code of Regulations §§ 15000 et seq.), an impact to mineral resources is significant if it will result in the "loss of availability of a known mineral resource that would be of value to the region and the residents of the state." Chapter 9, page 3.9-20 provides that the Preferred Alternative would have a significant impact if it "results in the loss of availability of a locally important mineral resource recovery site.[1]" But, then, despite conceding that the HSRA would be "acquiring

[1] This significance threshold appears crafted to downplay the significance of the Preferred Alternative's impacts, given that the threshold used in the HSRA's certified EIR for the Fresno to Bakersfield Section Project EIR/EIS was described as whether or not the project would "[r]esult in the loss of availability of a known mineral, petroleum, or natural gas resource of regional or statewide value." (Fresno to Bakersfield Section Project EIR/EIS, p. 3.9-8) The CalPortland Mojave Cement Plant and Quarries are far more than "locally important," indeed, they are of statewide value. But, by revising the significance threshold for use in this Draft EIR/EIS the HSRA improperly avoids taking that fact into consideration.

804-724

property" from CalPortland, **the Draft EIR/EIS does not identify any impact, let alone a significant impact, due to the loss of mineral resources from the Preferred Alternative**.

Here, as CalPortland has informed the HSRA in the past, the Preferred Alternative would result in the substantial loss of limestone, shale and pozzolan resources. Specifically, based on the Preferred Alternative's alignment and necessary safety buffers, CalPortland has determined that approximately **15.49 million tons** of limestone, equating to 10.32 million tons of cement, and thus 6.2 years of mine and cement plant life would be lost. CEQA requires that the Draft EIR/EIS disclose this significant impact and identify feasible mitigation measures by which the Preferred Alternative's environmental impacts to mineral resources can be mitigated or avoided. (Pub. Resources Code §§21002.1(a), 21061; CEQA Guidelines §§15121(a), 15126.4(a).) But the only way to avoid or reduce the significant impact of the Preferred Alternative on California's mineral resources is to pursue a route that will not cut through the CalPortland Mojave Cement Plant and Quarries.

804-725

These significant impacts to mineral resources will echo throughout the region, and even the State. The CalPortland Mojave Cement Plant and Quarries are one of the largest businesses in the Mojave community, today employing the full time equivalent of 200 employees and contractors at the Mojave Operations. The loss in mineral resources as a result of the Preferred Alternative would cause a gross revenue loss for CalPortland of **$929.4 million dollars**, and an additional **$300 million dollars** in losses related to mining efficiency and safety for a total of approximately **$1.23 billion dollars**. The tremendous loss associated with adoption of the Preferred Alternative would be felt not just by CalPortland and, certainly, the HSRA, but also by the workers at the Plant and Quarries, the Mojave community, ready mix concrete producers, residential housing, commercial and industrial construction contractors, concrete block, paving, cement sacking, concrete mix and other building product manufacturers, oil field service companies, developers of direct work projects including airport runways and California Department of Transportation paving projects and other consumers of cement, who could be forced to pay higher prices in a less competitive cement market.

804-726

Indeed, there is no evidence supporting the selection of Alternative 2 as the Preferred Alternative in the Draft EIR/EIS. Prior to its selection, CalPortland was told by HSRA staff only that Alternative 2 was selected because another local cement competitor objected to other routes, and due to non-specified concerns regarding wind turbines. But Alternative 2 is strikingly inconsistent with one of HSRA's stated objectives for alignment alternatives: to "minimize potential impacts to the CalPortland limestone quarry and cement plant." (April 2016 Bakersfield to Palmdale Project Section Supplemental Alternatives Analysis Report, p. 2-5.) Subsequent to the Board's selection of Alternative 2 as the Preferred Alternative in October of

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804-726 2018 (over CalPortland's strenuous objection and detailed documentation of the dramatic financial, engineering/safety and environmental issues raised by the route), CalPortland engaged in follow-up meetings with the HSRA in 2018-2019, but at no time did the HSRA offer any solutions to CalPortland's concerns.

Safety and Security Impacts

804-727 Draft EIR/EIS Chapter 3.11, Safety and Security, fails to disclose the hazards to the Bakersfield to Palmdale Section from its proximity to the CalPortland Mojave Quarries. Specifically, Impact S&S #14—Hazards to the High-Speed Rail from Nearby Facilities fails to discuss the Quarries at all. (Draft EIR/EIS Chapter 3.11, Safety and Security, p. 3.11-66.) But, in two ways, the Preferred Alternative route is not safe for the train.

First, CalPortland recommends a 1,500 foot buffer zone between the surface rail line and quarries, as fly rock and vibrations from mining blast areas can damage the surface track and strike the rail tracks or trains, resulting in potential derailments and other significant hazards.[2] (See Attachment 2.) In 2016, CalPortland provided the HSRA with a map and cross sections illustrating the Alternative 2 alignment and quarry operations of the current and future mining areas, and it did so again in 2018, yet the Preferred Alternative is still designed too close to CalPortland pits, roads and conveyor designs. The Alternative 2 design also passes through the CalPortland planned construction material stockpiles. (See Attachment 2, showing current and future mining areas.) Indeed, the Draft EIR/EIS states that there would only be "a 220-foot exclusion zone around the B-P Build Alternatives' tunnel structures to provide a buffer from CalPortland Company drilling and blasting excavation activities." (Draft EIR/EIS, Chapter 9, "Geology, Soils, Seismicity, and Paleontological Resources," p. 3.9-55 [emphasis added].) As the HSRA has been repeatedly told, **this is not a safe buffer zone for the underground tunnel portions of the track; a minimum underground blast buffer of 640 feet or an increase of 420 feet over HSRA's proposed 220 foot blast buffer for the underground track area is recommended**.

Second, nothing in the Draft EIR/EIS, or its attendant Technical Reports, provides substantial evidence showing that the Preferred Alternative was developed to account for large open pit repetitive blast and geological factors, including blast vibration, concussions, fly rock and movement along faults and structures. Again, a 220 foot underground exclusion zone is simply inadequate to protect the underground train track, and the track comes within the 1500 foot surface safety buffer zone, even assuming the route was altered to directly avoid existing pits.

[2] In March 2016, Martin Marietta reported to the U.S. Department of Labor's Mine Safety and Health Administration regarding a fatality to a pickup truck driver from fly rock that came through the roof of the truck while the driver was parked 1,200 feet from the blast zone.

Technological Infeasibility

804-728 CalPortland further notes that, under CEQA, the HSRA, should not approve a project that is technically infeasible. Feasible is defined as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, technological, and legal factors." (Pub. Resources Code §21061.1; CEQA Guidelines §15364.) Here, it is beyond dispute that the CalPortland Mojave Quarries are surface mines, with pits going approximately 1,000 feet below the surface. The Preferred Alternative calls for the construction of surface portions of the route adjacent to exiting pits and within the 1500 foot surface safety buffer zone and the 640 foot underground safety buffer (see Attachment 2). Simply put, no train alignment (surface or tunnel) would be feasible at such close distances to active pits, which bottom out well below the underground and surface rail designs. (See Attachment 2, showing the recommended safety buffer zone around Alternative 2.)

Recirculation Is Required

804-729 An EIR must be recirculated when "significant" new information is added and when the document is fundamental inadequate. (Public Resources Code §21092.1.) As defined by Public Resources Code section 21166, and CEQA Guidelines section 15162, new information is "significant" when it shows a new, substantial environmental impact resulting either from the project and when an EIR is fundamentally inadequate. Similarly, under NEPA, recirculation is required where there is significant new information or circumstances relating to the proposed action. (*Westlands Water Dist. v. U.S. Dep't of Interior* (9th Cir. 2004) 376 F.3d 853, 873 [citing 40 C.F.R. § 1502.9(c)(1)(ii)].). Here, as detailed above, the Draft EIR/EIS fails as an informational document, improperly conflates project design features with mitigation measures, is replete with ineffective and illusory mitigation measures, fails to disclose the significant impacts the Preferred Alternative will have to mineral resources, and safety. Further, its repeated statements that the Preferred Alternative will pass west of the CalPortland Mojave Cement Plant and Quarries, is feasible, will avoid impacts to any future mining, and needs only an underground 220 foot blast buffer from the Quarries to ensure rail safety, results in a document that is fundamentally inadequate and fails to provide an accurate description of the project under consideration which also includes track coming within the 1500 foot and 640 foot surface and underground blast safety buffers. (*See County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185; CEQA Guidelines §15124.) The Draft EIR/EIS must therefore be recirculated.

Conclusion

804-730 Though CalPortland is a significant landholder in the Mojave community and a key stakeholder, HSRA has not been in direct communication with CalPortland since February 5, 2020, at an HSRA public meeting. Rather than proceeding with the Preferred Alternative, CalPortland urges the HSRA to recirculate the Draft EIR/EIS after engaging in new direct

Submission 804 (Michelle Ouellette, Best Best & Kreiger LLP, April 27, 2020) - Continued

BBK
BEST BEST & KRIEGER LLP
ATTORNEYS AT LAW

804-730 dialogue with the HSRA that would assist it in avoiding the significant financial, engineering and legal issues with the Preferred Alternative that are detailed above.

Sincerely,

Michelle Ouellette
of BEST & KRIEGER LLP

Enclosures:

Attachment 1, October 15, 2018 Letter from BBK to HSRA.
Attachment 2, showing current and future mining areas recommended surface and underground safety buffer zone and construction material stockpiles around Alternative 2

cc: Client (via email)
Congressman Kevin McCarthy (via email)
Congressman TJ Cox (via email)
State Senator Shannon Grove (via email)
State Senator Scott Wilk (via email)
State Senator Andy Vidak (via email)
Assembly Member Tom Lackey (via email)
Assembly Member Rudy Salas (via email)
Assembly Member Vince Fong (via email)
Gavin McHugh, McHugh, Koepke & Associates (via email)

Attachment 1

Submission 804 (Michelle Ouellette, Best Best & Kreiger LLP, April 27, 2020) - Continued

Indian Wells (760) 568-2611
Irvine (949) 263-2600
Los Angeles (213) 617-8100
Manhattan Beach (310) 643-8448

BEST BEST & KRIEGER LLP
ATTORNEYS AT LAW

3390 University Avenue, 5th Floor, P.O. Box 1028, Riverside, CA 92502
Phone: (951) 686-1450 | Fax: (951) 686-3083 | www.bbklaw.com

Ontario (909) 989-8584
Sacramento (916) 325-4000
San Diego (619) 525-1300
Walnut Creek (925) 977-3300
Washington, DC (202) 785-0600

Michelle Ouellette
(951) 826-8373
michelle.ouellette@bbklaw.com
File No. 31273.00001

October 15, 2018

VIA E-MAIL BOARDMEMBERS@HSR.CA.GOV
VIA EXPRESS MAIL

Chairman Dan Richards and Members of the High-Speed Rail Authority Board of Directors
California High-Speed Rail Authority
770 L Street, Suite 620
Sacramento, CA 95814

Re: October 16, 2018 High-Speed Rail Authority Meeting, Agenda Item 2, Staff Presentation on the Recommended State Preferred Alternative for the Bakersfield to Palmdale Project Section

Chairman Richards and Honorable Board Members:

CalPortland Company (CalPortland), the owner of the CPC Mojave Cement Plant and Quarries, has retained Best Best & Krieger LLP to evaluate the California High-Speed Rail Authority (HSRA) staff's proposed Bakersfield to Palmdale alignment route for the High-Speed Rail Line, a route referred to as "Alternative 2." On September 13, 2018, at a HSRA Open House meeting on the segment, CalPortland first learned that staff wished to recommend that this Board adopt Alternative 2 as its "Preferred Alternative" for evaluation in a Draft Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) for the segment. Alternative 2 is a route that crosses into CalPortland's private land holdings, moving through the middle of its current and future limestone, shale and pozzolan mining operations. CalPortland has conducted a detailed review of Alternative 2, and, as detailed below, given the dramatic financial, engineering/safety and environmental issues raised by the route, hereby submits this letter in strong opposition to selection of Alternative 2 as the "State Preferred Alternative."

Financial Impacts of Alternative 2

The CPC Mojave Cement Plant and Quarries have been in operation since 1955. Then, as now, the Plant and Quarries have been one of the largest businesses in the Mojave community, today employing the full time equivalent of 200 employees and contractors. Based on the Alternative 2 alignment and necessary safety buffers, CalPortland has determined that approximately 63.5 million tons of limestone, equating to 42.3 million tons of cement at 25.4 years of mine and plant life would be lost, resulting in a gross revenue loss for the company of **$3.81 billion dollars**, and an additional **$1.2 billion dollars** in losses related to mining efficiency and safety for a total of approximately **$5 billion dollars**. The tremendous loss associated with

Alternative 2 would be felt not just by CalPortland and, certainly, the HSRA, but also by the workers at the Plant and Quarries, the Mojave community, ready mix concrete producers, residential housing, commercial and industrial construction contractors, concrete block, paving, cement sacking, concrete mix and other building product manufacturers, oil field service companies, developers of direct work projects including airport runways and California Department of Transportation paving projects and other consumers of cement, who could be forced to pay higher prices in a less competitive cement market.

Indeed, there does not seem to be a clear reason why HSRA staff recommends the selection of Alternative 2. At the Open House, CalPortland was told only that the alternative was selected because another local cement competitor objected to other routes, and due to non-specified concerns regarding wind turbines.[1] Indeed, Alternative 2 is strikingly inconsistent with one of HSRA's stated objective for alignment alternatives: to "minimize potential impacts to the CalPortland limestone quarry and cement plant." (April 2016 Bakersfield to Palmdale Project Section Supplemental Alternatives Analysis Report, p. 2-5.) CalPortland strongly urges the HSRA Board not to select an alternative with such massive economic impacts, impacts that are also in direct conflict with stated HSRA objectives.

Engineering and Safety Impacts of Alternative 2

Even if Alternative 2 was not economically prohibitive on all levels, the route is not feasible from an engineering or safety perspective. CPC Mojave Quarries are surface mines, with pits going approximately 1,000 feet below the surface. Alternative 2 calls for the construction of portions of the route adjacent to exiting pits and within the safety buffer zone. Simply put, no train alignment (surface or tunnel) would be possible at such close distances to active pits which bottom out well below the underground rail designs. (See Attachment 1, showing the recommended safety buffer zone around Alternative 2.)

Further, there are two significant safety issues raised by Alternative 2. First, CalPortland would recommend a 2,000 foot buffer zone between the rail line and quarries, as fly rock from mining blast areas can strike the rail tracks or trains, resulting in potential derailments and other significant hazards.[2] (See Attachment 1.) CalPortland has seen no documentation indicating that Alternative 2 was developed in any manner that would avoid this hazard. In 2016, CalPortland provided the HSRA with a map of the current and future mining areas, yet Alternative 2 is still

[1] While it is unknown what benefits Alternative 2 may or may not have with regard to avoidance of existing wind turbines, we note that the April 2016 Bakersfield to Palmdale Project Section Supplemental Alternatives Analysis Report, at page 2-14, states that all of the alternatives under consideration would result in the same potential impact to wind turbines (11 turbines) and, as such, this evaluation measure was not a critical differentiator.
[2] In March 2016, Martin Marietta reported to the U.S. Department of Labor's Mine Safety and Health Administration regarding a fatality to a pickup truck driver from fly rock that came through the roof of the truck while the driver was parked 1,200 feet from the blast zone.

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designed too close to CalPortland pits, roads and conveyor designs. (See Attachment 2, showing current and future mining areas.)

Second, CalPortland has seen no documentation indicating that Alternative 2 was developed in any manner that accounted for large open pit blast and geological factors including blast vibration, concussions, fly rock and movement along faults and structures. Indeed, the two "blasting exclusion zones" shown in typical cross-sections of the proposed tunnel design for Alternative 2 are only 220 feet to either side of the train – simply inadequate to protect the train with the necessary 2,000 foot buffer zone, even assuming the route was altered to directly avoid existing pits. Accordingly, CalPortland also strongly urges the Board to reject Alternative 2 so that this segment of the High-Speed Rail project can be safely constructed.

Environmental Impacts of Alternative 2

Under the California Environmental Quality Act (CEQA), the Bakersfield to Palmdale segment of the High-Speed Rail project cannot be approved unless the HSRA first certifies an EIR for the segment. Nowhere in the materials CalPortland has reviewed does HSRA disclose that Alternative 2 will result in multiple significant environmental impacts under CEQA, including significant air quality impacts from the proposed construction of underground tunnels and a significant impact to mineral resources. As detailed in Appendix G to the CEQA Guidelines (14 California Code of Regulations §§ 15000 et seq.), an impact to mineral resources is significant if it will result in the "loss of availability of a known mineral resource that would be of value to the region and the residents of the state." Here, Alternative 2 would result in the substantial loss of limestone, shale and pozzolan resources, indeed it would result in a loss of quarry mine life, based on current production levels, of 25.4 years. Thus, even if the Board proceeds with consideration of Alternative 2 as its "project", CEQA will require that the EIR identify specifically feasible mitigation measures by which Alternative 2's significant environmental impacts to air quality, mineral resources, and other environmental areas can be mitigated or avoided. (Pub. Resources Code §§21002.1(a), 21061; CEQA Guidelines §§15121(a), 15126.4(a).) Further, the EIR will also be required to focus in its selection of alternatives to the "preferred alternative" or "project" on alternatives that can avoid or substantially lessen the route's significant environmental effects. (Pub. Resources Code §21002; CEQA Guidelines §15126.6(a)–(b).) Indeed, the only way to avoid or reduce the significant impact of Alternative 2 on California's mineral resources is to pursue a route that will not cut through the CPC Mojave Cement Plant and Quarries. Accordingly, given the significant economic, engineering and safety issues, CalPortland also urges the Board not pursue the time-consuming and likely wasteful process of conducting CEQA review of Alternative 2.

Next Steps

Though CalPortland is a significant landholder in the Mojave community and a key stakeholder, HSRA has not been in direct communication with CalPortland since 2016. Rather

than proceeding with selection of Alternative 2 at your October 16, 2018 meeting, CalPortland would welcome a new direct dialogue with the HSRA that would assist it in avoiding the significant financial, engineering and legal issues with Alternative 2 that are detailed above.

Sincerely,

Michelle Ouellette
of BEST BEST & KRIEGER LLP

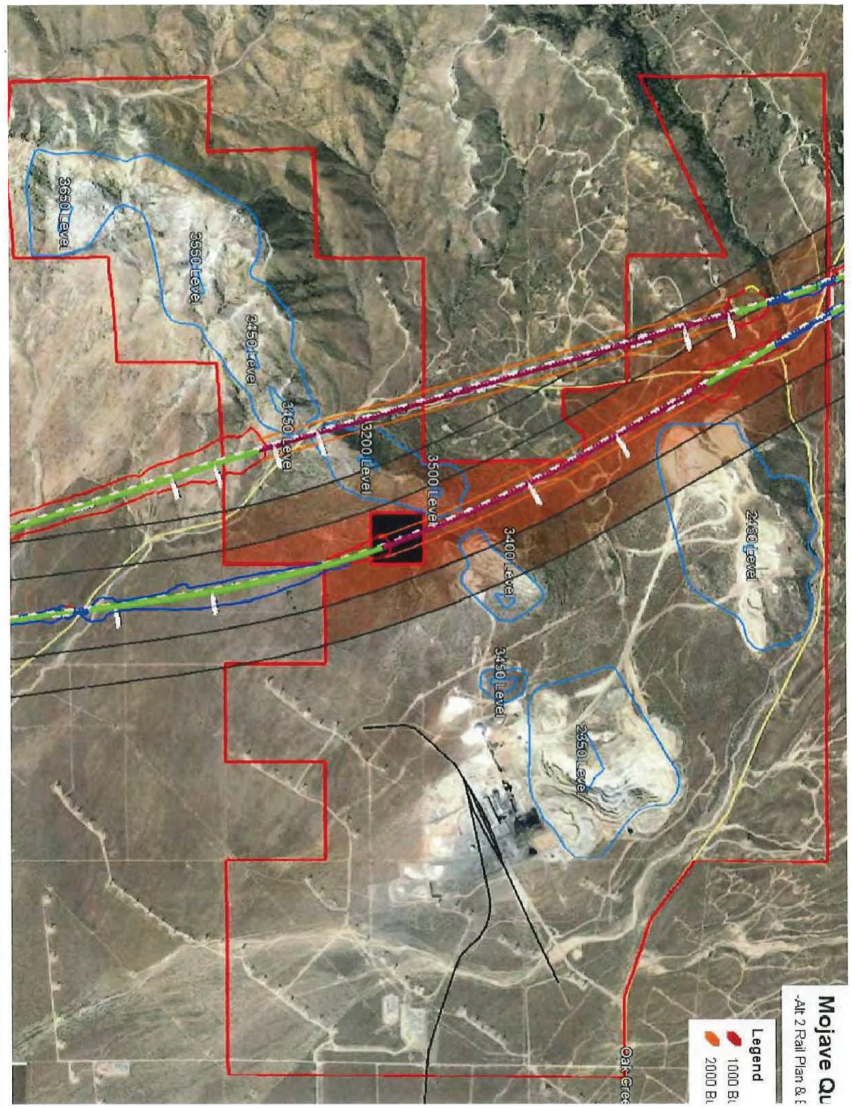
Enclosures:

Attachment 1, showing recommended safety buffer zone around Alternative 2
Attachment 2, showing current and future mining areas

cc: Client (via email)
Congressman Kevin McCarthy (via email)
Congressman David Valadao (via email)
Congressman Steve Knight (via email)
State Senator Jean Fuller (via email)
State Senator Scott Wilk (via email)
State Senator Andy Vidak (via email)
Assembly Member Tom Lackey (via email)
Assembly Member Rudy Salas (via email)
Assembly Member Vince Fong (via email)
Gavin McHugh, McHugh, Koepke & Associates (via email)

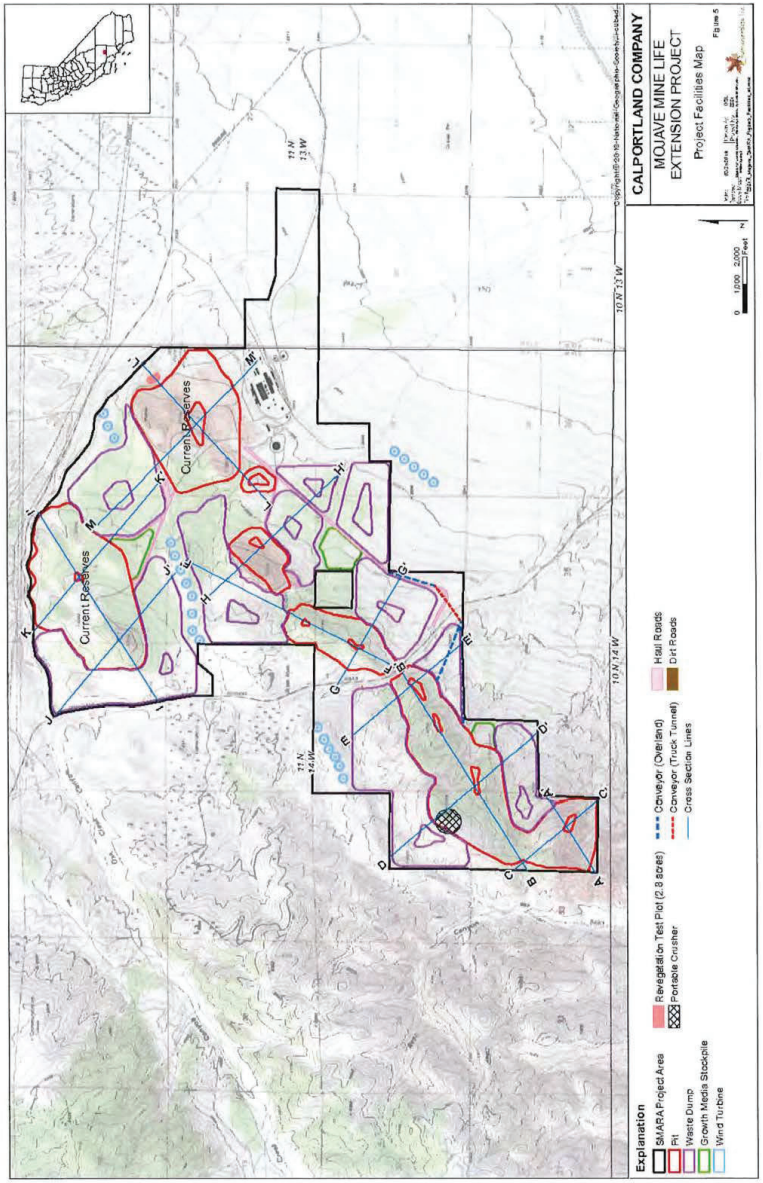
Submission 804 (Michelle Ouellette, Best Best & Kreiger LLP, April 27, 2020) - Continued

Attachment 1



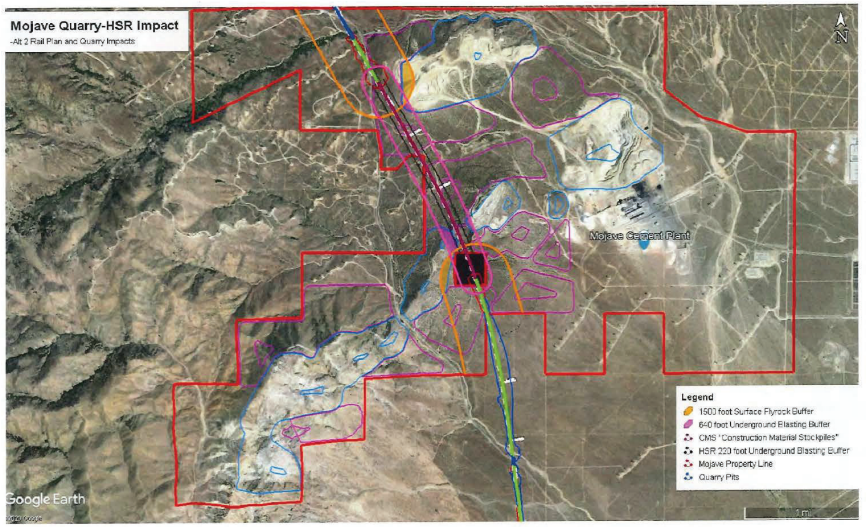
Submission 804 (Michelle Ouellette, Best Best & Kreiger LLP, April 27, 2020) - Continued

Attachment 2



Submission 804 (Michelle Ouellette, Best Best & Kreiger LLP, April 27, 2020) - Continued

Attachment 2



Response to Submission 804 (Michelle Ouellette, Best Best & Kreiger LLP, April 27, 2020)

804-711

The commenter calls for recirculation of the Draft EIR/EIS.

According to the California Environmental Quality Act (CEQA) Guidelines Section 15088.5, recirculation of an EIR prior to certification is required when "significant new information" is added after the draft EIR is circulated for public review.

Pursuant to the Council on Environmental Quality (CEQ) National Environmental Policy Act (NEPA) regulations in effect prior to September 14, 2020, "if a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion." 40 C.F.R. 1502.9(a). A supplemental EIS is required when “[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.” 40 C.F.R. §1502.9(c)(1)(ii).

Following the Authority’s publication of the Draft EIR/EIS in February 2020, the Authority learned that the California Fish and Game Commission advanced the Southern California and Central Coast mountain lion (*Puma concolor*) populations to candidacy for listing under the California Endangered Species Act. The Authority also learned that the U.S. Fish and Wildlife Service (USFWS) determined that listing the monarch butterfly (*Danaus plexippus*) under the federal Endangered Species Act is warranted, but that listing is precluded by other priorities; therefore, the monarch butterfly is now a candidate species under the Endangered Species Act. The U.S. Fish and Wildlife Service will review the species’ status annually until a listing decision is made.

Both CEQA and NEPA provide guidance on the recirculation and supplementation of published environmental documents. Pursuant to pertinent requirements of both laws, the Authority, as lead CEQA and NEPA agency for the Bakersfield to Palmdale Project Section, issued the Revised Draft EIR/Supplemental Draft EIS limited to the portions of the Draft EIR/EIS that required revision based on the new information about the mountain lion and the monarch butterfly. New information included background information, impact analysis, and mitigation measures. In addition to providing new information about the mountain lion and monarch butterfly, the Authority identified two new mitigation measures to address impacts to wildlife resulting from lighting during construction and project operation.

804-711

804-712

Refer to Response to Comment 804-711.

Response to Submission 804 (Michelle Ouellette, Best Best & Kreiger LLP, April 27, 2020) - Continued

804-713

Refer to Standard Response BP-Response-GENERAL-02: Public Outreach on the Draft EIR/EIS.

The commenter claims that the Draft EIR/EIS fails as an informational document by withholding access to essential information necessary to understand the environmental consequences of the project. The commenter cites CEQA Guidelines Section 15147 and states that the Draft EIR/EIS, supporting appendices, and technical reports must be readily available for public examination and must be submitted to all clearinghouses that assist with public review. The text of CEQA Guidelines Section 15147 provides the following:

"The information contained in an EIR shall include summarized technical data, maps, plot plans, diagrams, and similar relevant information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public. Placement of highly technical and specialized analysis and data in the body of an EIR should be avoided through inclusion of supporting information and analyses as appendices to the main body of the EIR. Appendices to the EIR may be prepared in volumes separate from the basic EIR document, but shall be readily available for public examination and shall be submitted to all clearinghouses which assist in public review."

As described in CEQA Guidelines Section 15147, supporting information and analyses were included as appendices to the main body of the Draft EIR/EIS in the form of Volume 2, which is available online at the Authority's website. Technical reports, separate from the appendices in Volume 2, were also prepared and electronic copies were "readily available" at public libraries in the project vicinity and at the Authority's offices, as well as upon request.

The commenter's firm (Best Best &Krieger) requested copies of the technical reports, which were mailed to them on March 20, 2020. Additionally, electronic copies of the technical reports were delivered to public libraries for public review, as stated in Chapter 10 of the Draft EIR/EIS, in the project vicinity along with all three volumes of the Draft EIR/EIS.

804-714

The commenter states that the Draft EIR/EIS relies on the the 2005 Statewide Program EIR/EIS, the 2008 Bay Area to Central Valley Program EIR/EIS, and the 2012 Partially Revised Final Program EIR for the HSR project, and states that none of those documents are available online and cannot be obtained without requesting them from the Authority. The commenter also claims that the Draft EIR/EIS incorporates by reference documents that are unavailable for public review. The only document incorporated by reference is the Fresno to Bakersfield Section Supplemental EIR and Supplemental EIS, which is available on the Authority's website.

The 2005 Statewide Program EIR/EIS, the 2008 Bay Area to Central Valley Program EIR/EIS, and the 2012 Partially Revised Final Program EIR for the HSR project were all available for review at the Authority's offices and electronic copies were also made available upon request.

804-715

The commenter expresses concern about the availability of the Authority's Voluntary Emissions Reduction Agreement Memorandum of Understanding with the San Joaquin Valley Air Pollution Control District for public review. The Voluntary Emissions Reduction Agreement and Memorandum of Understanding were available for public review during the public comment period for the Bakersfield to Palmdale Project Section Draft EIR/EIS, and continue to be available on the San Joaquin Valley Air Pollution Control District website at http://www.valleyair.org/Board_meetings/GB/agenda_minutes/Agenda/2014/June/final/08.pdf (Authority and SJVAPCD 2014). Citations to the Memorandum of Understanding and the Voluntary Emissions Reduction Agreement have been added to Chapter 12, References, in this Final EIR/EIS.

804-716

Refer to Response to Comment 804-713, contained in this chapter.

Response to Submission 804 (Michelle Ouellette, Best Best & Kreiger LLP, April 27, 2020) - Continued

804-717

The commenter states that the impact avoidance and minimization features (IAMFs) should be considered mitigation measures. The commenter states that IAMFs should be considered mitigation measures in light of the Lotus v. Department of Transportation (2014) decision (referred to herein as "Lotus")

The Authority has pledged to integrate programmatic IAMFs consistent with the (1) 2005 Statewide Program EIR/EIS, (2) 2008 Bay Area to Central Valley Program EIR/EIS, and (3) 2012 Partially Revised Final Program EIR into the HSR project. The Authority would implement these features during project design and construction, as relevant to an HSR project section, to avoid or minimize impacts. In instances where project features are not specific to the circumstances of a single project, these standardized and/or pre-existing features are considered integral to the overall project and therefore not mitigation.

Unlike the situation in the Lotus decision, each IAMF is described in detail in the EIR/EIS and the factual basis for their efficacy, feasibility, and implementation is also provided. The avoidance and minimization features are also included in the MMEP to enhance implementation tracking, identify the responsible party, and clarify implementation timing.

The IAMFs were developed at a statewide level to ensure better consistency across all project sections, reflecting uniformity in the commitment of the Authority to ensure environmental effects can be avoided or minimized. In each analytical section of the Draft EIR/EIS, the IAMFs are considered as project features that would be uniformly applied. The impacts of the alternatives are identified with the IAMFs included, and the text explains how the IAMFs function to avoid or minimize impacts. For CEQA, the analysis then describes whether the project, with incorporated IAMFs, is significant as measured against specific thresholds of significance. For impacts that are significant, the analysis identifies mitigation measures. The analysis provides the disclosure CEQA requires.

The IAMFs cited by the commenter (AQ-IAMF#3: Renewable Diesel, AQ-IAMF#4: Reduce Criteria Exhaust Emissions from Construction Equipment, AQ-IAMF#5: Reduce Criteria Exhaust Emissions from On-Road Construction Equipment, and AQ-IAMF#6: Reduce the Potential Impact of Concrete Batch Plants) are consistently applied to avoid

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and minimize potential impacts common to the type of construction required for the entire HSR project. The IAMFs typically represent practices that are standard in the industry.

Refer to the description of IAMFs in Section 3.1 of this Final EIR/EIS for further explanation.

804-718

The commenter notes that an EIR/EIS must propose mitigation measures that will minimize a project's significant impacts by reducing or avoiding them. Additionally, the commenter notes that mitigation measures that are unrealistic and unlikely to be implemented create an illusory analysis and should not be included in an EIR. Additionally, the commenter notes that any uncertainty should be acknowledged and disclosed. The commenter also notes that, per NEPA, an EIS cannot omit a discussion of mitigation. For each mitigation measure proposed in the Draft EIR/EIS and included in this Final EIR/EIS, the Authority has provided a description of how and when the measure will be implemented, how it reduces the impact, and what potential environmental impacts could occur as a result of implementing the measure. Neither the IAMFs nor the mitigation measures are illusory or unrealistic. These measures are real, feasible, and implementable. Following this comment, the commenter identifies several examples that allegedly illustrate claims that mitigation in the Draft EIR/EIS is illusory; responses to those comments is provided in Responses to Comments 804-719 through 804-722, contained in this chapter. No changes have been made to the document in response to these comments.

Response to Submission 804 (Michelle Ouellette, Best Best & Kreiger LLP, April 27, 2020) - Continued

804-719

The commenter states that Mitigation Measure F-B LGA AVR-MM#2a required for Impact AVQ#3 for the portion of the LGA alignment from the intersection of 34th Street and L Street to Oswell Street violates CEQA and NEPA.
The commenter also states that F-B LGA AVR-MM#2a requires that the Authority coordinate with local jurisdictions, but does not include specific actions to ensure appropriate design to reduce the significant aesthetic impacts. The commenter further states that the Draft EIR/EIS does not disclose what the impact would be if F-B LGA AVR-MM#2a is not effective.

Mitigation Measure F-B LGA AVR-MM#2a is part of the suite of measures, including F-B LGA AVR-MM#2b, F-B LGA AVR-MM#2e, F-B LGA AVR-MM#2f, and F-B LGA AVR-MM#2g, required under Impact AVR#4 from the Fresno to Bakersfield Section Final Supplemental EIR and EIS (Authority 2018a and 2019c) and Impact AVQ#3 from the Bakersfield to Palmdale Project Section Final EIR/EIS which would help reduce aesthetic impacts between the 34th Street/L Street intersection and Oswell Street in Bakersfield. F-B LGA AVR-MM#2a describes the consultation process that provides local input on the activities listed in F-B LGA AVR-MM#2a. F-B LGA AVR-MM#2a states the Authority's commitment and action to work with local jurisdictions on local design compatibility.

Altogether, the required mitigation measures for this area would include screening of elevated guideways adjacent to residential areas, replanting of acquired areas, landscape treatments, sound barrier treatments, and other actions. This measure, as part of a suite of measures, does not violate CEQA or NEPA. The mitigation measures in this Final EIR/EIS are enforceable through the Authority's Mitigation Monitoring and Reporting Program under CEQA and its Mitigation Monitoring and Enforcement Program under NEPA. Nonetheless, as noted in Section 3.16 of the Draft EIR/EIS, although implementation of these measures (F-B LGA AVR-MM#2a, F-B LGA AVR-MM#2b, F-B LGA AVR-MM#2e, F-B LGA AVR-MM#2f, and F-B LGA AVR-MM#2g) would reduce visual degradation to the extent feasible, impacts would remain significant and unavoidable. Therefore, the Draft EIR/EIS does disclose the impact after implementation of these mitigation measures.

804-720

This comment states that the Draft EIR/EIS identifies significant and unavoidable carbon monoxide (CO) impacts on air quality during construction and that Mitigation Measure AQ-MM#1 calls for the Authority to enter into an agreement with the Antelope Valley Air Quality Management District and Eastern Kern Air Pollution Control District to mitigate (by offsetting) to net zero (to the extent that offsets are available) the project's construction emissions. This comment also suggests that as separate, independent agencies, the Antelope Valley Air Quality Management District and Eastern Kern Air Pollution Control District are not obligated to enter into agreements with the Authority, and that the Draft EIR/EIS does not disclose specific impacts that could result without implementation of Mitigation Measure AQ-MM #1.

Mitigation Measure AQ-MM#1 requires the Authority to purchase offset emissions through the Eastern Kern Air Pollution Control District's Emission Banking Certificate Program and the Antelope Valley Air Quality Management District's Air Quality Investment Program. The Authority has agreed to purchase offset emissions through these programs, resulting in no net increase in emissions burdens due to nitrogen oxides and volatile organic compounds. There is no evidence that this mitigation measure will not be effective. In fact, the air districts have confirmed that offsets are available based on the project's anticipated annual emission rates and HSR is currently working on agreements with the two districts for the purchase of such offsets.

However, as discussed in Section 3.3.6.3 of this Final EIR/EIS, the emissions offsets programs do not apply to CO emissions.

Construction of the project would not result in localized adverse health effects, as hot-spot modeling indicates that the project is not predicted to cause or exacerbate an exceedance of the National Ambient Air Quality Standards or the California Ambient Air Quality Standards for CO. Construction of the project would exceed the mass emissions thresholds during the construction period. As offsets would not be available to reduce this impact, the project would continue to exceed the significance thresholds for CO mass emissions during construction. As such, the EIR/EIS concludes that construction-related CO emissions would be significant and unavoidable. No change was made to this conclusion in this Final EIR/EIS.

Response to Submission 804 (Michelle Ouellette, Best Best & Kreiger LLP, April 27, 2020) - Continued

804-720

804-721

The commenter notes that AG-MM#1 references an agreement between the Authority and the Department of Conservation California Farmland Conservancy Program to mitigate impacts related to the conversion of farmland, parcel severance, and impacts on farmland under the Williamson Act, and other conservation contracts. The commenter states that this agreement is unavailable online for review and further notes that the Authority Board's online list of resolutions does not include authorization of this agreement. The commenter states that unless there is evidence that the agreement is in place, AG-MM#1 is illusory and cannot be used to address significant impacts on agricultural resources.

As explained in the mitigation measure, the Authority has entered into an agreement with the Department of Conservation California Farmland Conservancy Program to implement agricultural land mitigation for the California HSR Project. The Department of Conservation California Farmland Conservancy Program website includes a fact sheet regarding the agency's agricultural land mitigation agreement with the Authority, which is accessible at https://www.conservation.ca.gov/dlrp/grant-programs/mitigation/Documents/HSR_Agricultural%20Land%20Mitigation%20Program_Q%20and%20A.pdf. The fact sheet explains how the Authority will fund mitigation for HSR project sections undergoing environmental review, which includes this section: "As the Authority fulfills its agricultural lands mitigation commitments in association with construction of other portions of the high-speed rail system (San Jose to Merced, Merced to Sacramento, etc.), the budget for acquiring easements will be increased accordingly. The alternatives and environmental impacts in each of these corridors are now being evaluated." The fact sheet also indicates that the agreement is intended to cover impacts from all sections of the HSR project. Mitigation Measure AG-MM#1 includes enforceable commitments and performance standards to reduce impacts, and it is reasonable to expect that the Department of Conservation California Farmland Conservancy Program will include future HSR project sections in the agreement as they are approved, consistent with the explanation in the fact sheet. As noted in the comment, the EIR/EIS explains that impacts would be significant and unavoidable even with implementation of the mitigation measure.

Response to Submission 804 (Michelle Ouellette, Best Best & Kreiger LLP, April 27, 2020) - Continued

804-722

The assessment of potential mitigation measures in the form of sound barriers presented in Section 3.4 of this Final EIR/EIS is consistent with the Authority's Noise Mitigation Guidelines (Appendix 3.4-B). The guidelines, consistent with methodologies used for other federally and state-funded projects completed by the Caltrans, use a cost reasonableness assessment to determine whether a sound barrier is considered to be a feasible form of mitigation. N&V-MM#3 also identifies Building Sound Insulation and Noise Easements as potential options to mitigate noise impacts.

804-723

The commenter claims that "nowhere in the Draft EIR/EIS does the Authority disclose that the Preferred Alternative, Alternative 2, will result in significant environmental impacts."

Significant environmental impacts are identified throughout the document, many of which can be reduced to less than significant through the implementation of mitigation measures. Other impacts are identified as significant and unavoidable. See Table S-6, Comparison of Potential Adverse Impacts of Bakersfield to Palmdale Project Section Build Alternatives, in this Final EIR/EIS.

Specifically, this Final EIR/EIS identifies the following significant and unavoidable impacts: Air Quality and Global Climate Change; Noise and Vibration; Socioeconomics and Communities; Station Planning, Land Use, and Development; Agricultural Farmland and Forest Land; Aesthetics and Visual Quality; and Cultural Resources. Chapter 3 of this Final EIR/EIS summarizes each section's project impacts along with NEPA and CEQA impact conclusions. Section 3.9.6 discusses the impacts on mineral resources, while Section 3.11.6 discusses impacts on safety and security.

804-724

The commenter raises concerns that the Draft EIR/EIS did not accurately describe the proximity of Alternative 2 (Preferred Alternative) or the extent of the project's impacts to CalPortland Cement Company's (CalPortland) existing and future mining operations. The commenter states that CalPortland has expressed concerns regarding the proposed location of the Bakersfield to Palmdale Project Section through CalPortland's property/holding impacts numerous times to the Authority. The commenter further states that the Authority did not properly consider impacts to mineral resources as required under CEQA.

In 2014, the Authority began studying alignments that would cross CalPortland's Mojave Cement Plant and Quarries. These alignments were studied in order to develop alternatives to avoid and minimize impacts to other resources and communities to the east and north as documented in the 2010 Preliminary Alternatives Analysis (Authority 2010) and the 2012 Supplemental Alternatives Analysis (Authority 2012). The Authority has been in regular coordination with CalPortland since early 2015. Chapter 9 of this Final EIR/EIS lists the meetings between the Authority and CalPortland representatives that occurred six times between February 2015 and the publication of the Draft EIR/EIS on February 28, 2020. Since the close of the public comment period on the Draft EIR/EIS, the Authority met with CalPortland representatives in June 2020.

The 2015 meetings between CalPortland and the Authority focused on developing the Bakersfield to Palmdale Project Section alignment through CalPortland's holdings in the least impactful way as possible to their operations and mineral resource recovery areas. In these 2015 meetings, CalPortland and the Authority coordinated alignment efforts based on CalPortland's input and mapping of their mineral resource holdings. The results of this coordination to minimize impacts to CalPortland are shown in the map in Attachment 1 to the Best, Best, &Krieger letter to the Authority dated October 15, 2018 which shows the location of both Bakersfield to Palmdale alternative alignments crossing between polygons mapped as limestone reserve. As shown in the map, both alignments avoid future mining areas on the CalPortland property which is the basis for the statement on page 8-17 of the Draft EIR/EIS that the Preferred Alternative would avoid future mining areas.

At the meeting with CalPortland on May 12, 2016, Authority staff presented the four

Response to Submission 804 (Michelle Ouellette, Best Best & Kreiger LLP, April 27, 2020) - Continued

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build alternatives to be studied in the Draft EIR/EIS based upon the Authority Board approval of the 2016 Supplemental Alternatives Analysis Report (SAA) in April 2016 (Authority 2016). CalPortland representatives stated that, of the alternatives being carried forward into the Draft EIR/EIS, Alternatives 1, 2, and 5 would be the least objectionable alignment of those proposed. CalPortland representatives indicated that the Alternative 3 alignment would cause greater impact to future limestone reserve. Subsequent meetings between CalPortland and the Authority in late 2016, 2018, and 2019 continued discussions on design refinements to: 1) minimize impacts to the CalPortland property and operations, and, 2) to ensure safe operations of HSR through the CalPortland mining area. As discussed at the most recent meeting in June 2020, as the design of the Preferred Alternative progresses and through the right of way acquisition process, the Authority will continue to coordinate with CalPortland to minimize the impact of the project on CalPortland's mineral resources and mining operations. As Authority staff has stated in meetings with CalPortland since 2015, the Authority understands its responsibilities to compensate CalPortland for its property and resources impacted by the Bakersfield to Palmdale Project Section. The Authority's commitment to provide such compensation will be implemented through SOCIO-IAMF-#2 (Compliance with Uniform Relocation Assistance and Real Property Acquisition Policies Act) described in Section 3.12.4.2 of this Final EIR/EIS.

Section 3.9 of the Bakersfield to Palmdale Project Section Draft EIR/EIS, under subsection 3.9.5.3, provided a discussion of the Affected Environment pertaining to mineral resources and mineral resource zones. The statement on page 3.9-55 of the Draft EIR/EIS cited in this comment that the Bakersfield to Palmdale Build Alternative alignments "would pass just west of CalPortland Company's limestone quarry in a 9,500 foot tunnel" has been revised in this Final EIR/EIS to note that the project design for Alternatives 1, 2, and 5 has been revised to provide for construction of a cover extending 1,700 feet from the north portal of Tunnel #9 to protect the HSR infrastructure from the potential for damage from flyrock. For further discussion of this design modification, refer to Chapter 2 and Appendix 3.1-B of this Final EIR/EIS.

With regard to the comment that the potential loss of mineral resources (particularly at the CalPortland Mojave plant) was not addressed in the Draft EIR/EIS, the comment cites the text on page 3.9-55 of the Draft EIR/EIS which acknowledges that the Authority

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would acquire the legal rights to a portion of the CalPortland property. Once the Authority acquires that portion of the currently unmined property, the limestone reserves within that area could not be mined in the future. CalPortland will be able to continue mining throughout its land holdings outside of this area. To further clarify the impacts of the Bakersfield to Palmdale Build Alternatives on mineral resources, Impact GSS #7a –Impacts to Mineral Resources during Construction has been added to Section 3.9 of this Final EIR/EIS to provide additional detail regarding potential impacts of the Bakersfield to Palmdale Build Alternatives construction on known mineral resources, which is summarized as follows:

The Bakersfield to Palmdale Preferred Alternative would cross CalPortland's property through a 9,500-foot-long tunnel. (Recent coordination between CalPortland and the Authority resulted in refinement of the project design for Alternatives 1, 2, and 5 to provide for construction of a cover extending 1,700 feet from the north portal of Tunnel #9 to protect the HSR infrastructure from the potential for damage from flyrock.) As stated in the Draft EIR/EIS, the Authority determined that a 220-foot exclusion zone would be required as Tunnel #9 traverses through CalPortland's operational area. The 220-foot exclusion zone was established based on modeling performed by the Authority. This exclusion zone permits CalPortland to continue blasting operations for mineral resource recovery up to a distance of 220 feet from the HSR tunnel. This does not preclude CalPortland from mineral resource collection using methods other than blasting within the 220-foot exclusion zone. As discussed in coordination meetings in 2015-16 with the Authority, CalPortland estimated that there is approximately 200 years of limestone reserves throughout their property at the Mojave quarry and cement plant. As stated in this comment, CalPortland has estimated that 6.2 years of mine life and cement production would be lost as a result of the Bakersfield to Palmdale Preferred Alternative. Based on CalPortland's estimate, CalPortland will be able to continue mining over 190 years' worth of limestone reserves that will remain on their property. Accordingly, the project would not result in the loss of a locally important mineral recovery site. Therefore, the impact under CEQA would be less than significant and no mitigation would be required.

The comment also asserts that the Authority has downplayed impacts to mineral resources by using a threshold that the project would have a significant impact under

Response to Submission 804 (Michelle Ouellette, Best Best & Kreiger LLP, April 27, 2020) - Continued

804-724

CEQA if it "results in the loss of availability of a locally important mineral resource recovery site". The comment questions why the threshold of statewide or regional significance that was used in the Final EIR/EIS for the Fresno to Bakersfield Project Section was not used for the Bakersfield to Palmdale Project Section. With regard to CalPortland's limestone reserves, the threshold of impacting a locally important mineral resource recovery site is a more conservative impact threshold because it focuses on the local site (CalPortland) rather than taking into account all limestone reserves within the State of California. In any event, the analysis in the Final EIR/EIS has been updated to reflect the thresholds identified in the comment. Using those thresholds, the impact would still be less than significant as explained in Section 3.9 of this Final EIR/EIS.

804-725

The commenter raises concerns regarding the economic impacts resulting from the potential impacts of the project to CalPortland's mining operations. While the Authority recognizes the potential revenue loss to CalPortland, this comment overstates the magnitude of the economic loss to CalPortland, its employees, and the Mojave community. The B-P Preferred Alternative requires the Authority to purchase property within CalPortland's land holdings where the HSR alignment and right-of-way would be located. The B-P Preferred Alternative does not require closure of the CalPortland Mojave quarry and cement plant. In fact, as discussed in earlier coordination meetings in 2015-16 with the Authority, CalPortland estimated that there is approximately 200 years of limestone reserves throughout their property at the Mojave quarry and cement plant. As stated in Comment 804-724, contained in this chapter, CalPortland has estimated that 6.2 years of mine life and cement production would be lost as a result of the B-P Preferred Alternative. Because CalPortland will be able to continue mining over 190 years worth of limestone reserves that will remain on their property, they will continue to be able to produce cement for their customers and employ the equivalent of 200 employees and contractors who work at the facility today. It should also be noted that a minimum 220-foot exclusion zone on each side of Tunnel #9 would be implemented by the Authority to ensure blasting activities from CalPortland's resource recovery activities do not cause damage to the HSR System. This minimum 220-foot exclusion zone prohibits blasting from occurring; however, CalPortland would continue to be able to recover resources within the minimum 220-foot exclusion zone by using non-blasting activities. As such, the 6.2 year loss of mine life and cement production that would be lost as a result of the Preferred Alternative is overstated in the comment.

Response to Submission 804 (Michelle Ouellette, Best Best & Kreiger LLP, April 27, 2020) - Continued

804-726

Refer to Standard Response BP-Response-GENERAL-01: Alternatives.

The commenter objects to the selection of Alternative 2 as the Preferred Alternative based on its proximity and impacts to the CalPortland Cement Company property. The commenter states that Alternative 2 is inconsistent with the Authority's stated objectives in the 2016 SAA for alignment alternatives: to "minimize" potential impacts to the CalPortland limestone quarry and cement plant.

Consistent with the objectives stated in the 2016 SAA, the alternatives were designed to minimize potential impacts to the CalPortland limestone quarry and cement plant. Because of CalPortland's large land holdings in this area, full avoidance of CalPortland's property is not feasible. The results of the Authority's efforts to minimize impacts to CalPortland are shown in the map in Attachment 1 to the BB&K letter to the Authority dated October 15, 2018, as seen from the location of both B-P alternative alignments crossing between polygons mapped as limestone reserve. As shown in the map, both alignments avoid future mining areas on the CalPortland property which is the basis for the statement on page 8-17 of the Draft EIR/EIS that the Preferred Alternative would avoid future mining areas.

The Authority disagrees with the portion of the comment which states "CalPortland engaged in follow-up meetings with the HSRA in 2018-2019, but at no time did the HSRA offer any solutions to CalPortland's concerns". The Authority has explained that the alternatives in the 2016 SAA which impact the CalPortland property had fewer impacts overall than alternatives previously studied in the 2010 Preliminary Alternatives Analysis Report (PAA; Authority 2010) and 2012 SAA. The Authority appreciates the information provided by CalPortland from their studies to assess peak particle velocity and fly rock distance from blasting operations. As noted previously, the tunnel entrance has been moved in response to CalPortland's concerns regarding safety and operations, and the Authority will continue to work during final design to address CalPortland's concerns.

Refer to Standard Response BP-Response-GENERAL-01: Alternatives for additional information regarding the development and analysis of alternatives.

804-726

804-727

The commenter indicates that the Draft EIR/EIS fails to disclose safety hazards to the Bakersfield to Palmdale Project Section resulting from its proximity to the CalPortland Mojave Quarries operations. The commenter acknowledges that the Draft EIR/EIS identifies a minimum 220-foot buffer exclusion zone to provide a buffer from CalPortland drilling and blasting activities; however, the commenter states this distance is not enough for the safe operation of the project. The commenter also states that the Draft EIR/EIS did not take into account safety considerations for repetitive blast and geological factors, including blast vibrations, concussions, fly rock, and movement along faults and structures.

In the Draft EIR/EIS, Impact S&S #14 in Section 3.11.6 states "Any sites of concern are evaluated through the use of site-specific hazard and vulnerability assessments (S&S-IAMF#3) to determine risks to the HSR system". The term "any sites of concern" would include facilities like CalPortland's Mojave quarry and cement plant, specifically with regard to the blasting. Clarifying text has been added to Impact S&S #14 in Section 3.11 of this Final EIR/EIS specifically referring to the 220-foot exclusion zone proposed by the Authority to ensure the safety of HSR trains as they traverse the portion of the HSR alignment adjacent to the Cal Portland Mojave quarry and cement plant property.

In response to the CalPortland Company's comments made during the public review period of the Draft EIR/EIS, the project design for Alternatives 1, 2, and 5 has been revised to provide for construction of a cover extending 1,700 feet from the north portal of Tunnel #9 to protect the HSR infrastructure from the potential for damage from flyrock. This engineering refinement further reduces potential effects that surface blasting and flying rock would have on the HSR trainsets traveling through the CalPortland Company's property. In addition, during final design, the Authority will coordinate with CalPortland to obtain information (e.g., blasting details, vibration monitoring data, and geotechnical data) that would help refine the detailed engineering design for the exclusion zone.

Response to Submission 804 (Michelle Ouellette, Best Best & Kreiger LLP, April 27, 2020) - Continued

804-728

The commenter questions the feasibility of the alignment given CalPortland's stated safety buffers of 1,500 feet on the surface and 640 feet underground. The commenter's recommended buffers are noted. The Authority has determined that a minimum 220-foot exclusion zone would be required for Tunnel #9 that traverses through CalPortland's operational area. This exclusion zone permits CalPortland to continue blasting operations for mineral resource recovery up to a distance of 220 feet from the HSR tunneling.

In response to the CalPortland Company's comments made during the public review period of the Draft EIR/EIS, the project design for Alternatives 1, 2, and 5 has been revised to provide for construction of a cover extending 1,700 feet from the north portal of Tunnel #9 to protect the HSR infrastructure from the potential for damage from flyrock. This specific engineering refinement further reduces potential effects that surface blasting and flying rock would have on the HSR trainsets traveling through the CalPortland Company's property. In addition, during final design, the Authority will coordinate with CalPortland to obtain information (e.g., blasting details, vibration monitoring data, and geotechnical data) that would help refine the detailed engineering design for the exclusion zone.

804-729

Refer to Response to Comment 804-711, contained in this chapter.

The Authority has been in regular coordination with CalPortland since early 2015. Chapter 9 of this Bakersfield to Palmdale Project Section Final EIR/EIS lists the meetings between the Authority and CalPortland representatives, which occurred six times between February 2015 and the publication of the Draft EIR/EIS on February 29, 2020. Since the close of the public comment period on the Draft EIR/EIS, the Authority met with CalPortland representatives in June 2020.

The 2015 meetings between CalPortland and the Authority focused on developing the Bakersfield to Palmdale Project Section alignment through CalPortland's holdings in the least impactful way as possible to their operations and mineral resource recovery areas. In these 2015 meetings, CalPortland and the Authority coordinated alignment efforts based on CalPortland's input and mapping of their mineral resource holdings. The results of this coordination to minimize impacts on CalPortland are shown in the map in Attachment 1 to the Best, Best &Krieger letter to the Authority dated October 15, 2018, as seen from the location of both B-P Build Alternative alignments crossing between polygons mapped as limestone reserve. As shown in the map, both alignments avoid future mining areas on the CalPortland property which is the basis for the statement on page 8-17 of the Draft EIR/EIS that the Preferred Alternative would avoid future mining areas.

At the meeting with CalPortland on May 12, 2016, Authority staff presented the four B-P Build Alternatives to be studied in the Draft EIR/EIS based upon the Authority Board approval of the 2016 SAA in April 2016. CalPortland representatives stated that, of the alternatives being carried forward into the Draft EIR/EIS, Alternatives 1, 2, and 5 would be the least objectionable alignment of those currently proposed. CalPortland representatives indicated that the Alternative 3 alignment would cause greater impact on future limestone reserve. Subsequent meetings between CalPortland and the Authority in late 2016, 2018, and 2019 continued discussions on design refinements to: 1) minimize impacts on the CalPortland property and operations, and 2) ensure safe operations of HSR through the CalPortland mining area. As discussed at the most recent meeting in June 2020, as the design of the Preferred Alternative progresses and through the right-of-way acquisition process, the Authority will continue to coordinate

Response to Submission 804 (Michelle Ouellette, Best Best & Kreiger LLP, April 27, 2020) - Continued

804-729

with CalPortland to minimize the impact of the project on CalPortland's mineral resources and mining operations. As Authority staff have continuously stated in meetings with CalPortland since 2015, the Authority understands its responsibilities to compensate CalPortland for its property and resources affected by the Bakersfield to Palmdale Project Section. The Authority's commitment to provide such compensation will be implemented through SOCIO-IAMF-#2 (Compliance with Uniform Relocation Assistance and Real Property Acquisition Policies Act) described in Section 3.12.4.2 of this Final EIR/EIS. The Authority looks forward to continuing its dialogue with CalPortland as the Bakersfield to Palmdale project progresses.

804-730

The commenter notes their last contact with the Authority was on February 5, 2020, at a public meeting. The commenter requests that the Authority engage in new direct dialogue with CalPortland and recirculate the Draft EIR/EIS with an alternative that avoids the financial, engineering, and legal issues raised in their letter. The Authority met with CalPortland in June 2020 to discuss their concerns. The Authority will continue to coordinate with CalPortland regarding the specific financial, engineering, and legal issues raised in this comment letter.

Submission 707 (Jared Cooley, Brookfield Renewable, March 26, 2020)

Bakersfield - Palmdale - RECORD #707 DETAIL

Status :	Action Pending
Record Date :	3/26/2020
Affiliation Type :	Business and/or Organization
Submission Date :	3/26/2020
Interest As :	Business and/or Organization
Submission Method :	Program Info Line
First Name :	Jared
Last Name :	Cooley
Professional Title :	Senior Manager, Operations
Business/Organization :	Brookfield Renewable
Address :	
Apt./Suite No. :	
City :	
State :	CA
Zip Code :	0000
Telephone :	(661) 557-8451
Email :	Jared.Cooley@brookfieldrenewable.com
Cell Phone :	
Email Subscription :	Bakersfield to Palmdale
Add to Mailing List :	Yes
EIR/EIS Comment :	Yes
Attachments :	Jared_Cooley_Transcription.pdf (41 kb)

707-536

Hello, Jared Cooley, 661-557-8451, I'm calling to inquire about the March 26th and April 9th Public Meetings for the Bakersfield to Palmdale section, I'm wondering if they will be cancelled, rescheduled or held virtually. Thank you.

Response to Submission 707 (Jared Cooley, Brookfield Renewable, March 26, 2020)

707-536

Refer to Standard Response BP-Response-GENERAL-02: Public Outreach on the Draft EIR/EIS.

Submission 708 (Jared Cooley, Brookfield Renewable, March 26, 2020)

Bakersfield - Palmdale - RECORD #708 DETAIL

Status :	Action Pending
Record Date :	3/26/2020
Affiliation Type :	Business and/or Organization
Submission Date :	3/26/2020
Interest As :	Business and/or Organization
Submission Method :	Project Email
First Name :	Jared
Last Name :	Cooley
Professional Title :	Senior Manager, Operations
Business/Organization :	Brookfield Renewable
Address :	6703 Oak Creek Rd
Apt./Suite No. :	
City :	Mojave
State :	CA
Zip Code :	93501
Telephone :	661.823.2155
Email :	Jared.Cooley@brookfieldrenewable.com
Cell Phone :	661.557.8451
Email Subscription :	Bakersfield to Palmdale
Add to Mailing List :	Yes
EIR/EIS Comment :	Yes

Stakeholder Comments/Issues :

Hello,

708-572 I am wondering if these meetings are cancelled, postponed, rescheduled, or if they will go on as-planned, but virtually/online.

Thank you

Jared Cooley
Senior Manager, Operations

Brookfield Renewable
6703 Oak Creek Rd, Mojave, CA, 93501
T 661.823.2155 C 661.557.8451 F 661.749.7227
jared.cooley@brookfieldrenewable.com<mailto:jared.cooley@brookfieldrenewable.com>
www.brookfieldrenewable.com<http://www.brookfieldrenewable.com/>

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Response to Submission 708 (Jared Cooley, Brookfield Renewable, March 26, 2020)

708-572

Refer to Standard Response BP-Response-GENERAL-02: Public Outreach on the Draft EIR/EIS.

The Authority outreach team contacted the commenter on March 26, 2020 to inform him of the Rosamond Community event cancellation and changes in meeting format for the public hearing.

Submission 783 (Angela Moskow, California Wildlife Foundation/California Oaks, April 28, 2020)

Bakersfield - Palmdale - RECORD #783 DETAIL

Status :	Action Pending
Record Date :	4/30/2020
Affiliation Type :	Business and/or Organization
Submission Date :	4/28/2020
Interest As :	Business and/or Organization
Submission Method :	Project Email
First Name :	Angela
Last Name :	Moskow
Professional Title :	California Oaks Information Network Manager
Business/Organization :	California Wildlife Foundation/California Oaks
Address :	428 13th Street
Apt./Suite No. :	Suite 10A
City :	Oakland
State :	CA
Zip Code :	94612
Telephone :	(510) 763-0282
Email :	amoskow@californiaoaks.org
Cell Phone :	510) 610-4685
Email Subscription :	
Add to Mailing List :	
EIR/EIS Comment :	Yes
Attachments :	CaliforniaOaksCommentLetterBPHighSpeedRail4_28.pdf (1 mb)

783-731

783-732

Stakeholder Comments/Issues :

Greetings,

Please find attached a comment letter by California Wildlife Foundation/California Oaks on the draft EIR/EIS for the Bakersfield to Palmdale Project Section, California High-Speed Rail Project. 783-733

Please acknowledge receipt of this letter.

Best,

Angela Moskow

Angela Moskow
California Oaks Information Network Manager
California Wildlife Foundation/California Oaks
428 13th Street, Suite 10A
Oakland, CA 94612
www.californiaoaks.org
Office: (510) 763-0282
Mobile: (510) 610-4685

California Wildlife Foundation
428 13th Street, Suite 10A
Oakland, CA 94612
www.californiawildlifefoundation.org
tel 510.208.4436
fax 510.268.9948

April 28, 2020

Draft EIR/EIS for the Bakersfield to Palmdale Project Section
California High-Speed Rail Authority
770 L Street, Suite 620 MS-1
Sacramento, CA 95814

Transmitted via email: Bakersfield_Palmdale@hsr.ca.gov

RE: Draft EIR/EIS for the Bakersfield to Palmdale Project Section, California High-Speed Rail Project

Dear Ladies and Gentlemen:

The California Oaks program of California Wildlife Foundation (CWF/CO) works to conserve oak ecosystems because of their critical role in sequestering carbon, maintaining healthy watersheds, providing wildlife habitat, and sustaining cultural values. CWF/CO reviewed the Draft EIR/EIS (DEIR) for the Bakersfield to Palmdale Project Section of the High Speed Rail Project and the Biological and Aquatic Resources Technical Report. Unfortunately, the DEIR has deficiencies that do not align with California law. The first pertains to the definition of an oak woodland. The DEIR does not calculate the greenhouse gas impacts of the proposed tree removals—a second deficiency. This letter also discusses proposed mitigation, proposed placement of excavated material, and the stated objective to carry out the project *in a manner sensitive to and protective of California's unique natural resources*.

DEFINITION OF OAK WOODLAND

California Fish and Game Code defines oak woodlands: ''*Oak woodlands* means an oak stand with a greater than 10 percent canopy cover or that may have historically supported greater than 10 percent canopy cover." Unfortunately, it appears that this definition is not used in analyzing impacts to oaks. Instead, the DEIR relies on discussion of plant communities, thus not analyzing the impacts to many of the oak woodlands in the project area.

The discussion of Plant Communities in section 5.4.2.5 on page 5-13 of Chapter 5 of the Biological and Aquatic Resources Technical Report (technical report) addresses the methods used to classify plant communities:

> Plant communities within the SSPSA were mapped according to the vegetation classification system described in *Manual of California Vegetation* (Sawyer et al. 2009), using alliance names and definitions from that work and from *Vegetation Alliances and Associations of the Great Valley Ecoregion, California* (Buck-Diaz et al. 2012). In cases for which a land cover could not be suitably represented by an alliance name, a CWHR category was used for the mapping, based on CWHR category names and definitions in *A Guide to Wildlife Habitats of California* (CDFG 1988). The minimum mapping unit was 0.5 acre, except for lacustrine communities, for which the minimum was 0.02 acre (approximately 870 square feet). Mapping was based on aerial photographic interpretation (1990 to 2014),

Submission 783 (Angela Moskow, California Wildlife Foundation/California Oaks, April 28, 2020) - Continued

783-733

which was ground truthed along public rights-of-way and private properties for which PTE was granted.

Conservation status of vegetation communities was determined based on state ranks provided in *A Manual of California Vegetation*. Vegetation communities with state ranks of S1, S2, and S3 are considered to be Rare and Threatened statewide (Sawyer et al. 2009) and of "special concern" by CDFW (CDFW 2015b). Additionally, some oak woodland and oak scrub communities are evaluated as special-status plant communities because they are subject to preservation requirements as oak woodlands under Section 1.10.10 of the Kern County General Plan (Kern County Planning Department 2007).

The underlined text (underline is added for emphasis) on page R-4 of the Biological and Aquatic Resources Technical Report indicates that blue oak woodland impacts are only assessed for blue oak woodlands that fit the definition of *Quercus douglasii* Woodland Alliance, thus utilizing a biological classification system that only identifies a subset of impacted oaks rather than properly using the state definition of oak woodland:

> ***Quercus douglasii* Woodland Alliance (Blue oak woodland)**
> Blue oak woodland is defined as having blue oak as at greater than 50 percent relative cover in the tree canopy (Sawyer et al. 2009). Although this community has a state rarity ranking of S4, it is evaluated as special-status plant community because it is subject to preservation requirements of section 1.10.10 of the Kern County General Plan.

This error continues (underline is added for emphasis) for the three oak woodland communities described below, quoting from the same section of the technical report:

> ***Quercus john-tuckeri* Shrubland Alliance (Tucker oak chaparral)**
> Tucker oak chaparral is defined as having greater than 50 percent relative cover in the shrub canopy. Although this community has a state rarity ranking of S4, it is evaluated as special-status plant community because it is subject to preservation requirements of section 1.10.10 of the Kern County General Plan.
>
> ***Quercus lobata* Woodland Alliance (Valley oak woodland)**
> Valley oak woodland is defined as having valley oak at greater than 50 percent relative cover in the tree canopy or at greater than 30 percent relative cover when a mixture of willows or other oaks are present.
>
> ***Quercus wislizeni* Woodland Alliance (Interior live oak woodland)**
> Interior live oak woodland is defined as having interior live oak at greater than 50 percent relative in the tree canopy and greater than 15 percent absolute cover. Although this community has a state rarity ranking of S4, it is evaluated as special-status plant community because it is subject to preservation requirements of section 1.10.10 of the Kern County General Plan.

Thus, the DEIR assesses only a portion of Kern County's oak woodlands that will be impacted. It also raises the question of whether other oak species were omitted from the analysis. Furthermore, the technical report does not properly characterize Kern County's oak protections. The summary table of Regional and Local Laws and Regulations on page 8-3 of the technical report provides the summary quoted below for the oak provisions in Kern County General Plan (2007) Land Use, Open Space, and Conservation Element:

2

783-733

> **Section 1.10.10, General Provisions: Oak Tree Conservation, Policies 65 and 66:** State that oak woodlands and large oak trees will be protected where possible and incorporated into the project development plans. The County will promote the conservation of oak tree woodlands for their environmental value and scenic beauty. A registered professional forester (RPF) or certified arborist must perform a site survey to determine the amount of oak canopy coverage and to plot trees that are larger than 12 inches in diameter at 4.5 feet breast height.

The text below quotes Kern County's General Plan section on oak protections (pages 74 and 75). (Underlined text is used for emphasis.):

> **1.10.10 Oak Tree Conservation**
>
> Policies
>
> 65. Oak woodlands and large oak trees shall be protected where possible and incorporated into project developments.
> 66. Promote the conservation of oak tree woodlands for their environmental value and scenic beauty.
>
> Implementation Measures
>
> KK. The following applies to discretionary development projects (General Plan Amendment, zone change, conditional use permit, tract maps, parcel maps, precise development plan) that contains oak woodlands, which are defined as development parcels having canopy cover by oak trees of at least ten percent (10%), as determined from base line aerial photography or by site survey performed by a licensed or certified arborist or botanist. If this study is used in an Environmental Impact Report, then a Registered Professional Forester (RPF) shall perform the necessary analysis.
>
> a. Development parcels containing oak woodlands are subject to a minimum canopy coverage retention standard of thirty percent (30%). The consultant shall include recommendations regarding thinning and diseased tree removal in conjunction with the discretionary project.
> b. Use of aerial photography and a dot grid system shall be considered adequate in determining the required canopy coverage standard.
> c. Adjustments below thirty percent (30%) minimum canopy standard may be made based on a report to assess the management of oak woodlands.
> d. Discretionary development, within areas designated as meeting the minimum canopy standard, shall avoid the area beneath and within the trees unaltered drip line unless approved by a licensed or certified arborist or botanist.
>
> LL. The following applies to development of parcels having oak tree canopy cover of less than ten percent (10%), but containing individual oak trees equal to or greater than a 12-inch diameter trunk at 4.5 feet breast height.
>
> a. Such trees shall be identified on plot plans.
> b. Discretionary development shall avoid the area beneath and within the trees unaltered drip line unless approved by a licensed or certified arborist or botanist.
> c. Specified tree removal related to the discretionary action may be granted by the

3

Submission 783 (Angela Moskow, California Wildlife Foundation/California Oaks, April 28, 2020) - Continued

783-733 decision making body upon showing that a hardship exists based on substantial evidence in the record.

The DEIR neither discusses nor conforms to the Kern County's 30% retention standard.

783-734 Page 6-77 of the technical report states: *There are no oak communities mapped for the project within Los Angeles County.* This statement is repeated in the DEIR (page 3.7-39). It is unclear whether this is because the improper definition of oak woodland is used and thus oaks present

783-735 are not mapped. Furthermore, the discussion of Los Angeles County tree protections omits many of the county's oak protections. The county protections for individual oak trees are summarized in the technical report, yet the county's Oak Woodland Management Plan and the associated guidance document are not discussed.

The Los Angeles County Oak Woodlands Conservation Management Plan Guide states: *The main goal of the Plan is to preserve and restore oak woodlands so they are conserved in perpetuity with no net loss of existing woodlands. There are three important objectives of the Plan: prioritize the preservation of oak woodlands, promote conservation by integrating oak woodlands into the development process in a sustainable manner and effectively mitigate the loss of oak woodlands.* Table 3 of the document provides guidance on Estimated Level of Significance for impacts to oak woodlands.

783-736 **Discussion:** The entire DEIR erroneously uses a definition of oak woodlands that does not conform to California law. This is important in part because oak woodlands provide food and vital habitat for California's native species, including 2,000 plants, 5,000 insects and arachnids, 80 amphibians and reptiles, 160 birds, and 80 mammals—many of which are listed as threatened, endangered, or are species of special concern, at the state or federal level.[1] Davis et al. describe oaks as a "foundation species," using Ellison et al.'s definition of such a species as "...one that 'controls population and community dynamics and modulates ecosystem processes,' whose loss 'acutely and chronically impacts fluxes of energy and nutrients, hydrology, food webs, and biodiversity.'"[2]

Many of the endangered, threatened, and species of concern analyzed in the DEIR depend on oak woodland habitat. The perfunctory manner in which the proposed project's oak impacts were analyzed is inadequate for the protection of these species as well as the state's primary old growth resource.

783-737 Lastly, if the definitional mistake was also made in the environmental documentation for other segments of the High-Speed Rail project those phases of the High-Speed Rail project are in violation of California law.

783-738 **GREENHOUSE GAS IMPACTS OF TREE REMOVALS**

California law requires the greenhouse gas (GHG) impacts of proposed oak removals to be assessed. Section 3.3 of the DEIR lacks this analysis. CEQA's sole GHG focus is "the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions." Net present value of GHG emissions forms the foundation of the state's greenhouse reduction objectives, as well as

[1] Meadows, R. 2007. Oaks: Research and outreach to prevent oak woodland loss. *California Agriculture* 61(1): 7-10.

[2] Davis, F.W., D.D. Baldocchi, and C.M. Taylor. 2016. "Oak Woodlands," chap. 25 in *Ecosystems of California*. Editors: H. Mooney and E. Zavaleta. University of California Press.

783-738 the California Forest Protocol preservation standards. Every ton of carbon dioxide (CO_2) released into the atmosphere by oak woodland or forest conversion represents a measurable potential adverse environmental effect, which is covered by CEQA. Thus California requires the analysis and mitigation of greenhouse gas emissions associated with proposed oak woodland or forest conversions.

Project mitigation that is based on the preservation ("avoided conversion") of existing natural lands does not adequately mitigate GHG emissions of natural lands conversion. Existing trees, understory, and soil conserved by the mitigation, do not, suddenly, upon the protections afforded by their conservation sequester more carbon to mitigate impacted biomass GHG emission effects of the conversion. Newly planted trees take many years to sequester carbon in the soil, understory, and woody mass of the trees.

MITIGATION PLAN

783-739 As discussed above, the DEIR provides an inadequate analysis of the proposed project's impacts on oak communities. Thus, the acreage figures used in the DEIR present only a subset of the woodlands that the proposed project will threaten or destroy. This must be corrected. Further, the

783-740 proposed mitigation actions for trees are problematic, as discussed below.

The provisions of BIO-MM#35: *Implement Transplantation and Compensatory Mitigation Measures for Protected Trees*, are below, with underlined text addressed in the discussion that follows:

> Prior to ground disturbing activities, the Project Biologist will conduct surveys in the Work Area to identify protected trees.
>
> The Project Biologist will establish ESAs around protected trees with the potential to be affected by construction activities, but do not require removal. <u>The ESAs will extend outward five feet from the drip lines of such protected trees.</u>
>
> The Authority will provide compensatory mitigation for impacts on protected trees, including impacts associated with removing or trimming a protected tree. Compensation will be based on requirements set out in applicable local government ordinances, policies and regulations. Compensatory mitigation may include, but is not limited to, the following:
>
> <u>Transplantation of protected trees to areas outside of the Work Area.</u>
>
> <u>Replacement of protected trees at an off-site location, based on the number of protected trees impacted, at a ratio not to exceed 3:1 for native trees, 10:1 for heritage trees</u>, or 1:1 for ornamental trees, unless higher ratios are required by local government ordinances or regulations.
>
> <u>Contribution to a tree-planting fund.</u> This mitigation measure is anticipated to be effective because it ensures that any protected trees within the work area are either transplanted or replaced. Implementation of this measure may result in some additional physical disturbance outside the project footprint for any protected trees transplanted outside of the Work Area.

Discussion: <u>1. ESA protections</u> are not sufficiently protective of large oaks, which should have no disturbance within the root protection zone (RPZ). RPZ is the area that extends beyond the dripline to a distance that is half the distance between the trunk and the dripline—an area that will require a much larger ESA protection area in many cases. Many problems for oaks are

Submission 783 (Angela Moskow, California Wildlife Foundation/California Oaks, April 28, 2020) - Continued

783-740 initiated by disturbing the roots within this zone. *Care of California's Native Oaks*, which is downloadable from http://californiaoaks.org/oak-tree-care/ provides additional guidance.

783-741 2. Transplanting trees: Transport of oak trees, is a very difficult procedure, in part because of the extensive taproots of oak trees. Many trees will not survive transport. It also appears that the mitigation is built on the assumption that no additional mitigation is necessary if oak trees are transported elsewhere. A transplanted oak that survives would no longer continue to provide the same ecosystem and cultural services that it did in its original location.

Lastly, the establishment period must be seven years. Public Resources Code Section 21083.4 applies to mitigation for the removal of oaks that are not commercial species, which are five inches or more in diameter as measured at a point 4.5 feet (breast height) above natural grade level. Senate Bill 1334 (Kuehl), which brought the conversion of oak woodlands under California Environmental Quality Act (CEQA) states: *The requirement to maintain trees in compliance with this paragraph shall terminate seven years after the trees are planted.* This requirement should be clearly stated in the DEIR's discussion of mitigation.

783-742 3. Replacement of trees: The ratios for mitigation are weak. This is especially problematic for impacts to valley oaks. The International Union for Conservation of Nature *Red List of US Oaks* (http://www.mortonarb.org/science-conservation/global-tree-conservation/projects/iucn-red-list-threat-assessments-priority) reports on distributions, population trends, and threats facing the 91 native oak species in the United States, including nine California oak species, which the report designates as of conservation concern. The valley oak is evaluated as near-threatened. A 3:1 maximum replacement ration is inadequate.

The following provisions are from Santa Barbara's deciduous oak protection ordinance:

- A 15:1 mitigation ratio by replacement planting, or protection of naturally occurring oak trees between six (6) inches and six (6) feet tall on the lot.
- Naturally occurring valley and blue oak seedlings/saplings, growing on the lot and between six (6) inches and six (6) feet in height that are successfully protected and nurtured may be counted as replacement (mitigation) trees under the Program.
- If planting is done using acorns, the ratio of acorns to oak trees removed shall be a minimum of forty-five (45) acorns for every protected valley oak tree removed. Up to three (3) acorns may be planted in the same hole.

783-743 4. Contribution to a tree fund: The language quoted above, which references contributions to a tree fund provides no detail about how the contributions will be calculated, Further, as stated in the GHG section above, project mitigation that is based on the preservation ("avoided conversion") of existing natural lands does not adequately mitigate GHG emissions of natural lands conversion. A mitigation ratio that exceeds 2:1 would be necessary if funded activities include conservation of other trees.

783-744 **PLACEMENT OF EXCAVATED SOIL**

Page S-20 of the DEIR Executive Summary notes:

> The B-P Build Alternative alignments would achieve a balanced earthwork condition by use of varying slope ratios; all excavations would be placed within the project limits as embankment. With the addition of the Refined CCNM Design Option, the earthwork balance would not be achievable and would result in a range of about 2 to 14 million cubic yards of excess materials, depending on which of the B-P Build Alternative alignments the Refined CCNM Design Option is coupled. Those materials would be stockpiled in the area north of SR 58 in the vicinity of Bealville Road.

Discussion: Sheet 25 of the Footprint Mapbook shows the intersection of State Route 58 and Bealville Road. This oak woodland is inappropriate for the stockpiling of excess material.

Page 1-33 of the DEIR chapter on Project Purpose Need and Objectives states: *The HSR system would ease the pressure on the state's agricultural and natural resources…*Dumping soil on oak woodland habitat degrades an important natural resource. There are options for beneficial reuse of tested soil, such as building up subsided areas to marsh plain elevation and creating habitat features such as high-tide refugia islands and upland transition zones to advance the pace of restoration and benefit. This would be a far more productive use of the material than stockpiling it along the project corridor.

783-745 **CONCLUDING THOUGHTS**

Page 1-10 of Chapter 1, Project Purpose Need and Objectives, conveys the environmental objective (underlined) in section1.2.2**:**

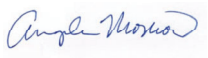
> The purpose of the system is to provide a reliable high-speed electrified train system that links the major metropolitan areas of the state and that delivers predictable and consistent travel times. Two objectives of the HSR system include provision of an interface with commercial airports, mass transit, and the highway network and relieve capacity constraints of the existing transportation system as increases in intercity travel demand in California occur, in a manner sensitive to and protective of California's unique natural resources (Authority and FRA 2005a).

Discussion: The project cannot be judged to be proceeding in a manner that is sensitive and protective of our state's natural resources given the DEIR's inadequate analysis of impacts to oak woodlands and the natural communities that they support.

Thank you for your consideration of our comments. We welcome your inquiry should additional input be helpful.

Sincerely,

Janet Cobb
Executive Officer
California Wildlife Foundation



Angela Moskow
Manager, California Oaks Coalition

Response to Submission 783 (Angela Moskow, California Wildlife Foundation/California Oaks, April 28, 2020)

783-731

The commenter states that the Draft EIR/EIS was deficient because it did not use the CDFW definition of oak woodlands.

Refer to Response to Comment 783-733, contained in this chapter.

783-732

This comment suggests that the EIR/EIS does not calculate the greenhouse gas (GHG) impacts of the proposed tree removals. As discussed in Section 3.3.4.4 of this Final EIR/EIS, the HSR project would reduce long-distance, city-to-city travel along freeways and highways throughout the state, as well as long-distance, city-to-city aircraft takeoffs and landings. The HSR project would also affect electricity demand throughout the state. These elements would affect GHG emissions in both the statewide and regional study areas. The methodology for estimating GHG emissions associated with construction and operations of the HSR project is discussed in Section 3.3.4.4 of this Final EIR/EIS. The operational GHG analysis includes on-road vehicle emissions, airport emissions, and power plant emissions. The construction-related analysis accounts for the vast majority of earthwork, the largest amount of diesel-powered off-road construction equipment, and the majority of material to be hauled along public streets compared with the other minor construction activities of the project. Operational emissions are presented for both the medium and high ridership forecasts.

The removal of trees would result in the loss of sequestered biogenic carbon dioxide (CO_2) emissions. Biogenic CO_2 emissions result from materials that are derived from living cells, as opposed to CO_2 emissions derived from fossil fuels, limestone, and other materials that have been transformed by geological processes. The air quality districts within the Bakersfield to Palmdale Project Section have not provided guidance on the evaluation of biogenic emissions under CEQA; however, other air quality districts within the state have. For example, the Bay Area Air Quality Management District states that biogenic GHG emissions should not be included in the quantification of GHG emissions for a project (BAAQMD 2017). The California Forest Protocol referenced in this comment “provides requirements and methods for quantifying the net climate benefits of activities that sequester carbon on forestland” and was developed for the purpose of providing offset project eligibility for California Air Resources Board and other registry offset credit programs for forest planting projects; it is not specifically a CEQA guidance document (CARB 2014). The analysis of the project not only considered the direct impacts of the project in terms of the mass emissions generated by the project during construction and operations, but also accounted for the net benefit of GHG emissions associated with the reduction in emissions achieved by reducing car and plane trips with implementation of the project.

Response to Submission 783 (Angela Moskow, California Wildlife Foundation/California Oaks, April 28, 2020) - Continued

783-732

For information purposes, a typical oak tree would have an annual CO_2 accumulation per tree of approximately 0.0367 tons CO_2/year (CAPCOA 2017). Assuming 100 trees per acre (as assumed in the example on the California Oak Foundation paper providing guidance on how to comment on CEQA documents) and a maximum of 1,331 acres of oak woodlands affected by the project (as shown in Table 3.7-11 of this Final EIR/EIS or 133,100 trees), this would equate to approximately 4,885 tons per year or 4,431 metric tons per year in lost sequestration potential if the trees were removed. As shown in Table 3.3-43 of this Final EIR/EIS, the project would result in a net benefit of 1,000,000 to 1,500,000 metric tons of carbon dioxide equivalent (CO_2e) per year. Therefore, the net benefit of the project would negate the sequestration that could be achieved if the 133,100 trees were preserved. Additionally, trees would be planted as part of the project's revegetation plan, which would provide sequestration.

As shown in Table 3.3-43 of this Final EIR/EIS, the project would result in a net reduction of 1 million to 1.5 million metric tons of CO_2e per year. Therefore, the project would still result in a substantial net reduction in GHG emissions, even with the loss of sequestration potential attributed to 133,100 trees.

783-733

The commenter states that the Draft EIR/EIS was deficient because it did not use the California Department of Fish and Wildlife (CDFW) definition of oak woodlands. Section 1361(h) of the California Fish and Game Code provides this definition of oak woodlands: "'Oak woodlands' means an oak stand with a greater than 10 percent canopy cover or that may have historically supported greater than 10 percent canopy cover." The California Wildlife Foundation/California Oaks (CWF/CO) states that the Draft EIR/EIS assesses only a portion of Kern County's oak woodlands that will be affected. The commenter also raises the question of whether other oak species were omitted from the analysis.

The Authority is not required to comply with local ordinances. That said, the method used for mapping oak woodlands for the project involved a criterion of *relative* canopy cover, while the CDFW definition has a criterion of *absolute* canopy cover. Relative cover and absolute cover are different methods of measuring canopy cover and cannot be directly compared. However, the overall result of the mapping method used for the project resulted in a greater amount of mapped oak woodland and integrated a larger proportion of oak trees than would have been mapped and integrated using the state definition. This is because, in order to meet the 10 percent absolute cover criterion and be considered part of a woodland according to the state definition, an oak tree would have to be within a short distance (generally less than 2 times the diameter of its canopy) of other oak trees. The mapping method used for the project was not as strict in this way, with the result that many areas of scattered oak trees were mapped as woodlands even with an absolute canopy cover as low as about 2 percent. However, the mapping method used did not always capture all oaks that would have been captured with the state definition. For example, areas that had more pines than oaks were usually mapped as ghost pine woodland rather than oak woodland because the pines better characterized the vegetation. A strict mapping of oak woodland according to the CDFW definition would require complete access to the project vicinity so that individual trees could be identified. More importantly, it would have resulted in mapping less oak woodland overall and thus identifying fewer impacts on oak woodlands, rather than more impacts as suggested in this comment.

In addition, the following mitigation measures in the Draft EIR/EIS and this Final EIR/EIS ensure that impacts on oak woodlands and individual oak trees will be mitigated:

Response to Submission 783 (Angela Moskow, California Wildlife Foundation/California Oaks, April 28, 2020) - Continued

783-733

· BIO-MM#1 requires pre-construction surveys and GIS mapping of all sensitive plant communities within the work area. This measure will ensure that appropriate buffers can be provided during construction and will ensure the accurate quantification of affected oaks.

· BIO-MM#35 requires pre-construction surveys to identify protected trees such as oaks within the work area. These pre-construction surveys ensure accurate quantification of affected oaks for purposes of either tree replacement at a 3:1 ratio (10:1 for heritage trees) or the Authority's contribution to a tree-planting fund.

In this comment, CWF/CO also states that the Draft EIR/EIS did not properly characterize Kern County's oak protections, specifically Kern County's 30 percent retention standard per Policy 66.a in Section 1.1.10 (Oak Tree Preservation) in the Kern County General Plan (County of Kern 2009). As a statewide public infrastructure project, the California HSR Project is not subject to the provisions of Policy 66.a.

783-734

The commenter states that page 6-77 of the BARTR states: "*There are no oak communities mapped for the project within Los Angeles County.*" It is unclear whether this is because the improper definition of oak woodland is used and thus oaks present are not mapped.

The Los Angeles County portion of the project extends from Avenue A in the north to the Palmdale Station near Avenue Q in the south. As seen in the aerial mapping provided in Figure 6-2 (Special-Status Plant Communities and Special-Status Survey Results) in the BARTR, the land cover in this area includes vegetation characteristic of the high desert, as well as urban land uses within the cities of Lancaster and Palmdale. Therefore, there are no oak woodlands in the Los Angeles County portion of the Bakersfield to Palmdale Project Section.

783-735

The commenter states that the discussion of Los Angeles County tree protections omits many of the County's oak protections. The commenter acknowledges that the County's protections for individual oak trees are summarized in the technical report, but the County's Oak Woodland Management Plan and the associated guidance are not discussed.

The Los Angeles County Oak Woodland Management Plan was not discussed in the Draft EIR/EIS or the Biological and Aquatic Resources Technical Report (BARTR) because there are no oak woodlands in the Los Angeles County portion of the Bakersfield to Palmdale Project Section (refer to Response to Comment 783-734, contained in this chapter).

Response to Submission 783 (Angela Moskow, California Wildlife Foundation/California Oaks, April 28, 2020) - Continued

783-736

The commenter states that the entire Draft EIR/EIS erroneously uses a definition of oak woodlands that does not conform to California law. The commenter further asserts that "the perfunctory manner in which the proposed project's oak impacts were analyzed is inadequate for the protection of these species as well as the state's primary old growth resource." Sections 6.2, 6.3, and 6.4 of the BARTR provide detailed descriptions of habitat requirements for sensitive plant and wildlife species, including specific discussions of which species are found within oak woodland habitats.

Plant communities were mapped according to the vegetation classification system described in Manual of California Vegetation (Sawyer et al. 2009), using alliance names and definitions from that work and from Vegetation Alliances and Associations of the Great Valley Ecoregion, California (Buck-Diaz et al. 2012). In cases for which a land cover could not be suitably represented by an alliance name, a California Wildlife Habitat Relationship system category was used for the mapping, based on California Wildlife Habitat Relationship category names and definitions in A Guide to Wildlife Habitats of California (CDFG 1988). These habitat classification systems were developed in association with, or by, CDFW and are widely used throughout the state. The minimum mapping unit for oak woodland was 0.5 acre. Mapping was based on aerial photographic interpretation. Refer to Response to Comment 777- 310, contained in this chapter, for an explanation of how the mapping actually included more oak woodland than the general definition of 10 percent cover.

As discussed in Response to Comment 783-733, contained in this chapter, and above, the mapping of oak woodlands used a conservative method ensuring that all oak woodlands were considered in the analysis and that no individual oak species were omitted from the analysis.

783-737

The commenter states that if the definitional mistake was also made in the environmental documentation for other segments of the HSR project, those phases of the HSR project are in violation of California law.

For each project section of the California HSR Project, the Authority has used the same method described in Response to Comment 783-733, contained in this chapter.

783-738

This comment states that California law requires the GHG impacts of proposed oak tree removals to be assessed. Refer to Response to Comment 783-732, contained in this chapter, which describes the analysis performed to determine the net results of the project's effects on CO_2 emissions, including the potential loss of carbon sequestration in oak forests.

783-739

The commenter states that as discussed above, the Draft EIR/EIS provides an inadequate analysis of the proposed project's impacts on oak communities. Thus, the acreage figures used in the Draft EIR/EIS present only a subset of the woodlands that the proposed project will threaten or destroy.

Refer to Response to Comment 783-733, contained in this chapter, regarding the sufficiency of the calculations of impacts on oak woodlands in terms of acreage affected and the conservative approach undertaken by the Authority in assessing impacts.

Response to Submission 783 (Angela Moskow, California Wildlife Foundation/California Oaks, April 28, 2020) - Continued

783-740

The commenter is concerned that the provisions of BIO-MM#35, Implement Transplantation and Compensatory Mitigation Measures for Protected Trees, are inadequate or problematic. Specifically the commenter states that Environmentally Sensitive Area protections are not sufficiently protective of large oaks.

Mitigation Measure BIO-MM#35 requires that Environmentally Sensitive Areas be established 5 feet beyond the drip line of protected trees. CWF/CO suggests that Environmentally Sensitive Areas for oaks extend to a distance equal to half the distance between the trunk and the dripline. Based on the Authority's experience in implementing this same measure for protection of oak trees during construction of the Merced to Fresno and Fresno to Bakersfield project sections, the Environmentally Sensitive Areas extending 5 feet beyond the dripline of protected trees have provided sufficient protection for oak trees.

783-741

The commenter is concerned that the provisions of BIO-MM#35, Implement Transplantation and Compensatory Mitigation Measures for Protected Trees, are inadequate or problematic. Specifically, the commenter states that transplanting trees is a very difficult procedure. Many trees will not survive transport. Relocation does not yield the same benefits. Lastly, the establishment period is 7 years.

The challenges of transporting and transplanting oak trees are acknowledged; this is one reason why Mitigation Measure BIO-MM#35 provides several options for mitigating the project's impacts on oak trees. With regard to the cited text from Public Resources Code Section 21083.4 regarding maintenance of trees 7 years after planting, it should be noted that Section 21083.4 applies to counties and not state agencies. The Authority will determine the duration of the maintenance period as part of implementing Mitigation Measure BIO-MM#6 (Prepare and Implement a Restoration and Revegetation Plan).

783-742

The commenter is concerned that the provisions of BIO-MM#35, Implement Transplantation and Compensatory Mitigation Measures for Protected Trees, are inadequate or problematic. Specifically, the commenter is concerned that the replacement ratios for trees are weak. The commenter further states that the International Union for Conservation of Nature reports on distributions, population trends, and threats facing 91 native oak species in the U.S., including 9 California species. The commenter provides recommendations for different mitigation ratios based on this and other protective ordinances.

In this comment, CWF/CO recommends higher mitigation ratios for replacement of affected oak trees, citing ratios provided in Santa Barbara's deciduous oak protection ordinance. The Bakersfield to Palmdale Project Section is not located within Santa Barbara County; therefore, the recommended mitigation ratios are not applicable within Kern County. Based on the Authority's experience in implementing replacement planting of oak trees to replace trees affected by construction of the Merced to Fresno and Fresno to Bakersfield project sections, the mitigation ratios included in Measure BIO-MM#35 will provide mitigation that is commensurate with the impacts of the project. Mitigation ratios in BIO-MM#35 were updated to, per previous agency comments, "3:1 for native trees, 10:1 for heritage trees, or 1:1 for ornamental trees unless higher ratios are required by local government ordinances or regulations."

Response to Submission 783 (Angela Moskow, California Wildlife Foundation/California Oaks, April 28, 2020) - Continued

783-743

The commenter is concerned that the provisions of BIO-MM#35, Implement Transplantation and Compensatory Mitigation Measures for Protected Trees, are inadequate or problematic. Specifically, the commenter is concerned that the language in the measure provides no detail about how the contributions will be calculated.

Contribution to a tree planting fund is one of several options for mitigating the project's impacts on oak trees. Details on how the funding contribution would be determined are not provided as part of BIO-MM#35 because: (1) the specific number of trees affected will not be known until surveys are conducted within the work area; (2) the amount of mitigation provided through implementation of other options within this measure are not known at this time; and (3) it is not known what tree planting programs may be available for the Authority to contribute funds to at the time of project construction. If contributing to a tree planting fund will not mitigate the impact, a different option included in the mitigation measure will be implemented to ensure that that any protected trees within the work area are either transplanted or replaced.

783-744

The commenter states that Page S-20 of the Draft EIR/EIS Summary notes: The B-P Build Alternative alignments would achieve a balanced earthwork condition by use of varying slope ratios; all excavations would be placed within the project limits as embankment. Sheet 21 of 127 of Appendix 3.1-C of this Final EIR/EIS shows the intersection of SR 58 and Bealville Road. This oak woodland is inappropriate for the stockpiling of excess material.

The proposed approximate 600-acre stockpile area north of SR 58 near Bealville Road has been proposed as part of the Refined César E. Chávez National Monument Design Option (Refined CCNM Design Option) to provide an available area for the construction contractor to place excess materials from project grading and tunneling. Before identifying the proposed stockpile location, the Authority first looked for previously disturbed locations near the project site that could accommodate the quantity of material (up to 14 million cubic yards) that would need to be stockpiled; however, none were identified. Although in an area of oak woodlands, the stockpile area location is appropriate due to its proximity to the Refined CCNM Design Option construction area, where the excess materials would be generated. Providing a stockpile area as close as possible to the construction area will minimize the length of truck haul trips and the associated vehicle miles traveled, thereby reducing potential vehicle emissions. The need for the construction contractor to use any or all of this stockpile area will depend on construction staging for the Bakersfield to Palmdale Project Section and specific storage requirements for the volume of excavated materials. While the Authority appreciates the suggestion for beneficial reuse of excess materials, such as building up subsided areas to marsh plain elevation and creating habitat features such as high-tide refugia islands and upland transition zones to advance the pace of restoration and benefit, additional impacts would likely result from hauling materials to these alternative locations, which have not been identified.

Project BIO-IAMFs and mitigation measures have been identified in Section 3.7.4.2 and 3.7.7, respectively, that will provide for protection to special-status species by identifying environmentally sensitive areas and protecting those from construction impacts. In addition mitigation measures are identified for the protection of special-status plant species, and restoration for those species by revegetating and contouring the stockpile area for wildlife corridor access.

Response to Submission 783 (Angela Moskow, California Wildlife Foundation/California Oaks, April 28, 2020) - Continued

783-744

783-745

The commenter states that the project cannot be judged to be proceeding in a manner that is sensitive and protective of our state's natural resources given the Draft EIR/EIS's inadequate analysis of impacts on oak woodlands and the natural communities they support.

Since initial planning of the California HSR Project began almost 20 years ago, the Authority has worked diligently to balance attainment of the program objectives with the need to minimize the impacts of each HSR project section on the natural environment and the human environment. As noted in Response to Comment 783-733, the project's impacts on oak woodlands were analyzed using conservative methods to ensure that all impacts have been accounted for so that sufficient mitigation can be provided pursuant to BIO-MM#35 and other applicable mitigation measures. The Authority's approach to impact analysis and mitigation has been in a manner sensitive to and protective of California's unique natural resources.

Submission 705 (Johanna Coronado, Californians for High-Speed Rail, March 25, 2020)

Bakersfield - Palmdale - RECORD #705 DETAIL

Status :	Action Pending
Record Date :	3/26/2020
Affiliation Type :	Business and/or Organization
Submission Date :	3/25/2020
Interest As :	Business and/or Organization
Submission Method :	Project Email
First Name :	Johanna
Last Name :	Coronado
Professional Title :	Government Affairs Associate
Business/Organization :	Californians for High-Speed Rail
Address :	P.O. Box 2493
Apt./Suite No. :	
City :	Bakersfield
State :	CA
Zip Code :	93303
Telephone :	661-800-5069
Email :	jcoronado@tdhintl.net
Cell Phone :	661-431-7269
Email Subscription :	
Add to Mailing List :	Yes
EIR/EIS Comment :	Yes
Attachments :	705_Coronado_website_032520_otherattachements_.pdf (2 mb)

Stakeholder Comments/Issues :

Dear High-Speed Rail Authority,

Please see the attached file for my comments and map on the Draft EIR for the Bakersfield to Palmdale Project Section.

Also, below is a copy of my comments:

RE: Draft EIR/EIS for the Bakersfield to Palmdale Project Section

Dear High-Speed Rail Authority Board,

I wish to submit this written comment for the Draft Bakersfield-Palmdale EIR. I attended the March 5, 2020 Community Meeting at Edison Middle School in Bakersfield. The issues raised in this letter are also related to the Fresno-Bakersfield EIR/EIS Supplemental LGA because it is referenced in the Draft Bakersfield-Palmdale EIR. It is my understanding that project sections must include two planned HSR stations. However, since there is a gap between the EIR's, the Draft Bakersfield-Palmdale EIR does not meet the requirement for two stations. 705-275

The LGA EIR that was approved by the FRA ROD ends at 34th and L Street but does not continue to Oswell Street. The Bakersfield-Palmdale section draft EIR begins at Oswell Street. Thus, the gap is between 34th/L Street and Oswell Street. In addition, the original FRA ROD approved Hybrid alignment that includes a HSR station downtown at Truxtun Avenue (adjacent to the existing Amtrak station) does go to Oswell Street.

The following is an excerpt from the BP Draft EIRS Vol 1 CH. 2 Alternatives: Section 2.3.3 Stations (Page 10): "In October 2018, the Authority Board certified the Final Supplemental EIR and approved the LGA through the 34th Street and L Street intersection, including the F Street Station. In October 2019, the Authority issued the Record of Decision and Final Supplemental EIS for the Fresno to Bakersfield LGA. In taking this action, the Authority Board reserved making a decision on the alignment from south of the F Street Station to Oswell Street to its future action on the Bakersfield to Palmdale Project Section."

Attached you will find a map that illustrates the gap in the EIRs, which is the basis of my comments.

I would appreciate an acknowledgement that you have received this comment.

_____ _____

Johanna Coronado Date
Government Affairs Associate

Thank You,
Johanna Coronado

--
Johanna Coronado
Public Affairs Associate
TDH Associates International
Email: jcoronado@tdhintl.net

Submission 705 (Johanna Coronado, Californians for High-Speed Rail, March 25, 2020) - Continued

Californians for High Speed Rail

March 24, 2020

California High-Speed Rail Authority
770 L Street, Suite 620 MS-1
Sacramento, CA 95814

RE: Draft EIR/EIS for the Bakersfield to Palmdale Project Section

Dear High-Speed Rail Authority Board,

I wish to submit this written comment for the Draft Bakersfield-Palmdale EIR. I attended the March 5, 2020 Community Meeting at Edison Middle School in Bakersfield. The issues raised in this letter are also related to the Fresno-Bakersfield EIR/EIS Supplemental LGA because it is referenced in the Draft Bakersfield-Palmdale EIR. It is my understanding that project sections must include two planned HSR stations. However, since there is a gap between the EIR's, the Draft Bakersfield-Palmdale EIR does not meet the requirement for two stations.

The LGA EIR that was approved by the FRA ROD ends at 34th and L Street but does not continue to Oswell Street. The Bakersfield-Palmdale section draft EIR begins at Oswell Street. Thus, the gap is between 34th/L Street and Oswell Street. In addition, the original FRA ROD approved Hybrid alignment that includes a HSR station downtown at Truxtun Avenue (adjacent to the existing Amtrak station) does go to Oswell Street.

The following is an excerpt from the BP Draft EIRS Vol 1 CH. 2 Alternatives: Section 2.3.3 Stations (Page 10): "In October 2018, the Authority Board certified the Final Supplemental EIR and approved the LGA through the 34th Street and L Street intersection, including the F Street Station. In October 2019, the Authority issued the Record of Decision and Final Supplemental EIS for the Fresno to Bakersfield LGA. In taking this action, the Authority Board reserved making a decision on the alignment from south of the F Street Station to Oswell Street to its future action on the Bakersfield to Palmdale Project Section."

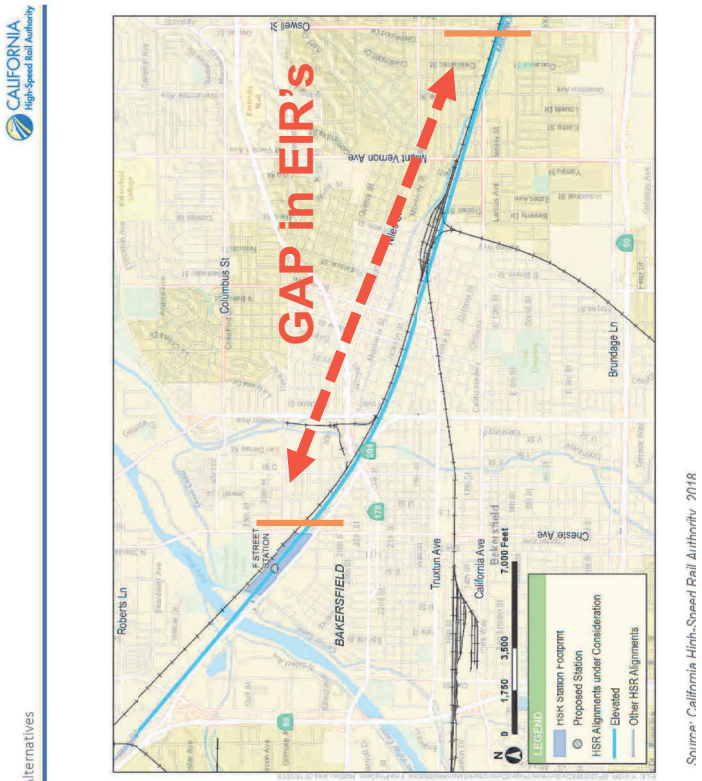
Attached you will find a map that illustrates the gap in the EIRs, which is the basis of my comments.

I would appreciate an acknowledgement that you have received this comment.

Johanna Coronado
Government Affairs Associate

03/24/2020
Date

Californians for HSR – www.CA4HSR.net
Po Box 2493, Bakersfield, CA 93303
(661) 800-5069, (661) 431-7269 mobile
Email: info@ca4hsr.net



Source: California High-Speed Rail Authority, 2018

Response to Submission 705 (Johanna Coronado, Californians for High-Speed Rail, March 25, 2020)

705-275

Refer to Standard Response BP-Response-GENERAL-03: Applicability of F-B LGA IAMFs/MMs"stub" on the Bakersfield to Palmdale Project Section.

The commenter states there is a gap in the analysis presented in the Draft EIR/EIS and the Fresno to Bakersfield Section Final Supplemental EIR (Authority 2018a) and Final Supplemental EIS (Authority 2019), and implies the Draft EIR/EIS is incomplete.

Section 2.4.2.3, Detailed Description, in the Draft EIR/EIS and this Final EIR/EIS state that the B-P Build Alternatives "would begin at the Bakersfield Station on a viaduct." Figure 2-55 (Bakersfield Area Map) in the Draft EIR/EIS and this Final EIR/EIS shows the Bakersfield to Palmdale Project Section's northern terminus at the Bakersfield Station and the portion between the station and Oswell Street is noted as part of the alignment. As such, there is no "gap" between the intersection of 34th/L Street and Oswell Street as stated in this comment. As explained in the Draft EIR/EIS, the portion of the alignment from the Bakersfield Station to Oswell Street was analyzed in the Fresno to Bakersfield Section documents (including the *Fresno to Bakersfield Section Draft Supplemental EIR/EIS* [Authority and FRA 2017] and the *Fresno to Bakersfield Section Final Supplemental EIR* [Authority 2018a] for the Fresno to Bakersfield Locally Generated Alternative [F-B LGA]). That information is incorporated by reference and summarized in this EIR/EIS where appropriate, providing B-P Build Alternatives from the Bakersfield Station to the Palmdale Station.

Submission 714 (Ileene Anderson, Center for Biological Diversity, April 8, 2020)

Bakersfield - Palmdale - RECORD #714 DETAIL

Status :	Action Pending
Record Date :	4/8/2020
Response Requested :	Yes
Affiliation Type :	Individual
Submission Date :	4/8/2020
Interest As :	Individual
Submission Method :	Project Email
First Name :	Ileene
Last Name :	Anderson
Professional Title :	Senior Scientist
Business/Organization :	Center for Biological Diversity
Address :	660 S Figueroa St
Apt./Suite No. :	Suite 1000
City :	Los Angeles
State :	CA
Zip Code :	90017
Telephone :	
Email :	IAnderson@biologicaldiversity.org
Cell Phone :	(323) 490-0223
Email Subscription :	
Add to Mailing List :	Yes

Stakeholder Comments/Issues :

Hi HSR folks,

714-185 I have tried calling the 866-300-3044 telephone number several times and the message just loops repeatedly with no ability to leave a message. In light of the complications with the Covid-19-related issues, I was calling to see if you will be extending the comment period beyond the current April 13, 2020 deadline which appears to still be in place according to the website. It would be helpful to have an extension to the deadline for those of us

714-186 that have been affected by Covid-19 related issues. Also I was wondering about the status of the public hearing in Lancaster coming up on Thursday 4/9. Could you please advise me on those two issues?

Thank you,

Ileene

Ileene Anderson
Senior Scientist
Center for Biological Diversity
660 S. Figueroa St., Suite 1000
Los Angeles, CA 90017
(323) 490-0223 (cell)
(she/her/hers)

#MobilizeForTheWild<https://www.mobilizeforthewild.org/>
#SavingLifeOnEarth

EIR/EIS Comment : Yes

Response to Submission 714 (Ileene Anderson, Center for Biological Diversity, April 8, 2020)

714-185

Refer to Standard Response BP-Response-GENERAL-02: Public Outreach on the Draft EIR/EIS.

714-186

Refer to Standard Response BP-Response-GENERAL-02: Public Outreach on the Draft EIR/EIS.

Submission 716 (Ileene Anderson, Center for Biological Diversity, April 15, 2020)

Bakersfield - Palmdale - RECORD #716 DETAIL

Status :	Action Pending
Record Date :	4/17/2020
Response Requested :	Yes
Affiliation Type :	Individual
Submission Date :	4/15/2020
Interest As :	Individual
Submission Method :	Email
First Name :	Ileene
Last Name :	Anderson
Professional Title :	Senior Scientist/Public Lands Desert Director
Business/Organization :	Center for Biological Diversity
Address :	660 S. Figueroa St.,
Apt./Suite No. :	Suite 1000
City :	Los Angeles
State :	CA
Zip Code :	90017
Telephone :	
Email :	IAnderson@biologicaldiversity.org
Cell Phone :	(323) 490-0223
Email Subscription :	
Add to Mailing List :	Yes

Stakeholder Comments/Issues :

716-231 I am now writing to ask for a copy of the Bakersfield to Palmdale Project Section Biological and Aquatic Resources Technical Report (Authority 2018a) which is referenced in the DEIR/S as well as the Noise and Vibration Technical Report.

I would appreciate if you could send them to me electronically, based on the looming comment deadline.

Thanks in advance!

Ileene Anderson
Senior Scientist/Public Lands Deserts Director
Center for Biological Diversity
660 S. Figueroa St., Suite 1000
Los Angeles, CA 90017
(323) 490-0223 (cell)
(she/her/hers)
#MobilizeForTheWild
#SavingLifeOnEarth

EIR/EIS Comment : Yes

Response to Submission 716 (Ileene Anderson, Center for Biological Diversity, April 15, 2020)

716-231

Per the commenter's request, a USB flash drive containing the Bakersfield to Palmdale Project Section technical reports was mailed on April 23, 2020 to the address provided. The Authority provided access to the technical reports upon request. Electronic media containing these documents were made available, free of charge, to anyone who requested them in writing or via the project hotline.

Submission 777 (Ileene Anderson, Center for Biological Diversity, April 28, 2020)

Bakersfield - Palmdale - RECORD #777 DETAIL

Status :	Action Pending
Record Date :	4/30/2020
Affiliation Type :	Business and/or Organization
Submission Date :	4/28/2020
Interest As :	Business and/or Organization
Submission Method :	Project Email
First Name :	Ileene
Last Name :	Anderson
Professional Title :	Senior Scientist/Public Lands Deserts Director
Business/Organization :	Center for Biological Diversity
Address :	660 S. Figueroa St
Apt./Suite No. :	Suite 1000
City :	Los Angeles
State :	CA
Zip Code :	90017
Telephone :	(323) 490-0223
Email :	IAnderson@biologicaldiversity.org
Cell Phone :	
Email Subscription :	
Add to Mailing List :	
EIR/EIS Comment :	Yes
Attachments :	CBD HSR DEISR comments 4-28-20 final.pdf (721 kb) Attachment - Email HSR RE Technical Reports Request.pdf (206 kb)

Stakeholder Comments/Issues :

Dear High Speed Rail staff,

Please find the attached comment letter and attachment submitted by the Center for Biological Diversity on the Draft Environmental Impact Report/Environmental Impact Statement (DEIR/S) for the Bakersfield to Palmdale Project Section of the California High-Speed Rail Project. We will be submitting a hard copy of this letter and attachment along with our references via snail mail.

Please feel free to reach out to us with any questions or concerns.

Sincerely,

Ileene

Ileene Anderson

Senior Scientist/Public Lands Deserts Director

Center for Biological Diversity

660 S. Figueroa St., Suite 1000

Los Angeles, CA 90017

(323) 490-0223

(she/her/hers)

#MobilizeForTheWild<https://www.mobilizeforthewild.org/>

#SavingLifeOnEarth

777-304

777-305

CENTER for BIOLOGICAL DIVERSITY Because life is good.

Protecting and restoring natural ecosystems and imperiled species through science, education, policy, and environmental law

Submitted via Email & USPS

April 28, 2020

"Bakersfield to Palmdale Draft EIR/EIS Comment"
770 L Street, Suite 620 MS-1,
Sacramento, CA 95814
Bakersfield_Palmdale@hsr.ca.gov

RE: Comments on Draft Environmental Impact Report/Environmental Impact Statement (DEIR/S) for the Bakersfield to Palmdale Project Section of the California High-Speed Rail Project.

To whom it concerns,

These comments are submitted on behalf of the Center for Biological Diversity's (the "Center") members, staff and supporters, regarding the Draft Environmental Impact Report/Environmental Impact Statement (DEIR/S) for the Bakersfield to Palmdale Project Section of the California High-Speed Rail Project. The Center has reviewed the DEIR/S and provides comments on numerous issues. We urge the HSRA to address these issues in a revised and recirculated DEIR/S as outlined in further detail below.

The Center is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 1.7 million members and online activists throughout California and the United States. The Center has worked for many years to protect imperiled plants and wildlife, open space, air and water quality, and overall quality of life for people in Kern and northern Los Angeles County. While we see many benefits to high-speed rail transportation, high-speed rail must be planned to avoid and minimize impacts to sensitive species and habitats. If impacts remain from the project, robust mitigation must be required in order to fully offset impacts and preserve California's incredible biodiversity.

I. The DEIR/S Fails to Use the Best Available Science

As identified and detailed below, the DEIR/S fails to use the best available science to craft alternatives that would avoid and minimize impacts. The DEIR/S fails to use the best available science as a basis for impact analysis. It also fails to adequately mitigate impacts to the biological resources. The inadequacies include the failure to identify all of the at-risk sensitive species that could be affected by the project, presenting consistent and comprehensive data analysis, analyzing species specific impacts, and many other short-comings under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). Oddly, the DEIR/S concludes that impacts to biological resources with the proposed mitigation is less than significant based on the analysis provided. But as our comments document below, the analysis is incomplete and flawed because the current and best available science was not included in the analysis.

Arizona . California . Colorado . Florida . N. Carolina . Nevada . New Mexico . New York . Oregon . Washington, D.C. . La Paz, Mexico

Center For Biological Diversity
www.BiologicalDiversity.org

Submission 777 (Ileene Anderson, Center for Biological Diversity, April 28, 2020) - Continued

A. Key Technical Reports Not Readily Available.

777-306 The DEIR/S refers to numerous Technical Reports and lists them on the website (at https://www.hsr.ca.gov/programs/environmental/eis_eir/draft_bakersfield_palmdale.aspx under Technical Reports). Because the website does not provide links to the reports, we requested copies of the Biological and Aquatic Resources Technical Report and the Noise and Vibration Technical Report from HSRA Communications Staff on April 15, 2020 but to date, we have never received the documents (Attachment). The Technical Reports are referred to in several of the sections that we are commenting on below, and their unavailability makes it difficult to understand and comment on key issues in the DEIR/S. Ultimately we were able to track down an electronic copy of the Biological and Aquatic Resources Technical Report elsewhere late last week. However, we have yet to acquire a copy of the Noise and Vibration Technical Report. For

777-307 that reason and others below, we respectfully request that an updated and recirculated supplemental DEIR/S be produced, where all pertinent supporting documents and Technical Reports are available to the public on request and preferably downloadable from the HSR website, in order to fully disclose environmental and impact analyses.

B. Failure to Identify All Special Status Species and Communities in the Project Area.

The DEIR/S states
"**California Natural Diversity Database/RareFind:** Lists of special-status plant and wildlife species and special-status plant communities were prepared through a twofold inquiry consisting of a standard nine-quadrangle search using the RareFind program and a GIS mapping exercise of known occurrences within 10 miles of the project footprint within the Biological RSA. This twofold inquiry was performed to ensure that the query captured all special-status species, including those listed by CDFW as "sensitive," whose geographic location data had been suppressed (California Department of Fish and Game [CDFG]2011; CDFW 2016)."
at pg. 3.7-23)

777-308 However in our query of that same database in a more limited five mile from centerline of the Bakersfield to Palmdale Project Section Alternative 2 Alignment with the Refined Cesar Chavez National Monument Design Option (Preferred Alternative), the California Natural Diversity Database/RareFind (CNDDB) (2020) which tracks sensitive species in California, identified five rare plant communities and over one hundred sensitive plants and animals including federally and State listed species. While the DEIR/S primarily addresses the federally and State listed species, 54 additional sensitive species are known to occur within five miles of the alignment and may also be impacted by the activities associated with the construction and operation of the Bakersfield-Palmdale HSR Preferred Alternative but were not included as species that may be impacted by the project and not analyzed in the impact analysis. The 54 species that were not identified or analyzed in the DEIR/S impact analyses include 24 rare plants, eight insects, two mollusks, three amphibians, five reptiles, eight birds and four mammals. Table 1 identifies all of

777-308 the species and the five rare plants communities known to occur within five miles of the Preferred Alternative.

Table 1. Rare Plant Communities and Sensitive Species Documented From Within 5 Miles of Preferred Alternative Centerline (CNDDB 2020)

COMMON NAME	SCIENTIFIC NAME	FED/STATE/CRPR or IUCN
Rare Plant Communities		
Stabilized Interior Dunes	Stabilized Interior Dunes	--/Tracked by State/--
Great Valley Cottonwood Riparian Forest	Great Valley Cottonwood Riparian Forest	--/Tracked by State/--
Southern Cottonwood Willow Riparian Forest	Southern Cottonwood Willow Riparian Forest	--/Tracked by State/--
Southern Willow Scrub	Southern Willow Scrub	--/Tracked by State/--
Valley Saltbush Scrub	Valley Saltbush Scrub	--/Tracked by State/--
Rare Plants		
California screw moss	*Tortula californica*	BLM-S/--/1B.2
Horn's milk-vetch	*Astragalus hornii var. hornii*	BLM-S/--/1B.1
Lancaster milk-vetch	*Astragalus preussii var. laxiflorus*	--/--/1B.1
Bakersfield smallscale	*Atriplex tularensis*	--/SE/1A
Peirson's morning-glory	*Calystegia peirsonii*	--/--/4.2
white pygmy-poppy	*Canbya candida*	USFS-S/--/4.2
California jewelflower	***Caulanthus californicus***	**FE/SE/1B.1**
hispid salty bird's-beak	*Chloropyron 3lex ssp. hispidum*	BLM-S/--/1B.1
Parry's spineflower	*Chorizanthe parryi var. parryi*	BLM-S, USFS-S/--/1B.1
Vasek's clarkia	*Clarkia tembloriensis ssp. calientensis*	BLM-S/--/1B.1
rose-flowered larkspur	*Delphinium purpusii*	BLM-S, USFS-S/--/1B.3
recurved larkspur	*Delphinium recurvatum*	BLM-S/--/1B.2
calico monkeyflower	*Diplacus (Mimulus) pictus*	BLM-S/--/1B.2
Kern mallow	***Eremalche parryi ssp. kernensis***	**FE/--/1B.2**
Hoover's eriastrum	*Eriastrum hooveri*	--/--/4.2
Rosamond eriastrum	*Eriastrum rosamondense*	--/--/1B.1
Tracy's eriastrum	*Eriastrum tracyi*	USFS-S/SR/3.2
Kern buckwheat	*Eriogonum kennedyi var. pinicola*	BLM-S/--/1B.1
Tejon poppy	*Eschscholzia lemmonii ssp. kernensis*	--/--/1B.1
Shevock's golden-aster	*Heterotheca shevockii*	BLM-S, USFS-S/--/1B.3
Coulter's goldfields	*Lasthenia glabrata ssp. coulteri*	BLM-S/--/1B.1
pale-yellow layia	*Layia heterotricha*	BLM-S, USFS-S/--/1B.1
Comanche Point layia	*Layia leucopappa*	BLM-S/--/1B.1
Munz's tidy-tips	*Layia munzii*	BLM-S/--/1B.2
sagebrush loeflingia	*Loeflingia squarrosa var. artemisiarum*	BLM-S/--/2B.2
Tehachapi monardella	*Monardella linoides ssp. oblonga*	BLM-S, USFS-S/--/1B.3
San Joaquin woollythreads	***Monolopia congdonii***	**FE/--/1B.2**

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Baja navarretia	*Navarretia peninsularis*	USFS-S/--/1B.2
Piute Mountains navarretia	*Navarretia setiloba*	BLM-S, USFS-S/--/1B.1
short-joint beavertail	*Opuntia basilaris var. brachyclada*	BLM-S, USFS-S/--/1B.2
Bakersfield cactus	***Opuntia basilaris var. treleasei***	**FE/SE/1B.1**
San Joaquin adobe sunburst	***Pseudobahia peirsonii***	**FT/SE/1B.1**
aromatic canyon gooseberry	*Ribes menziesii var. ixoderme*	--/--/1B.2
Latimer's woodland-gilia	*Saltugilia latimeri*	BLM-S, USFS-S/--/1B.2
oil neststraw	*Stylocline citroleum*	BLM-S/--/1B.1
Greata's aster	*Symphyotrichum greatae*	BLM-S/--/1B.3
grey-leaved violet	*Viola pinetorum ssp. grisea*	--/--/1B.2
Mt. Pinos onion	*Allium howellii var. clokeyi*	USFS-S/--/1B.3
Spanish Needle onion	*Allium shevockii*	BLM-S, USFS-S/--/1B.3
slender mariposa-lily	*Calochortus clavatus var. gracilis*	BLM-S/--/1B.2
Palmer's mariposa-lily	*Calochortus palmeri var. palmeri*	BLM-S/--/1B.2
alkali mariposa-lily	*Calochortus striatus*	BLM-S, USFS-S/--/1B.2
striped adobe-lily	***Fritillaria striata***	**BLM-S, USFS-S/SE/1B.1**
California satintail	*Imperata brevifolia*	USFS-S/--/2B.1
California alkali grass	*Puccinellia simplex*	--/--/1B.2
Piute Mountains triteleia	*Triteleia piutensis*	--/--/1B.1
Western Joshua tree	***Yucca brevivfolia (brevifolia)***	**--/SP/--**
Insects		
An andrenid bee	*Andrena macswaini*	--/Tracked by State/--
An andrenid bee	*Andrena subapasta*	--/Tracked by State/--
Crotch bumble bee	***Bombus crotchii***	**--/ST/--**
monarch – California overwintering population	*Danaus plexippus* pop. 1	USFS-S/Tracked by State/--
valley elderberry longhorn beetle	***Desmocerus californicus dimorphus***	**FT/Tracked by State/--**
Comstock's blue butterfly	*Euphilotes battoides comstocki*	--/Tracked by State/--
moestan blister beetle	*Lytta moesta*	--/Tracked by State/--
Morrison's blister beetle	*Lytta morrisoni*	--/Tracked by State/--
Tehachapi Mountain silverspot butterfly	*Speyeria egleis tehachapina*	USFS-S/Tracked by State/--
Mollusks		
Kern shoulderband	*Helminthoglypta callistoderma*	--/Tracked by State/EN
Mohave shoulderband	*Helminthoglypta greggi*	--/Tracked by State/--
Amphibians		
relictual slender salamander	*Batrachoseps relictus*	USFS-S/SSC/--
Tehachapi slender salamander	***Batrachoseps stebbinsi***	**BLM-S/ST/--**
foothill yellow-legged frog	*Rana boylii*	BLM-S, USFS-S/CT/--
California red-legged frog	***Rana draytonii***	**FT/SSC/--**
western spadefoot	*Spea hammondii*	BLM-S/SSC/--

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Reptiles		
Bakersfield legless lizard	*Anniella grinnelli*	--/SSC/--
northern California legless lizard	*Anniella pulchra*	USFS-S/SSC/--
southern California legless lizard	*Anniella stebbinsi*	USFS-S/SSC/--
California glossy snake	*Arizona elegans occidentalis*	--/SSC/--
western pond turtle	*Emys marmorata*	BLM-S, USFS-S/SSC/--
blunt-nosed leopard lizard	***Gambelia sila***	**FE/SE, FP/--**
desert tortoise	***Gopherus agassizii***	**FT/ST/--**
San Joaquin coachwhip	*Masticophis flagellum ruddocki*	--/SSC/--
coast horned lizard	*Phrynosoma blainvillii*	BLM-S/SSC/--
two-striped gartersnake	*Thamnophis hammondii*	BLM-S, USFS-S/SSC/--
Sierra night lizard	*Xantusia vigilis sierrae*	USFS-S/SSC/--
Birds		
Cooper's hawk	*Accipiter cooperii*	--/WL/--
tricolored blackbird	***Agelaius tricolor***	**BLM-S, BCC/ST/--**
southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*	--/WL/--
golden eagle	*Aquila chrysaetos*	BLM-S/FP/--
great egret	*Ardea alba*	--/SSC/--
Bell's sage sparrow	*Artemisiospiza belli belli*	BCC/WL/--
short-eared owl	*Asio flammeus*	--/SSC/--
long-eared owl	*Asio otus*	--/SSC/--
burrowing owl	*Athene cunicularia*	BLM-S, BCC/SSC/--
ferruginous hawk	*Buteo regalis*	BCC/WL/--
Swainsons hawk	***Buteo swainsoni***	**BLM-S, BCC/ST/--**
western snowy plover	*Charadrius 5lexandrines nivosus*	FT, BCC/SSC/--
mountain plover	*Charadrius montanus*	BLM-S, BCC/SSC/--
merlin	*Falco columbarius*	--/WL/--
prairie falcon	*Falco mexicanus*	BCC/WL/--
California condor	***Gymnogyps californianus***	**FE/SE,FP/--**
loggerhead shrike	*Lanius ludovicianus*	BCC/SSC/--
white-faced ibis	*Plegadis chihi*	--/WL/--
purple martin	*Progne subis*	--/SSC/--
Le Conte's thrasher	*Toxostoma lecontei*	BCC/SSC/--
least Bell's vireo	***Vireo bellii pusillus***	**FE/SE/--**
Mammals		
Nelson's antelope squirrel	***Ammospermophilus nelsoni***	**BLM-S/ST/--**
pallid bat	*Antrozous pallidus*	BLM-S, USFS-S/SSC/--
Townsend's big-eared bat	*Corynorhinus townsendii*	BLM-S, USFS-S/SSC/--
Tipton kangaroo rat	***Dipodomys nitratoides nitratoides***	**FT/ST/--**
western mastiff bat	*Eumops perotis californicus*	BLM-S/SSC/--
Mountain lion (So. California ESU)	***Puma concolor***	**--/SC/--**

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hoary bat	*Lasiurus cinereus*	--/Tracked by State/--
Tulare grasshopper mouse	*Onychomys torridus tularensis*	BLM-S/SSC/--
Tehachapi pocket mouse	*Perognathus alticola inexpectatus*	USFS-S/SSC/--
San Joaquin Pocket Mouse	*Perognathus inornatus*	BLM-S/--/--
American badger	*Taxidea taxus*	--/SSC/--
San Joaquin kit fox	***Vulpes macrotis mutica***	**FE/ST/--**
Mohave ground squirrel	***Xerospermophilus mohavensis***	**BLM-S/ST/--**

Federal
FE - Endangered
FT – Threatened
BLM-S – Sensitive (BLM)
USFS-S – Sensitive (USFS)
BCC – Bird of Conservation Concern (USFWS)
State
SE – Endangered
ST – Threatened
SR - Rare
FP – Fully Protected
SC - Candidate
SP - Petitioned; accepted by CFGC
SSC – Species of Special Concern
WL – Watch List
Tracked by State
California Rare Plant Rank (CRPR)
1A - Plants presumed extirpated in California and either rare or extinct elsewhere
1B - Plants rare, threatened, or endangered in California and elsewhere
2B - Plants rare, threatened, or endangered in California but more common elsewhere
3 - Review List: Plants about which more information is needed
4 - Watch List: Plants of limited distribution
Threat Rank
.1 - Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
.2 - Moderately threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat)
.3 - Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)
IUCN (International Union for Conservation of Nature)
EN – Endangered
Bold – Listed, candidate or petitioned for State or Federal Endangered Species Act Protection.
Underlined – Included in DEIR/S list of species potentially impacted by the proposed project

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It is unclear why the DEIR/S failed to identify all of the rare species/rare plant communities because it used the same publicly available CNDDB inclusive of a ten-mile boundary. The incomplete identification of species/rare plant communities that may be impacted results in an incomplete analysis of the rare species and rare plant communities impacts from the Preferred Action and alternatives. Therefore an updated and recirculated supplemental DEIR/S is necessary in order to fully disclose environmental impacts.

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i. The DEIR fails to adequately describe, assess, and mitigate impacts to Rare Plant Communities

The DEIR/S states
"Nine natural (plant) communities within the SSPSA are considered special-status plant communities. They include the following:

- Blue Oak Woodland
- Desert Riparian
- Desert Scrub
- Desert Wash
- Joshua Tree
- Mixed Chaparral
- Perennial Grassland
- Valley Foothill Riparian
- Valley Oak Woodland"

(at pg. 3.7-39)

Identifying these rare plant communities by common name, coupled with the fact that the delay in acquiring the Biological and Aquatic Resources Technical Report makes it difficult to evaluate which rare plant alliance(s) are actually present along the Preferred Alternative Alignment. The California Department of Fish and Wildlife provides a list of all Sensitive Natural Communities Alliances (CDFW 2019 https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153609&inline), but the information in the DEIR/S cannot be aligned with the State Sensitive Natural Communities Alliances.

In addition, the CNDDB (2020) identifies five rare plant communities located near or within the Preferred Alternative alignment including:

- Stabilized Interior Dunes
- Great Valley Cottonwood Riparian Forest
- Southern Cottonwood Willow Riparian Forest
- Southern Willow Scrub
- Valley Saltbush Scrub

It appears that at least two of these rare plant communities – Stabilized Interior Dunes and Valley Saltbush Scrub - are not included in the DEIR/S list of rare plant communities and therefore not analyzed for impacts in the publicly available materials. Therefore an updated and recirculated supplemental DEIR/S is necessary in order to fully disclose environmental impacts.

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ii. The DEIR fails to adequately describe, assess, and mitigate impacts to oak woodlands.

The DEIR fails to adequately describe, assess, and mitigate impacts to oak woodlands, ignores the best available science, and violates California Fish and Game Code and the Kern County General Plan. Blue oak woodlands are by far the most impacted special-status plant community assessed in the DEIR/S. According to Table 3.7-11, the proposed Project, including the CCNM Design Option and the Refined CCNM Design Option, would permanently impact 1,302 acres of blue oak woodland and temporarily impact 259 acres of blue oak woodland. Yet the DEIR/S fails to provide any explanation of these oak woodlands or any other special-status natural community within the main text. Any descriptions are buried in an appendix of a technical report that is not readily available to the public. And even if one is able to review the technical report, it is misleading and does not provide adequate information for the public to understand where these plant communities are and where they will be impacted. For example, the Biological and Aquatic Resources Technical Report states, "The locations of special-status natural communities within the Special-status Plant Study Area are shown in Figure 6-4" (Biological and Aquatic Resources Technical Report at 6-78), but Figure 6-4 actually shows special-status wildlife species survey results. In fact, there is no map showing the special-status natural communities at all. Thus, the DEIR fails to adequately describe existing conditions of oak woodlands and other special-status natural communities in the Project area.

The DEIR/S applies an erroneous definition of oak woodlands. According to the California Fish and Game Code, oak woodlands are defined as "an oak stand with a greater than 10 percent canopy cover or that may have historically supported greater than 10 percent canopy cover" (Cal Fish & Game Code § 1361). And the Kern County General Plan states that oak tree conservation implementation measures apply to development projects "that contains oak woodlands, which are defined as development parcels having canopy cover by oak trees of at least ten percent (10%), as determined from base line aerial photography or by site survey performed by a licensed or certified arborist or botanist" (Kern County General Plan Section 1.10.10, Implementation Measure KK). However, the DEIR/S defined blue oak woodlands as "having blue oak as at greater than 50 percent relative cover in the tree canopy" (Biological and Aquatic Resources Technical Report Appendix R at R-5). The DEIR/S similarly defines valley oak woodland and interior live oak woodland. And the description of the Kern County General Plan, Section 1.10.10, General Provisions is buried in an appendix of the Biological and Aquatic Resources Technical Report, where it omits any reference to how oak woodlands are defined as "having canopy cover by oak trees of at least ten percent (10%)" (Kern County General Plan Section 1.10.10, Implementation Measure KK). Thus, the DEIR/S does not adequately describe the extant oak woodlands in the Project area, and therefore does not adequately explain nor appropriately mitigate potential impacts to oak woodlands due to the proposed Project. It is possible that a much larger area of blue oak woodlands, and any other oak woodlands, could be temporarily or permanently impacted by the proposed Project. To know this, the correct definition of oak woodlands needs to be applied to the analyses. In assigning an erroneous definition of oak woodlands, the DEIR/S blatantly violates CA Fish and Game Code and the Kern County General Plan and fails to provide an adequate description of existing conditions and appropriate mitigation to potential impacts.

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Additionally, the DEIR states that "[t]here are no oak communities mapped for the project within Los Angeles County" (DEIR at 3.9-39). It is unclear if no oaks were identified in the Project in LA County or if oak communities in LA County were omitted from the analyses. LA County recognizes the historical, aesthetic, and ecological significant of oak trees, and the County has an Oak Tree Ordinance that states:

> a person shall not cut, destroy, remove, relocate, inflict damage or encroach into a protected zone of any tree of the oak genus which is (a) 25 inches or more in circumference (eight inches in diameter) as measured four and one-half feet above mean natural grade; in the case of an oak with more than one trunk, whose combined circumference of any two trunks is at least 38 inches (12 inches in diameter) as measured four and one half feet above mean natural grade, on any lot or parcel of land within the unincorporated area of Los Angeles County, or (b) any tree that has been provided as a replacement tree protects any tree of the oak tree genus that is 8 inches or more in diameter if a single trunk or a combined 12 inches or more in diameter if there are multiple trunks at 4.5 feet above mean natural grade. If the Project area impacts any oak trees in LA County then the DEIR should adequately describe, assess, and mitigate impacts to less than significant" (County of Los Angeles Oak Tree Ordinance Section 22.56.2060).

Measures should be taken to adequately describe, assess, and mitigate impacts to oak trees in LA County.

Although the DEIR/S provides information in a table that temporary impacts of at least 259 acres of blue oak woodland and permanent impacts of at least 1,302 acres of blue oak woodland, it is unclear what types of impacts those may entail. They could include trimming, habitat degradation, and removal, but such impacts are not quantified. In addition to this lack of clarity, the DEIR fails to provide sufficient mitigation measures to reduce impacts to blue oak woodland to less than significant. Mitigation measures BIO-MM#35, 50, 56, 58, and 61 are grossly insufficient. California has already lost over a million acres of oak woodlands since 1950 (Bolsinger 1988) and cannot afford to inadequately mitigate further impacts.

For example, BIO-MM#35 suggests transplantation of protected trees to areas outside the work area, an off-site compensatory mitigation ratio "not to exceed 3:1 for native trees," and an undisclosed "contribution" to a tree-planting fund to mitigate impacts to blue oak woodlands to less than significant (DEIR/S at 3.7-119). This pales in comparison to Santa Barbara County's Deciduous Oak Tree Protection and Regeneration Ordinance, which requires a 15:1 mitigation ratio (via replacement planting or protection of naturally occurring oaks between six inches and six feet tall) for removed oak trees (County of Santa Barbara 2003). The DEIR/S then goes on to state that "This mitigation measure is anticipated to be effective because it ensures that any protected trees within the work area are either transplanted or replaced" (DEIR/S at 3.7-119), which suggests that transplanting or attempting to replace any impacted tree would adequately provide the same habitat quality as current conditions. However, transplanting a blue oak tree outside of the work area does not negate the negative impacts to the tree or the habitat in the tree's original location. Translocating oak trees is a difficult procedure, mostly due to their deep taproots, and many trees may not survive transplantation. In addition, any off-site compensatory mitigation that involves restoration, enhancement, or creation of habitat does not guarantee oak

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establishment. Any mitigation measures involving tree transplantation or off-site mitigation (restoration, enhancement, creation, or otherwise), should be monitored for at least seven years (SB 1334, Public Resources Code § 21083.4), and there should be specific success criteria and adaptive management strategies to ensure success criteria are met.

Other mitigation measures for impacts to blue oak woodlands include: BIO-MM#50 – implementation of measures to minimize impacts during off-site habitat restoration/enhancement/creation; BIO-MM#56 – construction monitoring, BIO-MM#58 – establishing non-disturbance zones; and BIO-MM#61 – a compliance reporting program. These mitigation measures for impacts to oak woodlands, as defined by California Fish and Game Code and the Kern County General Plan (*i.e.*, an oak stand with a greater than 10 percent canopy cover or that may have historically supported greater than 10 percent canopy cover), are grossly insufficient and not based on any science. In addition, even though the Kern County General Plan provides protections for individual oak trees equal to or greater than a 12-inch diameter trunk at 4.5 feet breast height on parcels that have less than 10% oak tree canopy cover, there are no minimization or mitigation measures to ensure that such trees are identified and the area beneath and within the trees unaltered drip line is avoided unless approved by a licensed or certified arborist or botanist (Kern County General Plan Section 1.10.10, Implementation Measure LL). Removal of these individual trees may "be granted by the decision making body upon showing that a hardship exists based on substantial evidence in the record" (Kern County General Plan Section 1.10.10, Implementation Measure LL). Such insufficient mitigation would not reduce impacts to oak woodlands or oak trees to less than significant

Oak woodlands provide valuable habitat and connectivity for a wide variety of species (Bernhardt and Swiecki 2001; Lawrence et al. 2011; Jedlicka et al. 2014; Tietje et al. 2015). They are also important for many ecosystem services that communities rely on for safety and economic stability, including water quality protection, carbon sequestration, erosion control, and soil retention (Brown and Krygier 1970; Elliot 2010; Lawrence et al. 2011; Moyle et al. 2011; Pan et al. 2011; Jedlicka et al. 2014). Reduced woodland cover has been shown to result in increased runoff (*i.e.*, pollutants such as pesticides and fertilizers flowing into groundwater and surface waterways), erosion, sedimentation, and water temperatures; changes in channel morphology; decreased soil retention and fertility; and decreased terrestrial and aquatic biodiversity (Brown and Krygier 1970; Pess et al. 2002; Dahlgren et al. 2003; Houlahan and Findlay 2004; Opperman et al. 2005; Lohse et al. 2008; Elliot 2010; Lawrence et al. 2011; Moyle et al. 2011; Zhang and Hiscock 2011; Jedlicka et al. 2014). In addition, woodlands are an important carbon sink that can help moderate the impacts of climate change (Padilla et al. 2010; Pan et al. 2011), and some researchers argue that at a global scale, trees are linked to increased precipitation and water availability (Ellison et al., 2012). The DEIR/S should adequately assess and mitigate impacts to sensitive habitats like oak woodlands so that these unique ecosystems and the invaluable services they provide will not be lost. The DEIR/S is unclear, fails to adequately describe the oak woodlands in the Project area, violates California Fish and Game Code, ignores the best available science, and does not mitigate any impacts to oak woodlands, as defined by Fish and Game Code, to less than significant.

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iii. The DEIR fails to adequately describe, assess, and mitigate impacts to Rare Plants

The additional twenty-four rare plants that are known to occur within five miles off the centerline of the Preferred Alternative (see Table 1 above) were not identified in the DEIR/S and need to be addressed in a supplemental and recirculated DEIR. Both direct and indirect impacts need to be evaluated, including hydrological impacts resulting from the tunneling proposed as part of the Preferred Alternative.

The Western Joshua Tree (*Yucca brevifolia*) was recently petitioned to the California Fish and Wildlife Commission for consideration for protection under the California Endangered Species Act. CDFW's Petition Evaluation Report recommended that "In completing its Petition Evaluation, the Department has determined there is sufficient scientific information to indicate that the petitioned action for western Joshua tree may be warranted. Therefore, the Department recommends the Commission accept the Petition for further consideration under CESA" http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=178381. The Commission will take up the recommendation at a soon-to-be scheduled meeting. If the Commission follows the staff recommendation, the Western Joshua Tree will receive Candidate status where all of the protections of the California Endangered Species Act are applied to this species. The DEIR/S will need to revise its avoidance, minimization and if necessary mitigation strategy for the proposed impact of 325 acres of "Joshua Tree" (at pg. 8-A-10) in an updated and recirculated DEIR/S.

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iv. The DEIR fails to adequately describe, assess, and mitigate impacts to Rare Animals

The additional thirty rare animal species are known to occur within five miles off the centerline of the Preferred Alternative (see Table 1 above) but were not identified in the DEIR/S. In comprehensive EIR/S, each species with potential to be impacted (both temporarily or permanently) are addressed usually individually, because impacts are typically species-specific. The DEIR/S needs to provide that species-specific analysis in a revised and recirculated EIR/S. For example, railways act as a behavioral barrier to at least one species of bumblebees (Bhattacharya et al. 2003) while one species of butterflies easily cross railways when no trains are present (Barrientos and Borda-de-Água, 2017). Access by pollinators including bumblebees and butterflies to rare (and common) plants are also essential for successful plant reproduction and need to be identified and analyzed for avoidance, minimization and if necessary mitigation in a supplemental and recirculated DEIR/S. Both direct and indirect impacts need to be analyzed.

Clearly terrestrial animals depending on size are impacted differently by the proposed project. For example larger animals will find the HSR corridor as a barrier to movement (see wildlife connectivity discussion below) while fencing may be less of a barrier to small animals or animals that are active climber. Avian species may be able to avoid impacts from the proposed project. The DEIR/S fails to analyze the degree of impact to wildlife based on species life history. Therefore an updated and recirculated supplemental DEIR/S is necessary in order to fully disclose environmental impacts.

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v. *The DEIR fails to adequately describe, assess, and mitigate impacts to the Southern and Central Coastal California Evolutionarily Significant Unit (ESU) of mountain lions (Puma concolor*

The DEIR fails to adequately describe, assess, and mitigate impacts to the Southern and Central Coastal California Evolutionarily Significant Unit (ESU) of mountain lions, a candidate species under the California Endangered Species Act (CESA). There is ample scientific evidence that indicates mountain lion populations in Southern and Central Coast California are imperiled and that human activities and land use planning that does not integrate adequate habitat connectivity can have adverse impacts on mountain lions. Continued habitat loss and fragmentation has led to 10 genetically isolated populations within California. There are six identified mountain lion populations in the ESU, and several are facing an extinction vortex due to high levels of inbreeding, low genetic diversity, and high human-caused mortality rates from car strikes on roads, depredation kills, rodenticide poisoning, poaching, disease, and increased human-caused wildfires (Ernest et al. 2003; Ernest et al. 2014; Riley et al. 2014; Vickers et al. 2015; Benson et al. 2016; Gustafson et al. 2018; Benson et al. 2019).

The effective population sizes of the six populations within the ESU range from 4 to 56.6 (Gustafson et al. 2018; Benson et al. 2019). An effective population size of 50 is assumed to be sufficient to prevent inbreeding depression over five generations, while an effective population size of 500 is considered sufficient to retain evolutionary potential in perpetuity (Traill et al. 2010; Frankham et al. 2014). Five of the six populations are well below that minimum threshold of 50 and none have an effective population size anywhere near 500, which indicates that these populations are at serious risk of becoming extirpated. Furthermore, mountain lions in the Santa Monica and Santa Ana mountains have been found to have dangerously low genetic diversity and effective population size, and they are likely to become extinct within 50 years if gene flow with other mountain lion populations is not improved (Benson et al. 2016; Gustafson et al. 2018; Benson et al. 2019). Populations in the Santa Cruz, San Gabriel, and San Bernardino mountains are showing similar trends (Gustafson et al. 2018; Saremi et al. 2019). This is detailed in the Center's petition to the California Fish and Game Commission to protect Southern California and Central Coast mountain lions under the California Endangered Species Act (Yap et al. 2019).

The primary threat to the long-term survival of mountain lions in the Southern California/Central Coast ESU is genetic isolation due to lack of connectivity caused by continuous development in mountain lion habitat with little regard of their movement needs. Thus, the persistence of the six populations with the ESU relies heavily on being connected with mountain lions throughout the ESU *as well as* statewide. The location of the proposed Project slices through the Tehachapi Mountains, an area identified by multiple mountain lion and connectivity scientists and researchers as a critical area for statewide genetic connectivity (Ernest et al. 2003; Penrod et al. 2003; South Coast Wildlands 2008; CDFW 2010; Gustafson et al. 2018; Benson et al. 2019). Wildlife connectivity in this region is paramount for the survival of the ESU mountain lions, yet the DEIR fails to disclose this information. Thus, the DEIR fails to adequately describe, assess, and mitigate impacts to Southern and Central Coast mountain lions.

Providing only 39 wildlife crossings is grossly insufficient for 56 miles of 10-foot high, noisy, and bright barriers at grade throughout the last-remaining high-quality linkage area for

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statewide genetic connectivity for mountain lions. The majority of the proposed crossings (27/35) are too small for mountain lions, Mountain lions have been documented using culverts that are about 4 meters (~13 feet) in diameter (Riley et al. 2018; Clevenger and Waltho 2005, Kintsch and Cramer 2011, W. Vickers unpublished data), The dimensions of some of the other crossings are unclear. The DEIR lists five dual-use road undercrossings, two dual-use drainage overcrossings, and one overcrossing but does not provide dimensions for them. In addition, it is unclear how effective combined road and wildlife undercrossings will be, given that traffic noise and lighting could deter mountain lions, and numerous other species, from using them. In addition, the roads would be fenced off and therefore pose another movement barrier perpendicular to the proposed Project. The DEIR fails to adequately mitigate impacts to mountain lions and connectivity to less than significant.

The DEIR also fails to adequately assess and minimize impacts from noise and lighting to mountain lions. There is evidence documenting the effects of human activity specifically on mountain lions. One study found that mountain lions are so fearful of humans and noise generated by humans that they will abandon the carcass of a deer and forgo the feeding opportunity just to avoid humans (Smith et al. 2017).1 The study concluded that even "non-consumptive forms of human disturbance may alter the ecological role of large carnivores by affecting the link between these top predators and their prey" (Smith et al. 2017). In addition, mountain lions have been found to respond fearfully upon hearing human vocalizations, avoiding the area and moving more cautiously when hearing humans (Smith et al. 2017; Suraci et al. 2019). Other studies have demonstrated that mountain lion behavior is impacted when exposed to other evidence of human presence, such as lighting or vehicles/traffic (Wilmers et al. 2013; Smith et al. 2015; Wang et al. 2017). In addition, preliminary results from studies underway by researchers at UC Davis and University of Southern California, as well as those by other researchers, suggest that the light, noise, and other aspects of highways can have negative impacts on wildlife numbers and diversity near the highways (Vickers 2020). Thus, highways and similar infrastructure that exposes wildlife to high levels of noise and lighting can exert negative effects at some level, even if adequate wildlife passageways and fencing are well designed. Berms and sound/light barriers should be implemented at all wildlife crossings to encourage mountain lions and other wildlife to utilize the crossings. Sound and lighting should also be minimized throughout the entire proposed Project, including at other surface, elevated, and underground portions, particularly where the Project goes through natural habitats.

Mountain lions are a key indicator species of wildlife connectivity and healthy ecosystems. As the last remaining wide-ranging top predator in the region, the ability to move through large swaths of interconnected habitat is vital for genetic connectivity and their long-term survival. In addition, impacts to mountain lions in the region could have severe ecological consequences; loss of the ecosystem engineer could have ripple effects on other plant and animal species, potentially leading to a decrease in biodiversity and diminished overall ecosystem function. Many scavengers, including California condors, kit foxes, raptors, and numerous insects, would lose a reliable food source (Ruth and Elbroch 2014; Barry et al. 2019). Fish, birds, amphibians, reptiles, rare native plants, and butterflies would potentially diminish if this apex predator were lost (Ripple and Beschta 2006; Ripple and Beschta 2008; Ripple et al. 2014). Any

1 *See also* Sean Greene, "How a fear of humans affects the lives of California's mountain lions," *Los Angeles Times* (June 27, 2017), available at http://beta.latimes.com/science/sciencenow/la-sci-sn-pumas-human-noise-20170627-story.html.

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777-313 transportation project that does not adequately address wildlife connectivity issues and integrate effective wildlife crossings and corridors based on the best available science could lead to the extirpation of mountain lion populations in the ESU and severe loss of biodiversity and ecosystem function in the region. See further discussion in Section III of this comment letter regarding the DEIR's failure to adequately describe, assess, and mitigate impacts to wildlife movement and connectivity to less than significant.

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II. Inadequate Alternatives Analysis

NEPA requires that an EIS contain a discussion of the "alternatives to the proposed action." 42 U.S.C. §§ 4332(C)(iii),(E). The discussion of alternatives is at "the heart" of the NEPA process, and is intended to provide a "clear basis for choice among options by the decisionmaker and the public." 40 C.F.R. §1502.14; *Idaho Sporting Congress*, 222 F.3d at 567 (compliance with NEPA's procedures "is not an end in itself . . . [but] it is through NEPA's action forcing procedures that the sweeping policy goals announced in § 101 of NEPA are realized.") (internal citations omitted). NEPA's regulations and Ninth Circuit case law require the agency to "rigorously explore" and objectively evaluate "all reasonable alternatives." 40 C.F.R. § 1502.14(a) (emphasis added); *Envtl. Prot. Info. Ctr. v. U.S. Forest Serv.*, 234 Fed. Appx. 440, 442 (9th Cir. 2007). "The purpose of NEPA's alternatives requirement is to ensure agencies do not undertake projects "without intense consideration of other more ecologically sound courses of action, including shelving the entire project, or of accomplishing the same result by entirely different means." *Envtl. Defense Fund, Inc. v. U.S. Army Corps of Engrs.*, 492 F.2d 1123, 1135 (5th Cir. 1974). An agency will be found in compliance with NEPA only when "all reasonable alternatives have been considered and an appropriate explanation is provided as to why an alternative was eliminated." *Native Ecosystems Council v. U.S. Forest Serv.*, 428 F.3d 1233, 1246 (9th Cir. 2005); *Bob Marshall Alliance v. Hodel*, 852 F.2d 1223, 1228-1229 (9th Cir. 1988). The courts, in the Ninth Circuit as elsewhere, have consistently held that an agency's failure to consider a reasonable alternative is fatal to an agency's NEPA analysis. *See, e.g., Idaho Conserv. League v. Mumma*, 956 F.2d 1508, 1519-20 (9th Cir. 1992) ("The existence of a viable, but unexamined alternative renders an environmental impact statement inadequate.").

If HSRA rejects an alternative from consideration, it must explain why a particular option is not feasible and was therefore eliminated from further consideration. 40 C.F.R. § 1502.14(a). The courts will scrutinize this explanation to ensure that the reasons given are adequately supported by the record. *See Muckleshoot Indian Tribe v. U.S. Forest Service*, 177 F.3d 800, 813-15 (9th Cir. 1999); *Idaho Conserv. League*, 956 F.2d at 1522 (while agencies can use criteria to determine which options to fully evaluate, those criteria are subject to judicial review); *Citizens for a Better Henderson*, 768 F.2d at 1057.

CEQA also requires a robust alternatives analysis as noted above. Here, HRSA too narrowly construed the project purpose and need and project objectives such that the DEIS/R did not consider an adequate range of alternatives to the proposed project.

Additional feasible alternatives should be considered which would utilize additional tunneling that could reduce the terrestrial impacts particularly in sensitive habitats and rare plant communities. While we recognize increasing tunneling could increase impacts based on the location of the tunneling spoils, the DEIR/S should have provided an analysis of benefits of

777-314 avoidance of rare plant/animal habitat and connectivity versus the cost to mitigate impacts for those species/habitats. Alternative routes should have also been evaluated.

The existence of other feasible but unexplored alternatives shows that the analysis of alternatives in the DEIS/R is inadequate.

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III. The DEIR fails to adequately describe, assess, and mitigate impacts to wildlife movement and connectivity.

Although the DEIR acknowledges that the region has a high level of wildlife connectivity throughout the entire proposed Project, particularly in the Tehachapi Mountains (DEIR at 3.7-47), the DEIR fails to adequately describe, assess, and mitigate impacts to wildlife movement and connectivity.

Transportation infrastructure, like roads and rail, and development create barriers that lead to habitat loss and fragmentation, which harms native wildlife, plants, and people. As barriers to wildlife movement, poorly-planned development and roads can affect an animal's behavior, movement patterns, reproductive success, and physiological state, which can lead to significant impacts on individual wildlife, populations, communities, landscapes, and ecosystem function (Mitsch and Wilson 1996; Trombulak and Frissell 2000; van der Ree et al. 2011; Haddad et al. 2015; Marsh and Jaeger 2015; Ceia-Hasse et al. 2018; Dornas et al. 2019). For example, habitat fragmentation from transportation infrastructure and development has been shown to cause mortalities and harmful genetic isolation in mountain lions in Southern California (Ernest et al. 2014; Riley et al. 2014; Vickers et al. 2015), increase local extinction risk in amphibians and reptiles (Cushman 2006; Brehme et al. 2018; Dornas et al. 2019), cause high levels of avoidance behavior and mortality in birds and insects (Benítez-López et al. 2010; Loss et al. 2014; Kantola et al. 2019), and alter pollinator behavior and degrade habitats (Trombulak and Frissell 2000; Goverde et al. 2002; Aguilar et al. 2008). Habitat fragmentation also severely impacts plant communities. An 18-year study found that reconnected landscapes had nearly 14% more plant species compared to fragmented habitats, and that number is likely to continue to rise as time passes (Damschen et al. 2019). The authors conclude that efforts to preserve and enhance connectivity will pay off over the long-term (Damschen et al. 2019). In addition, connectivity between high quality habitat areas in heterogeneous landscapes is important to allow for range shifts and species migrations as climate changes (Heller and Zavaleta 2009; Cushman et al. 2013; Krosby et al. 2018). Loss of wildlife connectivity decreases biodiversity and degrades ecosystems.

The DEIR fails to adequately describe the Project area's importance in wildlife connectivity. The region's heterogeneous habitats that include wetlands, streams, grasslands, scrublands, woodlands, and desert are important for wildlife connectivity and migration at the local, regional, and continental scale. Local connectivity that links aquatic and terrestrial habitats allows various sensitive species to persist, including state-protected foothill yellow-legged frogs (*Rana boylii*), California red-legged frog (*Rana draytonii*), western spadefoot toad (*Spea hammondii*) and western pond turtles (*Actinemys marmorata*). At a regional scale, medium- and large-sized mammals, such as mountain lions (*Puma concolor*), bobcats (*Lynx rufus*), San Joaquin kit foxes (*Vulpes macrotis mutica*), ring-tailed cats (*Bassariscus astutus*), and mule deer

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(*Odocoileus hemionus*), require large patches of heterogeneous habitat to forage, seek shelter/refuge, and find mates. These species are all known to occur in the Project area. And, as mentioned previously, the Tehachapi Mountains have been identified by multiple mountain lion and connectivity scientists and researchers as a critical area for statewide genetic connectivity and the long-term persistence of the Southern/Central Coast California ESU of mountain lions (Ernest et al. 2003; Penrod et al. 2003; South Coast Wildlands 2008; CDFW 2010; Gustafson et al. 2018; Benson et al. 2019). And at a global scale, a portion of the Project area has been identified by Audubon as an Important Bird Area[2] for resident and migratory birds within the Pacific Flyway, a north-south migratory corridor the extends from Alaska to Patagonia. The region is a hub for local and global biodiversity; wildlife movement and habitat connectivity must be maintained to preserve the area's rich diversity and evolutionary potential.

Providing only 39 wildlife crossings is grossly insufficient for 56 miles of 10-foot high, noisy, and bright barriers at grade throughout the last-remaining high-quality linkage area for statewide genetic connectivity for numerous animal and plant species, including mountain lions. Most of the proposed crossings (27/39) are six-foot arch culverts, which would seem to target mostly medium-sized animals. Aside from three 10-foot arch culverts, the dimensions of the other crossings are unclear, though they are likely larger. The number of larger crossings (3 to 12 total) over 56 miles of barriers is insufficient for large animals or those that need more space to migrate, and this strategy neglects the needs and behaviors of smaller animals, including small mammals, reptiles, and amphibians, that might require much smaller passageways to actually use them, like the Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*) and blunt-nosed leopard lizard (*Gambelia sila*). Alternatively, placing logs and rocks/boulders along with native vegetation within the soft-bottom crossings could help facilitate the use of the crossings by small critters, but it would be important to understand which species occur in the area so that the crossings can be designed to be effective. More in-depth analyses that include on-the-ground movement studies of which species are moving in the area and their patterns of movement are needed to determine how to best implement such crossings. In addition, smaller species with poor dispersal abilities would require more frequent intervals of crossings to increase their chances of finding a crossing. And for some amphibian and reptile species, such as California red-legged frogs and western pond turtles, undercrossings should have grated tops so that the light and moisture inside the crossings are similar to that of the ambient environment. To improve the effectiveness of any wildlife crossings, they should be planned in areas with high quality, protected habitat on both sides of the rail infrastructure. The DEIR should include acquiring unprotected lands on both sides of the rail where a wildlife crossing would be implemented and preserve and manage those lands in perpetuity to ensure that the wildlife crossings remain functional over time. Ultimately, the DEIR fails to adequately assess and mitigate impacts to wildlife movement and connectivity needs for numerous special-status wildlife throughout the Project area to less than significant.

The DEIR lists five dual-use road undercrossings, two dual-use drainage overcrossings, and one overcrossing but does not provide dimensions for them. In addition, it is unclear how effective combined road and wildlife undercrossings will be, given that traffic noise and lighting could deter numerous other species, from using them. In addition, the roads would be fenced off and therefore pose another movement barrier perpendicular to the proposed Project. Again, the

2 https://www.audubon.org/important-bird-areas/state/california

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DEIR fails to adequately describe and mitigate impacts to wildlife movement and connectivity in the Project area to less than significant.

The DEIR's lack of sufficient wildlife crossings dismisses the need for corridor redundancy (*i.e*. the availability of alternative pathways for movement). Corridor redundancy is important in regional connectivity plans because it allows for improved functional connectivity and resilience. Compared to a single pathway, multiple connections between habitat patches increase the probability of movement across landscapes by a wider variety of species, and they provide more habitat for low-mobility species while still allowing for their dispersal (Mcrae et al., 2012; Olson & Burnett, 2008; Pinto & Keitt, 2008). In addition, corridor redundancy provides resilience to uncertainty, impacts of climate change, and extreme events, like flooding or wildfires, by providing alternate escape routes or refugia for animals seeking safety (Cushman et al., 2013; Mcrae et al., 2008; Mcrae et al., 2012; Olson & Burnett, 2008; Pinto & Keitt, 2008).

Corridor redundancy is critical when considering the impacts of climate change on wildlife movement and habitat connectivity. Climate change is increasing stress on species and ecosystems, causing changes in distribution, phenology, physiology, vital rates, genetics, ecosystem structure and processes, and increasing species extinction risk (Warren et al. 2011). A 2016 analysis found that climate-related local extinctions are already widespread and have occurred in hundreds of species, including almost half of the 976 species surveyed (Wiens 2016). A separate study estimated that nearly half of terrestrial non-flying threatened mammals and nearly one-quarter of threatened birds may have already been negatively impacted by climate change in at least part of their distribution (Pacifici et al. 2017). A 2016 meta-analysis reported that climate change is already impacting 82 percent of key ecological processes that form the foundation of healthy ecosystems and on which humans depend for basic needs (Scheffers et al. 2016). Genes are changing, species' physiology and physical features such as body size are changing, species are moving to try to keep pace with suitable climate space, species are shifting their timing of breeding and migration, and entire ecosystems are under stress (Parmesan and Yohe 2003; Root et al. 2003; Parmesan 2006; Chen et al. 2011; Maclean and Wilson 2011; Warren et al. 2011; Cahill et al. 2012). Thus, the DEIR fails to use the best available science and adequately assess and mitigate impacts to wildlife movement to less than significant.

In addition, adequate mitigation measures should include addressing edge effects of the Project, such as light, noise, and other aspects of anthropogenic features that can have negative impacts on wildlife. Human development and associated noise can degrade adjacent wildlife habitat and behavior (*see e.g.,* Slabbekoorn and Ripmeester 2008). For instance, field observations and controlled laboratory experiments have shown that traffic noise can significantly degrade habitat value for migrating songbirds (Ware et al. 2015). Subjects exposed to 55 and 61 dBA (simulated traffic noise) exhibited decreased feeding behavior and duration, as well as increased vigilance behavior (Ware et al. 2015). Such behavioral shifts increase the risk of starvation, thus decreasing survival rates. A recent study also highlighted the detrimental impacts of siting development near areas protected for wildlife. The study noted that "Anthropogenic noise 3 and 10 dB above natural sound levels . . . has documented effects on wildlife species richness, abundance, reproductive success, behavior, and physiology" (Buxton et al. 2017). The study further noted that "there is evidence of impacts across a wide range of species [] regardless of hearing sensitivity, including direct effects on invertebrates that lack ears and indirect effects on plants and entire ecological communities (*e.g*., reduced seedling

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recruitment due to altered behavior of seed distributors)" (Buxton et al. 2017). Moreover, human transportation networks and development resulted in high noise exceedances in protected areas (Buxton et al. 2017). In addition, preliminary results from studies underway by researchers at UC Davis and University of Southern California, as well as those by other researchers, suggest that the light, noise, and other aspects of highways can have negative impacts on wildlife numbers and diversity near the highways (Vickers 2020). Thus, highways and similar infrastructure that exposes wildlife to high levels of noise and lighting can exert negative effects at some level, even if adequate wildlife passageways and fencing are well designed.

The Project's placement will subject the surrounding open space to development edge effects and will likely impact key, wide-ranging predators, such as mountain lions and bobcats (Crooks 2002; Riley et al. 2006; Delaney et al. 2010; Lee et al. 2012; Vickers et al. 2015), as well as smaller species with poor dispersal abilities, such as song birds, small mammals, and herpetofauna (Cushman 2006; Benítez-López et al. 2010; Kociolek et al. 2011). Negative edge effects from human activity, traffic, lighting, noise, domestic pets, pollutants, invasive weeds, and increased fire frequency have been found to be biologically significant up to 300 meters (~1000 feet) away from anthropogenic features in terrestrial systems (Environmental Law Institute 2003). As mentioned previously, limiting movement and dispersal can affect species' ability to find food, shelter, mates, and refugia during and after disturbances like fires or floods. Individuals can die off, populations can become isolated, sensitive species can become locally extinct, and important ecological processes like plant pollination and nutrient cycling can be lost. In addition, linkages and corridors between major core habitat areas are important to allow for range shifts and species migrations as climate changes. Therefore, it is imperative that thorough analyses are conducted to determine if Project activities (construction and operation) will affect species movement. Berms and sound/light barriers should be implemented at all wildlife crossings to encourage wildlife to utilize the crossings. Sound and lighting should also be minimized throughout the entire proposed Project, including at other surface, elevated, and underground portions, particularly where the Project goes through natural habitats. Again, the DEIR fails to provide sufficient details and analyses to warrant their conclusion that Project impacts on habitat connectivity and wildlife movement would be mitigated to less than significant.

The DEIR/S provides vague mitigation measures related to wildlife movement (WM-IAMF#1-6, which are buried in an appendix of a technical report that is not readily available to the public), and there is no guarantee that additional best management practices will be implemented or enforceable. Appendix 1 of the Biological and Aquatic Resources Technical Report states that "The Authority recognizes the following BMPs to minimize rail-kill and facilitate animal movement across rail lines" (Biological and Aquatic Resources Technical Report, Appendix 1 at 7-10). There is no accountability given to the Authority to actually implement practices that prevent fencing from blocking crossing structure entrances, ensure that disturbed areas outside the final Project footprint will be revegetated with native plants, or maintain crossing structures and fences. In addition, mitigation measures should include monitoring the wildlife crossings to determine if species are using the crossings.

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IV. Impact Analysis Flawed

As described above, because comprehensive baseline biological information is not included in the DEIR/S, the actual impact analysis is therefore flawed. Typically in the hundreds of environmental reports that we have reviewed and commented on, impact analysis is detailed by species. However this EIR/S fails to provide that much needed analysis by species particularly for the long-term operational impacts. For example, the DEIR/S is generally mute on the operational impact to species including the critically endangered California condor. California condors are rebounding from the brink of extinction due to unprecedented efforts and funding from federal, state and private entities. California condors use the general area of the Tehachapi mountains extensively as a strong-hold for the southern California flocks including heavy use of the proposed project area. Mortalities of birds of prey, particularly scavenging birds from trains including HSR are well documented in the literature (Borda-de-Água et al. 2017). The addition of fencing along the HSR tracks provide new perching and foraging perches for numerous species including California condors. The fencing along the HSR creates an "attractive nuisance" that lures birds into harm's way. These potential impacts to California condors and other birds are not addressed in the impact analysis section. The Biological and Aquatic Resources Technical Report (at pb. 8-5 and 8-6) includes a section on "Standard procedures when working in areas where California condors have a potential to occur would include, at a minimum, the following standard conservation practices:

- If condors enter the project site at any time during the project implementation, all personnel will be instructed to assess current work activities to ensure the activities do not present a hazard (e.g., moving vehicles and equipment loading). Any activities identified as presenting a potential hazard will be stopped or blocked.
- Any observations of condors within the project vicinity will be reported to the appropriate USFWS biologist with information including the date, time, location, and wing numbers if readable.
- Any condors in the work area will be observed until they have safely left the site.
- Within potential condor foraging areas, the WEAP will include the development and implementation of condor educational materials and training for all workers during construction.
- Project personnel shall collect all litter, small artificial items (screws, washers, nuts, or bolts, etc.), and food waste from the project vicinity on no less than a daily basis, including anytime during a given day that a crew leaves a work area where such materials exist."

These avoidance measures appear focused on the construction and maintenance activities but do not address the inherent threats to California condors from the operation of the HSR. In addition, Appendix O: Result of Analysis of California Condor (*Gymnogyps californianus*) Activity Patterns Based on 2014–2016 GIS Satellite Telemetry Movement Data is not included in the Biological and Aquatic Resources Technical Report.

Despite the failure to analyze impacts by species as identified above, the impact analysis that is presented in the DEIR/S is also fraught with inadequacies and inaccuracies. Here we highlight two of many examples of problems with the existing impact analysis:

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Example #1 - The DEIR/S states:

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" Implementation of the proposed B-P Build Alternatives (including the César E. Chávez National Monument Design Option [CCNM Design Option] and the Refined César E. Chávez National Monument Design Option [Refined CCNM Design Option]) would result in permanent impacts affecting 11,006.2 acres of suitable habitat for special-status species."
(DEIR/S at 3.7-1)

Summary Table S-7 indicates the following acreages of impacts for Alternative 2 and the Refined CCNM. Because Table 2-7 does not total the acres of the Preferred Alternative, we add the summation here in Column 4:

Biological/Aquatic Resources Impacts	Alternative 2	Refined CCNM Design Option	Total
Suitable habitat for special-status plant species (acres of overall habitat permanently affected)	9,974.4	+1,904.6	11,879.0
Suitable habitat for special-status wildlife species (acres of overall habitat permanently affected)	58,671.0	+12,142.9	70,813.9
Suitable habitat for modeled federal and state threatened/endangered species (acres of overall habitat permanently affected)	26,986.4	+5,430.2	32,416.6
Special-status plant communities (acres permanently impacted)	1,166.6	+555.4	1722.0

(DEIR/S at pg. S-79 and S-80)

The DEIR/S' calculated impact area of 11,006.2 acres to "suitable habitat for special-status species" at pg. 3.7-1 is less than the suitable habitat calculated for any of the special-status plant or animal or federal and state threatened/endangered species alone (11,879.0 acres for special status plant, 70,813.9 acres for special status wildlife and 32,416.6 acres for suitable habitat modeled for federal and state threatened and endangered species)

The DEIR/S' calculated impacts of 70,813.9 acres to the "Suitable habitat for special-status wildlife species (acres of overall habitat permanently affected)" in Table S-7 is an enormous impact. Even with the proposed inadequate 1:1 mitigation ratio (see below for discussion of the inadequacy of mitigation ratios), it is unclear where adequate species specific mitigation habitat would be available. At typical impact mitigation requirement ratio of 3:1, the mitigation to offset impacts should be over 210,000 acres, essentially requiring the HSRA acquire land equivalent to the whole Tejon Ranch as mitigation. For purposes of consistency and clarity, acres of impact must be consistent in the DEIR/S. Because the current DEIR/S impact analysis is unclear about the actual amount of impact that will occur from the Preferred Alternative, an updated and recirculated supplemental DEIR/S is necessary in order to fully and accurately disclose environmental impacts..

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Example 2 - The impact from the subsoil material excavated for the proposed tunnels is very unclear. The Summary Report states:

"With the addition of the Refined CCNM Design Option, the earthwork balance would not be achievable and would result in a range of about 2 to 14 million cubic yards of excess materials…"

And further states:

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"Those materials would be stockpiled in the area north of SR 58 in the vicinity of Bealville Road"
(DEIR/S at S-20)

The Foot Print Map Book (at Sheets 23, 24 and 25) identifies a large area (over 600 acres) of permanent impact, so we presume this area is the stockpile area referred to in the Summary and where it is mentioned in Section 3.7 in the context of "Impact Bio#10: Operation Impact on Aquatic Resources" (at pg. 3.7-85). However Impact Bio#10 does not discuss the key details about the stockpile area, including the impact to the existing lands. We could not locate the projected height of the stockpile in the impact area in the DEIR/S. Our rough calculations indicate that to accommodate 2 to 14 million cubic yards of material, the height of the stockpiled materials above the existing land surface on the approximately 600-acre stockpile area would need to be 3 to 14.5 feet. From the vegetation mapping, the stockpile area includes over 250 acres of blue oak woodland – an identified rare plant community. Stockpiling subsoils on this rare plant community is a significant permanent impact. Stockpile material would be subsoil which is typically unsuitable for most restoration purposes, so onsite mitigation for blue oak woodland would not be possible . Stockpiling would also affect wildlife connectivity, and other rare plants and animals. The stockpile area is also partially located on lands included in the White Wolf Conservation Easement (see below).

Because of the numerous inadequacies in the impact analyses, a revised/supplement and recirculated DEIR/S is necessary in order to provide an adequate level of impact analysis.

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V. Proposed Mitigation Measures Fail to Adequately Mitigate Impacts

In general, the proposed mitigation measures are focused on the short-term construction but fail long-term impact mitigation are generalized and often defer actual mitigation to an unclear future date through plans and strategies to be developed in the future, typically without public review. In the case where actual mitigation ratios are proposed, those mitigation ratios are woefully inadequate and well below standard mitigation requirements of the land management and wildlife agencies.

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A. Examples of Specific Mitigation Measure Failures

While many of the BIO-MM are vague and too non-specific to ensure that mitigation is truly effective, we provide a few specific examples to represent the mitigation measure failures below:

BIO-MM#1: Conduct Presence/Absence Pre-construction Surveys for Special-Status Plant Species and Special-Status Plant Communities (DEIR/S at pg.3.7-107)

In order for BIO-MM#1 to be effective, project biologist qualifications must require expertise in identifying rare plants. Surveys must occur during the season when the plants can be unequivocally identified, particularly rare annual species, and in years with adequate rainfall when germination and plant expression is visible. Absent these requirements, the mitigation measure is inadequate.

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BIO-MM#2: Prepare and Implement Plan for Salvage and Relocation of Special-Status Plant Species (DEIR/S at pg.3.7-107)

Relocation of special status plant species has an abysmal failure rate (Fiedler 1991). While the Bio-MM #2 states

> "If relocation or propagation is required by authorizations issued under the FESA and/or CESA, the Project Biologist will prepare a plant species salvage plan to address monitoring, salvage, relocation and/or seed banking of federal or State-listed plant species."

It is unclear why only federal and State-listed plant species are included based on the fact that many of the rare plant species, particularly the 1B.1 and 1B.2 species are eligible for listing under the ESAs. Based on the number of rare plant species with potential to be impacted by the preferred alternative, a "plant species salvage plan" needs to be included for public review a part of the DEIR/S needs to (see below section on missing plans), not deferred to a future time, when the public will have no opportunity to review. The plan must clearly identify the Salvage and Relocation strategies, because they will need to be species specific. This plan must include locations of recipient sites, because rare plant occurrences are often associated with specific soil types, aspects, hydrology etc. Without such details, Bio-MM#2 in inadequate.

While we generally support stockpiling topsoil, particularly to mitigate temporary impacts, critical protocols for stockpile storage must be carefully implemented in order to retain viable propagules and soil microflora/fauna (Strohmayer 1999, Ruiz-Jaen and Aide 2005). The "plant species salvage plan" needs to address this important aspect.

The "plant species salvage plan" must also follow guidelines developed by the Society for Ecological Restoration International (2004). Absent these requirements, the mitigation measure is inadequate.

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B. Failure to Identify Appropriate Mitigation

Because the DEIR/S fails to provide adequate identification and analysis of impacts, inevitably, it also fails to identify adequate mitigation measures for the project's environmental impacts. Most of the mitigation measures are focused on construction impacts, and the long-term permanent impacts of the projects are not addressed adequately.

"Implicit in NEPA's demand that an agency prepare a detailed statement on 'any adverse environmental effects which cannot be avoided should the proposal be implemented,' 42 U.S.C. § 4332(C)(ii), is an understanding that an EIS will discuss the extent to which adverse effects can be avoided." *Methow Valley*, 490 U.S. at 351-52. Because the DEIR/S does not adequately assess the project's direct, indirect, and cumulative impacts, its analysis of mitigation measures for those impacts is necessarily flawed. The DEIR/S must discuss mitigation in sufficient detail to ensure that environmental consequences have been fairly evaluated." *Methow Valley*, 490 U.S. at 352; *see also Idaho Sporting Congress*, 137 F.3d at 1151 ("[w]ithout analytical detail to support the proposed mitigation measures, we are not persuaded that they amount to anything more than a 'mere listing' of good management practices"). As the Supreme Court clarified in *Robertson*, 490 U.S. at 352, the "requirement that an EIS contain a detailed discussion of possible mitigation measures flows both from the language of [NEPA] and, more expressly, from

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CEQ's implementing regulations" and the "omission of a reasonably complete discussion of possible mitigation measures would undermine the 'action forcing' function of NEPA."

Although NEPA does not require that the harms identified actually be mitigated, NEPA does require that an EIS discuss mitigation measures, with "sufficient detail to ensure that environmental consequences have been fairly evaluated" and the purpose of the mitigation discussion is to evaluate whether anticipated environmental impacts *can be avoided*. *Methow Valley*, 490 U.S. at 351-52. As the Ninth Circuit noted: "[a] mitigation discussion without at least *some* evaluation of effectiveness is useless in making that determination." *South Fork Band Council of Western Shoshone v. DOI* , 588 F.3d 718 , 727 (9th Cir. 2009) (emphasis in original).

In contrast, CEQA requires even more--that mitigation be considered for unavoidable impacts and be adopted. The purpose of alternatives analysis in an environmental review document under CEQA is to enable the agency to fulfill the statutory requirement that feasible alternatives that avoid significant impacts of a project must be implemented.

> "[I]t is the policy of the state that public 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 of such projects, and that the procedures required by this division are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects."

(Public Res. Code § 21002.) The statutory language and case law are quite clear that the Legislature intended public agencies to utilize CEQA's environmental review process and procedures to make determinations regarding feasible alternatives and mitigation measures based on a robust analysis.

CEQA's mandates are not purely procedural. It also contains an important substantive mandate: public agencies are required "to deny approval of a project with significant adverse effects when feasible alternatives or feasible mitigation measures can substantially lessen such effects." (*Sierra Club v. Gilroy City Council* (1990) 222 Cal.App.3d 30, 41; *see also* Pub. Res. Code § 21002.) Thus, a thorough review of mitigation measures is needed, and the HRSA cannot rely on vague or unformulated measures to find that impacts have been mitigated.

Here, the DEIR/S does not provide a full analysis of possible mitigation measures to avoid or lessen the impacts of the proposed project and therefore the HSRA cannot properly assess the likelihood that such measures would actually avoid the impacts of the proposed project.

For example, ***BIO-MM#38: Compensate for Impacts to Listed Plant Species*** only requires a 1:1 mitigation ratio which is wholly inadequate and not in line with standard mitigation requirements by the wildlife agencies. The 1:1 mitigation ratio is also inadequate to mitigate for the destruction of occupied habitat and should be far higher (Moilanen et al 2009, Norton 2008). Mitigation presumes that acquisition will be appropriate occupied habitat which is currently existing and providing benefits to the species, to off-set the elimination of habitat

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from the proposed project. However, a 1:1 mitigation strategy assures *a net loss of habitat* for the species, because currently the species is present at both the mitigation site and the proposed project site. Adequate mitigation ratios must be included that actually safeguard rare species from further declines and the need for future listing. For these species and others that are already critically endangered including but not limited to the desert tortoise, San Joaquin kit fox, blunt-nosed leopard lizard and others, a minimum a 5:1 mitigation ratio should be required as mitigation for impacts associated with the proposed project.

As discussed above, DEIR/S calculates that impacts of 70,813.9 acres to the "Suitable habitat for special-status wildlife species (acres of overall habitat permanently affected)" in Table S-7 will likely occur. In order to properly and fully mitigate such an impact, the DEIR/S needs to consider as a mitigation alternative the acquisition of the Tejon Ranch in whole.

The DEIR/S is also fails to propose adequate mitigation on lands that are already protected for conservation purposes by conservation easements and other mechanisms. The DEIR/S proposes a terrible precedent to develop land that has been set aside exclusively for conservation purposes, for example the lands protected on Tejon Ranch by a Conservation Easement. In other projects that we have reviewed, such lands already conserved for conservation purposes have, at a minimum, required a 10:1 mitigation for any terrestrial impact.

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C. Key Plans are Unavailable for Public Review

The mitigation measures call for numerous plans to be developed in order to minimize and mitigate impacts. However none of those plans are provided in the DEIR/S. Therefore it is impossible to evaluate the efficacy of the mitigation without having those plans available. The key missing plans include:

- Plan for Salvage, Relocation and/or Propagation of Special-Status Plant Species (at pg. 3.7-107) which may be the same as Special Plant Species Management Plan (at pg.3.7-108)
- Restoration and Revegetation Plan for temporary impacts (at pg.3.7-108)
- Relocation plan to remove the hibernacula and provide for construction of an alternative bat roost outside of the Work Area (at pg.3.7-116) which may be the same as the Bat Roost Relocation Plan (at pg. 3.7-116)
- Biological Resources Management Plan (at pg. S-50)
- Flood Protection Plan (at pg. S-50)
- Stormwater Pollution Prevention Plan (at pg. 3.7-107)
- Construction Management Plan (at pg. S-51)
- Paleontological Resource Monitoring and Mitigation Plan (at pg. S-51)
- Compensatory Mitigation Plan for Species and Species Habitat (at pg. 3.7-128)
- Weed Control Plan (at pg. 3.7-124 and 130)
- Compensatory Mitigation Plan (CMP) for Impacts to Aquatic Resources (at pg. 3.7-122)
- Adaptive management plan (at pg. 3.7-123)
- Prepare Plan for Dewatering and Water Diversions (62 (at pg. 3.7-134)
- Annual Vegetation Control Plan (at pg. 3.7-129)

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It is critical that these plans are part of the environmental review process, so that the public and decisionmakers can evaluate the efficacy of the mitigation that these plans provide.

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VI. Impacts to Existing Conserved Lands Inadequate – Tejon Ranch White Wolf Conservation Easement.

The DEIR/S recognizes that the existing Conservation Easement on the White Wolf area of Tejon Ranch will be impacted by the preferred alternative (at pg. 3.7-89) and states:

> "The project is not anticipated to conflict with this easement, as the acquisition areas allow for the installation of infrastructure such as transit and transportation facilities."

In addition the Tejon Ranch White Wolf Conservation Easement area appears to include over 400 acres of the permanent impact area for the "excess material stockpile" from the tunnels boring. As calculated above, because we could not find where the DEIR/S addressed it, the 400+ acres currently under a Conservation Easement could be permanently covered by 3 to 14.5 feet of fill material – an area which includes over 250 acres of blue oak woodlands.

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VII. Project Fails to Properly Apply the DRECP CMAs

The DEIR/S fails to apply and analyze all of the Bureau of Land Management's (BLM's) Conservation Management Actions (CMAs) as adopted in the Desert Renewable Energy Conservation Plan (DRECP) for all BLM lands that the propose project crosses. In particular the DEIR/S fails to incorporate the LUPA-wide CMAs which are applied through out the DRECP area and include:

LUPA- BIO3 – Resource Setback Standards
LUPA- BIO4 – Seasonal Restrictions
LUPA- BIO6 – Subsidized Predator Standards
LUPA- BIO7 - Restoration of Areas Disturbed by Construction Activities But Not Converted by Long-Term Disturbance Requirements, which need to be incorporated into Restoration and Revegetation Plan for temporary impacts (at pg.3.7-108)
LUPA-BIO11 - Nuisance Animals and Invasive Species Requirements
LUPA-BIO13 - General Siting and Design Requirements
LUPA-BIO14 - Biology: General Standard Practices
LUPA-BIO16 - Activity-Specific Bird and Bat CMAs
LUPA-BIO17 - Activity-Specific Bird and Bat CMAs
LUPA-BIO RIPWET 1 & 2 – Riparian and Wetland Focus Species
LUPA-BIO RIPWET 3 – Riparian birds
LUPA-BIO RIPWET 6 – Tehachapi Slender Salamander
LUPA-BIO RIPWET 7 – Tehachapi Slender Salamander
LUPA-BIO BAT 1 & 2 – Bats
LUPA-BIO PLANTS 1, 2 & 3 – BLM Special Status Plant Species
LUPA-BIO SVF 1 through 5 – Special Vegetation Features
LUPA- BIO VEG 1 through 6 – General Vegetation Management
LUPA-BIO-IFS-4 through 9 – Desert tortoise

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LUPA-BIO-IFS-11 – Bendire's thrasher
LUPA-BIO-IFS-12 through 14 – Burrowing owl
LUPA-BIO-IFS-15 through 23 – California condor
LUPA-BIO-IFS-24 through 31 – Golden Eagle
LUPA-BIO-IFS-32 – Swainsons Hawk
LUPA-BIO-IFS-35 through 42 – Mohave Ground Squirrel
LUPA-BIO-COMP-1 through 4 – Compensation
LUPA-AIR-1 through 4 – Air Quality
LUPA-LANDS-2 - Land acquisition
LUPA-SW-1 through 31 – Soil and Water

Because of the DEIR/s did not analyze or adopt these LUPA-wide CMAs on the BLM parcels that the proposed project is planning on crossing, a revised/supplement and recirculated DEIR/S is necessary in order to provide an adequate level of impact analysis.

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VIII. CONCLUSION

Thank you for the opportunity to submit comments on the DEIR/S for the for the Bakersfield to Palmdale Project Section of the California High-Speed Rail Project. Because of all of the inaccuracies, short-comings and confusion in the DEIR/S, we request that the HSRA revise and recirculate the DEIR/S.

Please add the Center to your notice list for all future updates to the Project and do not hesitate to contact the Center with any questions at the number or email listed below.

Sincerely,

Ileene Anderson
Senior Scientist/Public Land Desert Director
660 S. Figueroa St., Suite 1000
Los Angeles, CA 90017
323-490-0223
ianderson@biologicaldiversity.org

Tiffany Yap, PhD
Senior Scientist, Wildlife Corridor Advocate
1212 Broadway, Suite #800
Oakland, CA 94612
(510) 844-7100

cc: via email
Brian Croft, USFWS, Brian_Croft@fws.gov
Sherry Byers, USFWS, Sherry_Byers@fws.gov
Julie Vance, CDFW, Julie.Vance@wildlife.ca.gov

Attachment: Email Thread with HSR Consultant RE: Availability of Technical Reports

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Submission 777 (Ileene Anderson, Center for Biological Diversity, April 28, 2020) - Continued

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Ileene Anderson

From: Ileene Anderson
Sent: Friday, April 24, 2020 12:11 PM
To: claudia.cruz@vmapr.com
Subject: RE: Bakersfield to Palmdale Project Section - Request for Information

Hi Claudia,
I have not received any confirmation or documents yet. It will disenfranchise my ability to comment at this point, bcs. I presume the technical reports will be relatively long.
If they are available, I would still appreciate seeing them, however…
Thanks
Ileene

From: claudia.cruz@vmapr.com
Sent: Friday, April 24, 2020 11:59 AM
To: Ileene Anderson <IAnderson@biologicaldiversity.org>
Subject: RE: Bakersfield to Palmdale Project Section - Request for Information

Good afternoon Ileene,

I just want to confirm that your request for electronic copies has been processed.

Claudia Cruz
Senior Associate
VMA Communications, Inc.
Main 909.445.1001 Direct 909.206.5302
243 Oberlin Ave | Claremont, CA 91711
vmapr.com | claudia.cruz@vmapr.com

From: Ileene Anderson <IAnderson@biologicaldiversity.org>
Sent: Wednesday, April 15, 2020 5:02 PM
To: claudia.cruz@vmapr.com
Subject: RE: Bakersfield to Palmdale Project Section - Request for Information

Thank you so much, Claudia!

From: claudia.cruz@vmapr.com
Sent: Wednesday, April 15, 2020 4:38 PM
To: Ileene Anderson <IAnderson@biologicaldiversity.org>
Subject: RE: Bakersfield to Palmdale Project Section - Request for Information

Hi Ileene,

No worries, I'll forward your request to the team.

Submission 777 (Ileene Anderson, Center for Biological Diversity, April 28, 2020) - Continued

Claudia Cruz
Senior Associate
VMA Communications, Inc.
Main 909.445.1001 Direct 909.206.5302
243 Oberlin Ave | Claremont, CA 91711
vmapr.com | claudia.cruz@vmapr.com

From: Ileene Anderson <IAnderson@biologicaldiversity.org>
Sent: Wednesday, April 15, 2020 4:08 PM
To: claudia.cruz@vmapr.com
Subject: RE: Bakersfield to Palmdale Project Section - Request for Information

Hi Claudia,
I am now writing to ask for a copy of the *Bakersfield to Palmdale Project Section Biological and Aquatic Resources Technical Report* (Authority 2018a) which is referenced in the DEIR/S as well as the *Noise and Vibration Technical Report*.
I would appreciate if you could send them to me electronically, based on the looming comment deadline.
Thanks in advance!
Ileene

Ileene Anderson
Senior Scientist/Public Lands Deserts Director
Center for Biological Diversity
660 S. Figueroa St., Suite 1000
Los Angeles, CA 90017
(323) 490-0223 (cell)
(she/her/hers)
#MobilizeForTheWild
#SavingLifeOnEarth

From: Ileene Anderson
Sent: Wednesday, April 8, 2020 7:37 PM
To: 'claudia.cruz@vmapr.com' <claudia.cruz@vmapr.com>
Subject: RE: Bakersfield to Palmdale Project Section - Request for Information

Thank you!

From: claudia.cruz@vmapr.com
Sent: Wednesday, April 8, 2020 7:29 PM
To: Ileene Anderson <IAnderson@biologicaldiversity.org>
Subject: Bakersfield to Palmdale Project Section - Request for Information
Importance: High

Dear Ileene Anderson,

2

Thank you for contacting the Bakersfield to Palmdale Project Section of the California High-Speed Rail. I am following up on your inquiring regarding the Public Comment and Review Period as well as the Public Hearing for the Bakersfield to Palmdale Draft EIR/EIS. Please note that the Authority has **extended the public review period 15 days to April 28, 2020 and changed the public hearing date and format from and in-person meeting on April 9, 2020 to a "virtual" public hearing on April 23, 2020.** I have attached a copy of the press release with the updated information. This information can also be found and any additional updates will be posted on the Authority's website www.hsr.ca.gov

On behalf of the Bakersfield to Palmdale Outreach Team, thank you.

Claudia Cruz
Senior Associate
VMA Communications, Inc.
Main 909.445.1001 Direct 909.206.5302
243 Oberlin Ave | Claremont, CA 91711
vmapr.com | claudia.cruz@vmapr.com

3

Response to Submission 777 (Ileene Anderson, Center for Biological Diversity, April 28, 2020)

777-304

The commenter calls for recirculation of the Draft EIR/EIS.

According to CEQA Guidelines Section 15088.5, recirculation of an EIR prior to certification is required when "significant new information" is added to the EIR after the public review period.

Pursuant to the CEQ NEPA regulations in effect prior to September 14, 2020, "if a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion." 40 C.F.R. 1502.9(a). A supplemental EIS is required when “[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.” 40 C.F.R. §1502.9(c)(1)(ii).

Following the Authority’s publication of the Draft EIR/EIS in February 2020, the Authority learned that the California Fish and Game Commission advanced the Southern California and Central Coast mountain lion (*Puma concolor*) populations to candidacy for listing under the California Endangered Species Act. The Authority also learned that the U.S. Fish and Wildlife Service (USFWS) determined that listing the monarch butterfly (*Danaus plexippus*) under the federal Endangered Species Act is warranted, but that listing is precluded by other priorities; therefore, the monarch butterfly is now a candidate species under the Endangered Species Act. The U.S. Fish and Wildlife Service will review the species’ status annually until a listing decision is made.

Both CEQA and NEPA provide guidance on the recirculation and supplementation of published environmental documents. Pursuant to pertinent requirements of both laws, the Authority, as lead CEQA and NEPA agency for the Bakersfield to Palmdale Project Section, issued the Revised Draft EIR/Supplemental Draft EIS limited to the portions of the Draft EIR/EIS that required revision based on the new information about the mountain lion and the monarch butterfly. New information included background information, impact analysis, and mitigation measures. In addition to providing new information about the mountain lion and monarch butterfly, the Authority identified two new mitigation measures to address impacts to wildlife resulting from lighting during construction and project operation. Refer to Responses Comments 777-305 through 777-325 for further details.

777-304

Response to Submission 777 (Ileene Anderson, Center for Biological Diversity, April 28, 2020) - Continued

777-305

The commenter states that the EIR/EIS fails to identify all of the at-risk sensitive species that could be affected by the project, and that the analysis is incomplete and flawed because the best available science was not included in the analysis.

Section 3.7 of this Final EIR/EIS summarizes the findings of the detailed analyses for the project as provided in the Biological and Aquatic Resources Technical Report (BARTR) and its appendices (Authority 2018b). The methodology implemented for the biological and aquatic resources analyses, which is discussed in Section 3.7.4 of this Final EIR/EIS, is consistent with methodology implemented for other California HSR Project Sections that have recently undergone the environmental review process. As discussed in Section 3.7.4.1 of this Final EIR/EIS, the Supplemental Habitat Study Area extends up to 10 miles outward from the widest point of the project footprint. The Supplemental Habitat Study Area was determined based on guidance from appropriate regulatory agencies and best professional judgment. The Supplemental Habitat Study Area extends up to 10 miles and assures that special-status species would be considered in the resource study area. Species-specific habitats within the Supplemental Habitat Study Area were identified based on aerial photograph interpretation, documented occurrences of a species (e.g., California Natural Diversity Database [CNDDB] database records), and field observations of special-status species and their habitats. Extending of the Supplemental Habitat Study Area up to 10 miles beyond the widest point of the project footprint was determined to be sufficient to ensure the analysis included species with a potential to occur within the study area. Species that would be potentially affected, or special-status species that have the potential to occur within the resource study area, are discussed in Section 3.7. Additionally, Section 3.7.4.2 outlines the IAMFs that will be implemented during design, construction, and operation of the project, and Section 3.7.6 discusses the environmental consequences of the project alternatives, outlining potential biological and aquatic resource impacts. Sections 3.7.7.1 and 3.7.7.2 of this Final EIR/EIS outline detailed mitigation measures designed to reduce identified impacts to less than significant levels.

Refer to Responses to Comments 777-306 through 777-325, contained in this chapter, for detailed responses to comments raised by the commenter, including the use of best available science, mitigation identified in the EIR/EIS, identification of protected species, the Authority's consistent and comprehensive data analysis, and the analysis of species-

777-305

specific impacts.

777-306

The commenter indicated it has been difficult to obtain copies of technical reports supporting analysis in the Draft EIR/EIS, making it difficult to understand some of the analysis.

Per the commenter's request on April 15, 2020, a USB flash drive containing the Bakersfield to Palmdale Project Section technical reports was mailed to the address provided. The Authority provided access to the technical reports at public libraries in the project vicinity, at the Authority's offices, and upon request. Electronic media containing these documents were made available, free of charge, to anyone who requested them in writing or via the project hotline.

Response to Submission 777 (Ileene Anderson, Center for Biological Diversity, April 28, 2020) - Continued

777-307

The commenter indicates that he has not yet received a copy of the *Noise and Vibration Technical Report* and request re-circulation of a Supplemental Draft EIR/EIS.

The Draft EIR/EIS was originally made available for a minimum 45-day public review beginning on February 28, 2020 and ending on April 13, 2020. Due to the uncertainty caused by the outbreak of COVID-19, the Authority elected to extend the public review period for an additional 15 days to end of April 28, 2020.

Technical reports, separate from the Appendices in Volume 2, were prepared and electronic copies were available to anyone upon request from the Authority. Per the commenter's previous request to obtain a copy of the *Noise and Vibration Technical Report*, a USB flash drive containing all of the Bakersfield to Palmdale Project Section technical reports was mailed to the address provided.

Additionally, paper and electronic copies of all three of the volumes of the Draft EIR/EIS and all of the technical reports were delivered to 17 public libraries in the project vicinity for public review at the start of the comment period, as stated in Chapter 10 of the Draft EIR/EIS. These were available for public review until libraries closed their doors to the public on March 17, 2020 due to the COVID-19 outbreak response in the State of California. The Notice of Availability/Notice of Public Hearing on the Authority's website also provided information on how to obtain print and electronic copies of the technical reports associated with the Draft EIR/EIS at the Authority's officers in Sacramento and Los Angeles, California. The Authority did not close either of these offices in response due to COVID-19 for any period during the extended comment period.

Refer to Response to Comment 777-304, contained in this chapter, for discussion of the Revised Draft EIR/Supplemental Draft EIS.

777-308

The commenter suggests that the Draft EIR/EIS did not analyze impacts on all federal and state-listed species and sensitive species.

The rare plant species and plant communities listed by the commenter were analyzed in the BARTR and its appendices (Authority 2018b). Those determined to have potentially significant impacts were summarized and evaluated in Section 3.7.6 per the methods defined in Sections 3.7.4.6 and 3.7.4.7. The methodology implemented for the biological and aquatic resources analyses is discussed in Section 3.7.4 of this Final EIR/EIS and is consistent with methodology implemented for other California HSR project sections that have recently undergone the environmental review process. Species that would be potentially affected, or special-status species that have the potential to occur within the resource study area, are discussed in Section 3.7. Additionally, Section 3.7.4.2 outlines the IAMFs that will be implemented during design, construction, and operations of the project, and Section 3.7.6 discusses the environmental consequences of the project alternatives, outlining potential biological and aquatic resource impacts, including special-status mammal species and wildlife corridor analysis. Sections 3.7.7.1 and 3.7.7.2 of this Final EIR/EIS outline detailed mitigation measures designed to reduce identified impacts to less than significant levels.

Following the Authority's publication of the Draft EIR/EIS in February 2020, the Authority learned that the California Fish and Game Commission advanced the Southern California and Central Coast mountain lion (*Puma concolor*) populations to candidacy for listing under the California Endangered Species Act. The Authority also learned that the U.S. Fish and Wildlife Service (USFWS) determined that listing the monarch butterfly (*Danaus plexippus*) under the federal Endangered Species Act is warranted, but that listing is precluded by other priorities; therefore, the monarch butterfly is now a candidate species under the Endangered Species Act. The U.S. Fish and Wildlife Service will review the species' status annually until a listing decision is made.

Both CEQA and NEPA provide guidance on the recirculation and supplementation of published environmental documents. Pursuant to pertinent requirements of both laws, the Authority, as lead CEQA and NEPA agency for the Bakersfield to Palmdale Project Section, issued the Revised Draft EIR/Supplemental Draft EIS limited to the portions of the Draft EIR/EIS that required revision based on the new information about the

Response to Submission 777 (Ileene Anderson, Center for Biological Diversity, April 28, 2020) - Continued

777-308

mountain lion and the monarch butterfly. New information included background information, impact analysis, and mitigation measures. In addition to providing new information about the mountain lion and monarch butterfly, the Authority identified two new mitigation measures to address impacts to wildlife resulting from lighting during construction and project operation.

The mountain lion was included in the Draft EIR/EIS special-status mammal species analysis and was specifically analyzed for movement across the HSR alignment, which is limited to the Tehachapi mountain range. Impacts associated with special-status wildlife habitat and wildlife movement are described in Section 3.7.6 of the EIR/EIS and will be avoided, minimized, or mitigated in accordance with applicable regulations and agency requirements, as specified in Section 3.7.4.2, Impact Avoidance and Minimization Features, and Section 3.7.7, Mitigation Measures. Table 3.7-6 in Section 3.7 of the Draft EIR/EIS listed special-status wildlife species and impacts on habitat for each B-P Build Alternative, but inadvertently did not list the mountain lion or the impacts on its habitat, despite the analysis having been completed in the special-status mammal species analysis and the Wildlife Corridor Assessment (WCA; Appendix I of the BARTR [Authority 2018b]). Table 3.7-7 in the Final EIR/EIS has been updated to include this species and impacts on its habitat.

777-309

The commenter states that the EIR/EIS analysis does not fully discuss rare plant communities.

Section 3.7.5.6 of the Draft EIR/EIS identified nine natural plant communities within the Special-Status Plant Study Area. The California Department of Fish and Wildlife (CDFW) Sensitive Natural Communities Alliances was referenced, and those nine special-status plant communities are included in the above-referenced section in the EIR/EIS. The five rare plant communities on the CNDDB 2020 list are not located within the Special-Status Plant Study Area (including Stabilized Interior Dunes and Valley Saltbush Scrub); therefore, they are not discussed in this Final EIR/EIS. Detailed discussion of rare plant communities is provided in Section 6.5 of the BARTR (Authority 2018b), while Figure 6-2 in the BARTR shows the special-status communities within the project vicinity.

Response to Submission 777 (Ileene Anderson, Center for Biological Diversity, April 28, 2020) - Continued

777-310

The commenter questions the adequacy of the oak woodland analysis and the availability of the technical document. The commenter also states that the Draft EIR/EIS fails to provide discussion of oak woodlands or any other special-status natural community. The commenter is directed to the text in Section 3.75.6 of the Draft EIR/EIS and this Final EIR/EIS. Section 3.7.5.6 provides discussion of special-status plant communities, including blue oak woodland and valley oak woodland.

Vegetation mapping methods are discussed in Section 3.7 4 of this Final EIR/EIS and in more detail in Section 5.4.2.5 of the BARTR (Authority 2018b).The method used for mapping oak woodlands for the project involved a criterion of relative canopy cover, while the CDFW definition has a criterion of absolute canopy cover. Relative cover and absolute cover are different methods of measuring canopy cover and cannot be directly compared. However, the overall result of the mapping method used for the project resulted in a greater amount of mapped oak woodland and integrated a larger proportion of oak trees than would have been mapped and integrated using the state definition. This is because in order to meet the 10 percent absolute cover criterion and be considered part of a woodland according to the state definition, an oak tree would have to be within a short distance (generally less than 2 times the diameter of its canopy) of other oak trees. The mapping method used for the project was not as strict in this way, with the result being that many areas of scattered oak trees were mapped as woodlands even with an absolute canopy cover as low as about 2 percent. The mapping method used did not always capture all oaks that would have been captured with the state definition, however. For example, areas that had more pines than oaks were usually mapped as ghost pine woodland rather than oak woodland since the pines better characterized the vegetation. A strict mapping of oak woodland according to the CDFW definition would require complete access to the project vicinity so that individual trees could be identified. More importantly, it would have resulted in mapping less oak woodland overall, thus identifying fewer impacts on oak woodlands, rather than more impacts as suggested in this comment.

In addition, the following mitigation measures as identified in Section 3.7.7 in the Draft EIR/EIS and this Final EIR/EIS ensure that impacts on oak woodland and individual oak trees will be mitigated. These mitigation measures will provide for protection to special-status plant species and sensitive plant communities, such as blue oak woodland, by

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identifying environmentally sensitive areas and protecting those from construction impacts, such as BIO-MM#1, BIO-MM#6, BIO-MM#47, BIO-MM#50, BIO-MM#53 through BIO-MM#56, BIO-MM#58, BIO-MM#60, BIO-MM#61, and BIO-MM#75, and restoration for those species by revegetating and contouring the stockpile area for wildlife corridor access under BIO-MM#2, BIO-MM#6, BIO-MM#35, BIO- MM#38, BIO-MM#46, BIO-MM#47, BIO-MM#50, and BIO-MM#53.

For example, BIO-MM#1 requires pre-construction surveys and GIS mapping of all sensitive plant communities within the work area. This measure will ensure that appropriate buffers can be provided during construction and the accurate quantification of affected oaks. And BIO-MM#35 requires pre-construction surveys to identify protected trees such as oaks within the work area. These pre-construction surveys ensure accurate quantification of affected oaks for purposes of either tree replacement at a 3:1 ratio (10:1 for heritage trees) or the Authority's contribution to a tree-planting fund. This is appropriate and consistent with Kern County oak tree preservation requirements, as the responsibility for most oak tree conservation as set forth in the Fish and Game Code rests with the local agency, i.e., subject to the polices listed in Section 1.10.10 of the Kern County General Plan for oak woodlands preservation requirements. As discussed in Section 3.7.5.6 of the Draft EIR/EIS and this Final EIR/EIS, there are no oak communities mapped for the project within Los Angeles County.

Finally, mitigation for special-status species and habitats includes a CMP per BIO-MM#53. The Compensatory Mitigation Plan (CMP) identifies the mitigation to offset impacts on sensitive habitats, plants, and wildlife resulting from construction of the Preferred Alternative. The CMP will detail the locations where mitigation is proposed to occur and the strategy proposed to implement mitigation to meet the requirements and standards of the various environmental regulatory agencies with jurisdiction over the project. The CMP will provide the methods and a foundation for the mitigation options that are available to offset the loss of sensitive natural resources within the Preferred Alternative project footprint. Compensatory mitigation includes purchase of mitigation bank credits; fee-title acquisition; conservation easements; in-lieu fee payments; and conservation projects to create, restore, or enhance habitats. These compensatory mitigation programs address resources, including special-status species, plants and wildlife, streambed/riparian communities, and wildlife movement corridors. Detailed

Response to Submission 777 (Ileene Anderson, Center for Biological Diversity, April 28, 2020) - Continued

777-310

analysis, including mapping, is included in the BARTR (Authority 2018b).

The BARTR, with other technical reports, was made available to the public by request during the public review process. The BARTR contains maps of the special-status plant species, including the various oak woodland communities in Figure 6-2.

777-311

The commenter raised concerns that not all rare plant species have been identified in the Draft EIR/EIS and need to be analyzed in a supplemental and recirculated Draft EIR/EIS, including the Western Joshua Tree. The commenter notes that the Western Joshua Tree was recently petitioned to the California Fish and Wildlife Commission for consideration for protection under the California Endangered Species Act (CESA).

The rare plant species and plant communities listed by the commenter were analyzed in the BARTR and its appendices (Authority 2018b). Those determined to have potentially significant impacts were summarized and evaluated in Section 3.7.6 per the methods defined in Sections 3.7.4.6 and 3.7.4.7. The methodology implemented for the biological and aquatic resources analyses is discussed in Section 3.7.4 of this Final EIR/EIS and is consistent with methodology implemented for other California HSR project sections that have recently undergone the environmental review process. Species that would be potentially affected, or special-status species that have the potential to occur within the resource study area, are discussed in Section 3.7. Additionally, Section 3.7.4.2 outlines the IAMFs that will be implemented during design, construction, and operations of the project, and Section 3.7.6 discusses the environmental consequences of the project alternatives, outlining potential biological and aquatic resource impacts. Sections 3.7.7.1 and 3.7.7.2 of this Final EIR/EIS outline detailed mitigation measures designed to reduce identified impacts to less than significant levels under CEQA.

As discussed in Section 3.7.4.5 of this Final EIR/EIS, during the botanical surveys, protected trees in the study area were identified based on the regulations summarized in Appendix B of the BARTR (Authority 2018b).

To address information needs for areas where access was not granted, the Authority used habitat suitability models based on several databases. This system is a widely used tool, and its approach assumes the presence of special-status wildlife species in areas where suitable habitat occurs (as identified in the California Wildlife Habitat Relationship System or other published agency literature). It provides a reasonable and conservative basis for estimating potential impacts. The net result is a conservative approach that overestimates impacts on suitable habitat.

Impact BIO#3 of this Final EIR/EIS discusses the construction impacts on special-status

Response to Submission 777 (Ileene Anderson, Center for Biological Diversity, April 28, 2020) - Continued

777-311

plant communities, including oak woodland and Joshua tree woodland. As discussed in BIO-MM#1 pre-construction botanical surveys for special-status species and special-status plant communities (including Joshua tree woodland) will be conducted. Additionally, BIO-MM#2 calls for the implementation of a plan for salvage and relocation of special-status plant species, including but not limited to Joshua trees. Furthermore, the petition to list the Joshua tree as threatened or endangered under CESA, is not based on rarity/scarcity of the species. Instead, habitat fragmentation and, most importantly, climate change are the primary issues that may adversely affect the reproductive capacity of existing Joshua trees in existing habitats and the long-term viability of existing Joshua tree habitats. The HSR itself will not adversely affect Joshua trees through the mechanisms set forth in the petition, and the existing BIO-MMs and BIO-IAMFs will mitigate the impacts on individual trees. In fact, the HSR will help reduce the climate change effects that potentially threaten the Joshua tree, by reducing greenhouse gas emissions for intrastate transportation. Finally, the component of the CMP that will require preservation of western Mohave Desert habitat for endangered/threatened animal species, could very well include Joshua tree habitat. The California Fish and Wildlife Commission accepted the petition for Joshua Tree on September 22, 2020. The change of status does not require additional analysis because impacts to the species were already analyzed in the Draft EIR/EIS, and a change in the legal status of the species does not affect the analysis.

The commenter also suggests that the EIR/EIS needs to evaluate hydrological impacts resulting from tunneling activities. Impact HWR #4, Temporary Construction Impacts to Groundwater Volume, Quality, and Recharge, in this Final EIR/EIS discusses the hydrological impacts associated with construction of the project, including tunneling activities. The commenter's implication is that hydrological changes induced by tunneling may affect special-status or special interest plant species. This could conceivably occur for plants that are associated with springs or seeps. Impacts on springs or seeps relative to the tunnel alignment was evaluated and it was determined that there are two locations where potential impacts could occur. These are located within 0.3 mile of the proposed tunnel 8, where tunnel construction may interfere with the flow systems that supply water to these resources. The discussion of potential hydrologic effects to springs and seeps was expanded in Section 3.8.6.3 Impact HWR#4, and in Section 3.7.6.4 Impacts BIO#1, BIO#2, BIO#3, and BIO#4 of this Final

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EIR/EIS to detail the changes in groundwater that would occur and may affect aquatic habitats that support fish, wildlife, and plant species. As discussed in Sections 3.8.6.3 and 3.8.7.2, Mitigation Measure WQ-MM#3 would be implemented to reduce effects related to groundwater (including subsurface flow that feeds seeps and springs) during tunnel construction.

As specified in WQ-MM#3, the tunnels would be designed as waterproofed or watertight, depending on the degree of groundwater protection needed. In areas with high groundwater pressure, the tunnel lining system would be designed to allow controlled drainage of water from around the tunnel lining. The rate of groundwater losses would be minimized by grouting the native rock to lower its hydraulic conductivity immediately around the tunnel lining. Design of the tunnels would reduce the amount of seepage into tunnels in areas of high groundwater pressure, reducing the potential for adverse impacts to occur on surface resources (i.e., seeps, springs, and wells) that rely on groundwater.

WQ-MM#3 also requires groundwater levels, flow, and quality to be monitored at domestic wells, springs, and seeps prior to, during, and after construction. Regular monitoring would indicate potential changes in the depth to groundwater beyond the expected seasonal variations. Depending on the collected monitoring data, corrective actions would be implemented to minimize impacts on groundwater, including seeps and springs. WQ-MM#3 was expanded to provide additional details of the Groundwater Adaptive Management and Monitoring Program (AMMP) that would be implemented to reduce potential impacts on springs and seeps if tunneling disrupts groundwater flow to these resources. The AMMP would specify requirements for baseline data collection, groundwater modeling, monitoring during and after construction, adaptive management triggers and required remedial actions (such as augmenting water supplies to affected seeps and springs). The AMMP would advance a flexible strategy to respond to monitoring information that indicates changes to groundwater conditions resulting from project activities. If monitoring demonstrates that adaptive management actions taken to address such changes are not achieving the intended outcomes, management actions will be modified, or other strategies implemented to meet the objectives of minimizing impacts on water resources supported by groundwater resources.

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In addition, evaluation and discussions of tunneling construction impacts on springs, seeps, streams and associated habitat have been added to Section 3.7 in several locations, specifically 3.7.6.4 under Impact BIO #1, Impact BIO #2, Impact BIO #3, Impact BIO #4, and Impact BIO #6 addressing potential indirect temporary impacts to special-status plant species, plant communities, wildlife species (specifically amphibians, reptiles, birds, and mammals), aquatic resources and protected trees. Reference to WQ-MM#3 has also been added in these 3.7 subsections. Special-status species that have a meaningful chance of occurring within the area of project effects that are associated with springs, seeps, streams and associated habitat fed from ground water resources would be included in the Groundwater AMMP monitoring during and after construction. Therefore, impacts on special-status species would be mitigated to a less-than-significant level under CEQA.

In addition, refer to Responses to Comments 777-305, 777-309, (contained in this chapter) and 781-591 (contained in Chapter 20 of this Final EIR/EIS) for further discussions of rare plant communities, and special-status plant communities and special status-plant species.

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The commenter raised concerns that not all rare animal species have been identified in the EIR/EIS analysis and recommended that analysis be provided for each individual species.

All of the rare species and plant communities listed by the commenter were analyzed in the BARTR and its appendices (Authority 2018b). Those determined to have potentially significant impacts were summarized and evaluated in Section 3.7.6 per the methods defined in Sections 3.7.4.6 and 3.7.4.7. Section 3.7 of this Final EIR/EIS summarizes the findings of the detailed analyses for the project as provided in the BARTR and its appendices (Authority 2018b). The methodology implemented for the biological and aquatic resources analyses is discussed in Section 3.7.4 of this Final EIR/EIS and is consistent with methodology implemented for other California HSR project sections that have recently undergone the environmental review process. Species that would be potentially affected, or special-status species that have the potential to occur within the resource study area, were discussed in Section 3.7.

The Supplemental Habitat Study Area (as identified in Section 3.7.4.1), which extends up to 10 miles outward from the widest point of the project footprint, was determined based on guidance from appropriate regulatory agencies and best professional judgment. The use of 10 miles out is relevant for occurrence data and assures that special-status species would not be in the resource study area. Species-specific habitats within the Supplemental Habitat Study Area were identified based on aerial photograph interpretation, documented occurrences of a species (e.g., California Natural Diversity Database records), and field observations of special-status species, and their habitats and movements.

The WCA (Appendix I of the BARTR [Authority 2018b]) analyzed various-sized animals, and the wildlife movement features were based on these analyses. Additionally, specific wildlife movement impact and avoidance project features were developed to address impacts on wildlife movement are outlined as WM-IAMF #1 through WM-IAMF #6 in the WCA. These measures have been incorporated into the biological BIO-IAMFs, and the BIO-MMs outlined in Sections 3.7.4.2 and 3.7.7.2 of the Final EIR/EIS. These wildlife movement IAMFs and mitigation measures are discussed under Impact BIO#5 of the Final EIR/EIS and include avoidance of impediments to movement, measures to reduce

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impacts from night lighting and construction noise, wildlife exclusion fencing, measures for impacts from vehicle traffic, and restoration and revegetation plans for impacts on special-status species and wildlife movement corridors.

Additionally, Section 3.7.4.2 outlines the IAMFs that will be implemented during design, construction, and operations of the project. Section 3.7.6 discusses the environmental consequences of the project alternatives, outlining potential biological and aquatic resource impacts. Sections 3.7.7.1 and 3.7.7.2 of this Final EIR/EIS outline detailed mitigation measures designed to reduce identified impacts to less-than-significant levels.

The commenter calls for recirculation of the Draft EIR/EIS. Refer to Response to Comment 777-304, contained in this chapter.

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The commenter raised concerns that the Draft EIR/EIS fails to adequately assess impacts or discuss mitigation for impacts on the Southern and Central Coastal California Evolutionary Significant Unit of mountain lions.

Refer to Responses to Comments 777-305, 777-315(a), (contained in this chapter) and 788-770 (contained in Chapter 22 of this Final EIR/EIS) regarding noise.

The mountain lion was included in the EIR/EIS special-status (CDFW species of concern) mammal species analysis (as it was not a candidate for listing as threatened or endangered), and was specifically analyzed for movement across the HSR alignment, which is limited to the Tehachapi mountain range. Impacts associated with special-status wildlife habitat and wildlife movement are described in Section 3.7.4 of the EIR/EIS and will be avoided, minimized, or mitigated in accordance with applicable regulations and agency requirements, as specified in Section 3.7.4.2, Impact Avoidance and Minimization Features, and Section 3.7.7, Mitigation Measures. Section 3.7, Table 3.7-7, of this Final EIR/EIS lists special-status wildlife species and impacts on habitat for each B-P Build Alternative. To correct the omission of the mountain lion in this table, the Authority has included this species and impacts on its habitat in this Final EIR/EIS.

Although the mountain lion Evolutionary Significant Unit was not proposed for listing at the time the BARTR was prepared, the mountain lion was analyzed as a state protected species of concern, and used as one of the focal species to analyze the effects the project would have on wildlife movement as addressed in Section 3.7.4.3 of this Final EIR/EIS and in Section 6.3.4 of the BARTR (Authority 2018b). The detailed methods, analysis, and results of the modeling effort are provided in Section 5.2, Section 6.3.4, and Appendix C of the BARTR, respectively.

Chapter 2, Section 2.3.5, of this Final EIR/EIS discusses the various grade separation features, including wildlife crossings that have been designed for the project. As shown in Table 2-25 of this Final EIR/EIS, the project would include 53 viaduct openings and the 9 tunnel openings between the fenced surface rail segments. The 9 tunnels are located primarily through the mountainous Tehachapi region and range in length from 0.30 mile (2,997 feet) to 2.36 miles (9,504 feet), with a median tunnel length of 0.99 mile (5,250 feet). The 53 elevated viaduct sections range from 0.04 mile (189 feet) to 2.94

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miles (12,500 feet), with the median viaduct span being 0.09 mile (367 feet).

Wildlife can freely pass over the underground tunnel sections and cross under the elevated viaduct sections. An additional 39 wildlife crossings are designed to provide additional opportunities across at-grade surface segments that exceeded the recommended interval length. The size of the wildlife undercrossings is based on the size of wildlife that would use the crossings. In areas where larger species such as mountain lion and mule deer occur, 10-foot arch culverts will be used for the larger overhead clearance; all other locations would include a 6-foot arch culvert to accommodate smaller species.

As described in Section 7.3.6 of the WCA, artificial lighting adjacent to natural areas would be avoided where feasible. Most of the wildlife crossing opportunities across the project within mountain lion species range consist of tunnel and viaduct sections. These areas provide unlighted areas where mountain lions can cross the project. There are four wildlife crossings within the species range of mountain lion, of which one is a dual-use road wildlife overcrossing at Bealville Road which is a rural road with relatively low traffic volumes.

These crossings in the project design are expected to maintain genetic connectivity for numerous plant and animal species. Impact BIO #5 and Impact BIO #11 of this Final EIR/EIS discuss the construction and operation impacts on wildlife movement, respectively. As discussed under Impact BIO #5, the project impact on wildlife crossings and habitat linkages under CEQA would be potentially significant during construction. However, with implementation of BIO-IAMF#5, BIO-IAMF#8, BIO-MM#37, BIO-MM#42, BIO-MM#56, BIOMM#64, BIO-MM#77, and BIO-MM#78, impacts on wildlife crossings and habitat linkages would be reduced to a less-than-significant level through avoidance, protection, or restoration methods.

As discussed under Impact BIO #11, the project impact on wildlife crossings and habitat linkages under CEQA would be potentially significant because potential disturbance of wildlife crossings and habitat linkages during maintenance activities could have a substantial adverse effect on areas that did not previously have this type of disturbance. However, with implementation of BIO-MM#76, BIO-MM#78, and BIO-MM#64, impacts

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on wildlife crossings and habitat linkages would be reduced to a less-than-significant level through protection of habitat linkages.

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The Authority considered an adequate range of alternatives. The 2010 PAA (Authority 2010) for the Bakersfield to Palmdale Project Section identifies feasible and practicable HSR study alternatives to carry forward for environmental review and evaluation in the Draft EIR/EIS under CEQA and NEPA. This included Alternative T3-2B through the Tehachapi Subsection. Table ES-1 of the 2010 PAA shows that Alternative T3-2B had the least amount of elevated structure, but the most tunneling, so it had the highest capital cost; it had the lowest maintenance cost because of the least amount of elevated structure; of the alternatives it would impact the fewest number of residential parcels; and it would cross the most acres of endangered species habitat.

The 2012 SAA (Authority 2012) presented a refined range of alternatives for the Antelope Valley alignment based on new information obtained since the 2010 study. The 2012 SAA responded specifically to the Authority's concerns about reducing environmental impacts and overall project costs. Potential land use conflicts, wetland issues, and other potential environmental impacts, project purpose/objectives and requirements, and stakeholder input were considered in modifying the alternatives. In addition, the higher costs associated with elevated profiles and tunneling were reduced by increasing track grade; lowering alignment profiles and bringing them close to grade; and reducing tunnel length where possible. As a result, Alternative T3-2B, among other alternatives, was eliminated from further consideration. Section 2.3.12 of this Final EIR/EIS provides additional discussion of the range of alternatives considered.

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a) The commenter states that the EIR/EIS fails to adequately describe the project area's importance in wildlife connectivity.

As discussed in Section 3.7.4 of this Final EIR/EIS, the Tehachapi Mountains provide a critical habitat connection for wildlife gene flow within California and beyond. The Final EIR/EIS also notes that previous conservation planning efforts have identified the Tehachapi Mountains and foothills as a particularly important habitat linkage.

Impact BIO #5 and Impact BIO #11 of this Final EIR/EIS discuss the construction and operations impacts on wildlife movement, respectively. As discussed under Impact BIO #5, the project impact on wildlife crossings and habitat linkages under CEQA would be potentially significant during construction. However, with implementation of IAMFs as outlined in Section 3.7.4.2, specifically BIO-IAMF#5 and BIO-IAMF#8, and mitigation measures outlined in Section 3.7.7.2, specifically BIO-MM#42, BIO-MM#37, BIO-MM#56, BIOMM#64, BIO-MM#77, and BIO-MM#78, would reduce impacts on wildlife crossings and habitat linkages to a less than significant level through avoidance of specific linkages when possible, protection of the linkage system during construction, or restoration of wildlife crossings after construction is completed.

As discussed under Impact BIO #11, the project's impact on wildlife crossings and habitat linkages under CEQA would be potentially significant because potential disturbance of wildlife crossings and habitat linkages during maintenance activities could have a substantial adverse effect on areas that did not previously have this type of disturbance. However, with implementation of BIO-MM#76, BIO-MM#78, and BIO-MM#64, impacts on wildlife crossings and habitat linkages would be reduced to a less than significant level through protection of habitat linkages.

b) The commenter states that providing only 39 wildlife crossings is insufficient for 56 miles of at-grade HSR through the last-remaining high-quality linkage area for statewide genetic connectivity for numerous plant and animal species, including mountain lions.

Chapter 2, Section 2.3.5, of this Final EIR/EIS discusses the various grade separation features, including wildlife crossings that have been designed for the project. As shown in Table 2-25 of this Final EIR/EIS, the project would include 9 tunnels of varying length

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located throughout the project. Additional detail about the 53 viaduct openings and 9 tunnel openings between the fenced surface rail segments is provided in Table 2-1 of the WCA (Authority 2018b). The 9 tunnels are located primarily through the mountainous Tehachapi region and range in length from 0.30 mile (2,997 feet) to 2.36 miles (9,504 feet), with a median tunnel length of 0.99 mile (5,250 feet). The 53 elevated viaduct sections range from 0.04 mile (189 feet) to 2.94 miles (12,500 feet), with the median viaduct span being 0.09 mile (367 feet). Wildlife can freely pass over the underground tunnel sections and cross under the elevated viaduct sections. The additional wildlife crossings are designed to provide additional opportunities across at-grade surface segments. These crossings in the project design are expected to maintain genetic connectivity for numerous plant and animal species, including the mountain lion.

Impact BIO #5 and Impact BIO #11 of this Final EIR/EIS discuss the construction and operations impacts on wildlife movement, respectively. As discussed under Impact BIO #5, the project impact on wildlife crossings and habitat linkages under CEQA would be potentially significant during construction. However, with implementation of BIO-IAMF#5, BIO-IAMF#8, BIO-MM#42, BIO-MM#37, BIO-MM#56, BIOMM#64, BIO-MM#77, and BIO-MM#78, impacts on wildlife crossings and habitat linkages would be reduced to a less-than-significant level through avoidance of specific linkages when possible, protection of the linkage system during construction, or restoration of wildlife crossings after construction is completed.

As discussed under Impact BIO #11, the project impact on wildlife crossings and habitat linkages under CEQA would be potentially significant because potential disturbance of wildlife crossings and habitat linkages during maintenance activities could have a substantial adverse effect on areas that did not previously have this type of disturbance. However, with implementation of BIO-MM#76, BIO-MM#78, and BIO-MM#64, impacts on wildlife crossings and habitat linkages would be reduced to a less than significant level through protection of habitat linkages.

c) The commenter states that the number of larger crossings (3 to 12 total) over 56 miles of barriers is insufficient for larger animals or those that need more space to migrate, and this strategy neglects the needs and behaviors of smaller animals, including small mammals, reptiles, and amphibians, that might require smaller

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passageways to actually use them, like the Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*) and blunt-nosed leopard lizard (*Gambelia sila*). Alternatively placing logs and rocks/boulders along with native vegetation within the soft-bottom crossings could help facilitate the use of the crossings by small animals, but it would be important to understand which species occur in the area so that the crossings can be designed to be effective.

Refer to Responses to Comments 777-315(b) and 777-315(f), contained in this chapter.

In addition, Figures 2-21 and 2-22 in Section 2.3.5 of this Final EIR/EIS show a typical cross-section and plan view of wildlife crossing structures, respectively. As shown on Figures 6-19 and 6-20 of the WCA (Authority 2018b), the project design includes underground tunnel sections and elevated viaduct sections within the species range of the Tipton kangaroo rat and blunt-nosed leopard lizard where these smaller mammals can cross the project alignment. The project design includes 4 underground tunnel segments and 13 elevated viaduct segments within the Tipton kangaroo rat species range. In addition to these design features, there are 17 additional wildlife crossings within Tipton kangaroo rat species range that allow wildlife to move across the alignment. The project design includes 3 underground tunnel segments and 12 elevated viaduct segments within the blunt-nosed leopard lizard species range. In addition to these design features, there are 15 wildlife crossings within the blunt-nosed leopard lizard species range that allow wildlife to move across the alignment. Table 6-7 in the WCA (Authority 2018b) presents additional detail regarding the lengths and locations of these openings that provide additional connectivity for these species.

d) The commenter describes more in-depth analyses that include on-the-ground movement studies of which species are moving in the area and their patterns of movement and states that such studies are needed to determine how to best implement such crossings.

On-the-ground movement studies were not conducted as part of the EIR/EIS analysis because of the lack of access to the properties along the alignment. The analysis relied on developing a Local Permeability Assessment (LPA) model using focal species data from South Coast Wildlands' Tehachapi Connection and California Desert. Available

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roadkill data along SR 58 and in-the-field evaluations of potential culvert crossings underneath SR 58 were also used and incorporated into the analysis. This method is sufficient to determine the effects on wildlife movement cost associated with the project. This analysis is discussed in Section 3.7.4.4 of this Final EIR/EIS, and additional detail in support of the EIR/EIS analysis is provided in Sections 7.7.3 through 7.7.5 of the BARTR and Section 5.2.1 of the WCA (Authority 2018b).

e) The commenter suggests smaller species with poor dispersal abilities would require more frequent intervals of crossings to increase their chances of finding a crossing. The commenter also suggests that for some amphibian and reptile species, undercrossings should have grated tops so that the light and moisture inside the crossings are similar to that of the ambient environment. The commenter suggests that in order to improve the effectiveness of any wildlife crossings, they should be planned in areas with high quality, protected habitat on both sides of the rail infrastructure.

The comment also suggests that the Draft EIR/EIS should include acquiring unprotected lands on both sides of the rail where a wildlife crossing would be implemented and preserved and managing those lands in perpetuity to ensure that wildlife crossings remain functional over time.

Refer to Responses to Comments 777-315(b) and 777-315(f), contained in this chapter.

During design of the wildlife crossings for large and small animals, the Authority will consider protection of land along the wildlife crossings and specific crossing treatments as recommended by the commenter.

f) The commenter states that the Draft EIR/EIS fails to adequately assess and mitigate impacts on wildlife movement and connectivity needs for numerous special-status wildlife throughout the project area to less than significant.

Refer to Response to Comment 777-315(c), contained in this chapter.

As discussed in Section 3.7.4.4 of this Final EIR/EIS, three analyses were conducted for focal species that represent a range of wildlife species. Nine focal species were selected

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to model wildlife movement across the project, including four listed species. The focal species included in the local permeability analysis include the mountain lion, mule deer, American badger, San Joaquin kit fox, desert kit fox, desert tortoise, western gray squirrel, Tipton kangaroo rat, and blunt-nosed leopard lizard. These focal species were selected because the movement cost data were available from the South Coast Wildlands Missing Linkages (Missing Linkages) project (South Coast Wildlands no date). These species also are representative of the various geographic areas, habitat types, and ranges of movement across the project, including three ecoregions (Central Valley, Sierra Nevada, and South Coast). Penrod et al. (2003) modeled regional least-cost corridors for seven of these species in the Tehachapi Linkage Design (Penrod et al. 2003), while regional least-cost corridors for the other two species (i.e., desert tortoise and desert kit fox) were modeled in A Linkage Network for the California Deserts (Penrod et al. 2012; Bureau of Land Management [BLM] 2016). As discussed in Responses to Comments 777-315(b), 777-315(c), and 777-315(f), contained in this chapter, crossing opportunities will be made available for smaller wildlife species (such as Tipton kangaroo rat and blunt-nosed leopard lizard) and larger species (such as mountain lion and mule deer). For additional discussion of wildlife movement and connectivity, refer to Section 6.7.3 and Appendix I (WCA) of the BARTR (Authority 2018b).

g) The commenter is concerned that dimensions are not provided for the five dual-use road undercrossings, two dual-use drainage overcrossings, and one overcrossing, and is unclear how effective combined road and wildlife undercrossings will be, given that traffic noise and lighting could deter numerous other species. The commenter is also concerned that roads would be fenced off and therefore pose another movement barrier perpendicular to the proposed project.

The final design for the wildlife crossings has not been completed. Section 2.3.5 of this Final EIR/EIS discusses wildlife crossings, which will be designed with consideration given to traffic, noise, and lighting. Roads perpendicular to the HSR alignment would not be fenced, as shown in Figure 2-20 of this Final EIR/EIS. Section 4.2.1 of the WCA (Authority 2018b) provides a list of sources consulted in developing the wildlife crossing designs, while Sections 7.7.3 through 7.7.5 provide additional detail on the project's effects on wildlife crossings.

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j) The commenter states that the Draft EIR/EIS fails to adequately describe and mitigate impacts on wildlife movement and connectivity in the project area to less than significant.

Refer to Response to Comment 777-315(c) and 777-315(f), contained in this chapter.

Wildlife movement corridors are discussed in Section 3.7.5.9 of this Final EIR/EIS, while project impacts on wildlife movement are discussed in Section 3.7.6.4 under Impact BIO #5 and in Section 3.7.6.5 under Impact BIO #11. Impact BIO #5 and Impact BIO #11 of this Final EIR/EIS discuss the construction and operations impacts on wildlife movement, respectively. As discussed under Impact BIO #5, the project impact on wildlife crossings and habitat linkages under CEQA would be potentially significant during construction. However, with implementation of BIO-IAMF#5 and BIO-IAMF#8 and BIO-MM#42, BIO-MM#37, BIO-MM#56, BIO-MM#64, BIO-MM#77, and BIO-MM#78, impacts on wildlife crossings and habitat linkages would be reduced to a less than significant level through avoidance of specific linkages when possible, protection of the linkage system during construction, or restoration of wildlife crossings after construction is completed.

As discussed under Impact BIO #11, the project impact to wildlife crossings and habitat linkages under CEQA would be potentially significant because potential disturbance of wildlife crossings and habitat linkages during maintenance activities could have a substantial adverse effect on areas that did not previously have this type of disturbance. However, with implementation of BIO-MM#76, BIO-MM#78, and BIO-MM#64, impacts on wildlife crossings and habitat linkages would be reduced to a less than significant level through protection of habitat linkages.

For additional detail on wildlife corridors within the project vicinity, refer to Sections 7.7.3 through 7.7.5 of the BARTR and Section 5.2.1 of the WCA in Appendix I of the BARTR (Authority 2018b). The WCA analyzed a variety of species for wildlife movement impacts and described how the project will maintain wildlife connectivity across the HSR alignment through the 62 underground tunnel and elevated viaduct sections and 39 wildlife crossings (Table 6-7 in the WCA). The LPA model quantifies the relative change

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to wildlife movement resulting from the project.

k) The commenter states that the Draft EIR/EIS lacks sufficient wildlife crossings and dismisses the need for corridor redundancy (i.e., the availability of alternative pathways for movement).

Section 2.3.5 of this Final EIR/EIS discusses the various grade separation features, including wildlife crossings that have been designed for the project. As shown in Table 2-25 of this Final EIR/EIS, the project would include 9 tunnels of varying length located throughout the project. Additional detail about the 53 viaduct openings and 9 tunnel openings between the fenced surface rail segments is provided in Table 2-1 of the WCA. The 9 tunnels are located primarily through the mountainous Tehachapi region and range in length from 0.30 mile (2,997 feet) to 2.36 miles (9,504 feet), with a median tunnel length of 0.99 mile (5,250 feet). The 53 elevated viaduct sections range from 0.04 mile (189 feet) to 2.94 miles (12,500 feet), with the median viaduct span being 0.09 mile (367 feet). Wildlife can freely pass over the underground tunnel sections and cross under the elevated viaduct sections. The additional wildlife crossings are designed to provide additional opportunities across at-grade surface segments. There are redundant crossing opportunities for each focal species that represents a variety of wildlife species with various species ranges, habitat requirements, and mobility.

l) The commenter suggests that adequate mitigation measures should include addressing the edge effects of the project, such as light, noise, and other aspects of anthropogenic features that can have negative impacts on wildlife.

Section 2.3.5 of this Final EIR/EIS discusses wildlife crossings, which will be designed with consideration given to traffic, noise, and lighting. Section 7.3.6 of the WCA provides additional detailed description of the design considerations to minimize lighting, noise, and vibration effects at wildlife crossing locations. WM-IAMF#2, discussed under Impact BIO #5 in this Final EIR/EIS, addresses the effects of nighttime lighting. WM-IAMF#3, also discussed under Impact BIO #5 in this Final EIR/EIS, addresses the effects of construction noise. Refer to Response to Comment 788-770, contained in this chapter, regarding noise. The references cited in the comment letter were reviewed for applicability.

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m) The commenter expresses concerns that highways and similar infrastructure expose wildlife to high levels of noise and lighting and can exert negative effects at some level, even if adequate wildlife passageways and fencing are well designed.

Refer Response to Comment 777-315(l), contained in this chapter.

n) The commenter expresses concern that project activities (construction and operations) will affect species movement. Berms and sound/light barriers should be implemented at all wildlife crossings to encourage wildlife to use the crossings. Sound and lighting should also be minimized throughout the entire proposed project, including at other surface, elevated, and underground portions, particularly where the project goes through natural habitats.

Mitigation Measure BIO-MM#37 in this Final EIR/EIS defines the measures to be implemented to minimize effects on wildlife movement corridors during construction. Additionally, and as described in Section 7.3.6.1 of the WCA, artificial lighting adjacent to natural areas should be avoided where practicable and feasible to encourage nighttime wildlife movement at crossing locations. Section 7.3.6.2 in the WCA describes that berms and berm/walls near crossing structures will be used to minimize and mitigate impacts from sound.

o) The commenter states that the Draft EIR/EIS fails to provide sufficient details and analyses to warrant the conclusion that project impacts on habitat connectivity and wildlife movement would be mitigated to less than significant.

As discussed in Section 3.7.4 of this Final EIR/EIS, the Tehachapi Mountains are the only forest and woodland connection between the 2,000-mile-long Sierra Cascade mountain system and the 800-mile-long mountain system of the Southern California Coastal Ranges, Transverse Ranges, and Peninsular Ranges. The Final EIR/EIS states that the Tehachapi Mountains provide a critical habitat connection for wildlife gene flow within California and beyond. The Final EIR/EIS also notes that previous conservation planning efforts have identified the Tehachapi Mountains and foothills as a particularly important habitat linkage.

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Impact BIO #5 and Impact BIO #11 of this Final EIR/EIS discuss the construction and operation impacts on wildlife movement, respectively. As discussed under Impact BIO #5, the project impact on wildlife crossings and habitat linkages under CEQA would be potentially significant during construction. However, with implementation of BIO-IAMF#8, BIO-IAMF#5, BIO-MM#42, BIO-MM#37, BIO-MM#56, BIOMM#64, BIO-MM#77, and BIO-MM#78, impacts on wildlife crossings and habitat linkages would be reduced to a less than significant level through avoidance of specific linkages when possible, protection of the linkage system during construction, or restoration of wildlife crossings after construction is completed.

As discussed under Impact BIO #11, the project impact on wildlife crossings and habitat linkages under CEQA would be potentially significant because potential disturbance of wildlife crossings and habitat linkages during maintenance activities could have a substantial adverse effect on areas that did not previously have this type of disturbance. However, with implementation of BIO-MM#76, BIO-MM#78, and BIO-MM#64, impacts on wildlife crossings and habitat linkages would be reduced to a less than significant level through protection of habitat linkages.

p) The commenter expresses concern that the Draft EIR/EIS provides IAMFs related to wildlife movement that are discussed in detail in an appendix of a technical report that is not readily available to the public and suggests that there is no guarantee that additional best management practices will be implemented or enforceable. The commenter expresses concern there is no accountability given to the Authority to actually implement practices that prevent fencing from blocking crossing structure entrances. The commenter suggests that mitigation measures should include monitoring the wildlife crossings to determine if species are using the crossings.

The Authority will prepare a Mitigation Monitoring and Enforcement Plan (MMEP) pursuant to NEPA. The MMEP is consistent with CEQA requirements for mitigation monitoring as set forth in Section 15097 of the CEQA Guidelines (Title 14 California Code of Regulations, Division 6, Chapter 3). The MMEP will identify responsible parties, timing of implementation, reporting criteria, and when the measure is complete. The MMEP will be considered for adoption at the time the Authority Board considers

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certification of the EIR and approval of the project. While the MMEP will be part of the Record of Decision issued pursuant to NEPA, all IAMFs and mitigation measures identified in this Final EIR/EIS will be included in the MMEP.

While the BARTR and WCA were made available to the public upon request during the public review process, the impacts on wildlife movement, and the IAMFs and mitigation measures applicable to wildlife movement were discussed in Section 3.7.6.4 under Impact BIO#5, and Impact BIO#11, Section 3.7.4.2 and Section 3.7.7.2, respectively, of the Draft EIR/EIS.

Response to Submission 777 (Ileene Anderson, Center for Biological Diversity, April 28, 2020) - Continued

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The commenter states that because comprehensive baseline biological information is not included in the Draft EIR/EIS, the actual impact analysis is flawed and the document fails to provide much-needed analysis by species, particularly for the long-term operational impacts.

The commenter expresses concern that construction impacts on California condors are not considered in the Draft EIR/EIS. The commenter notes that fencing along the HSR could attract condors, and identifies research findings showing mortalities particularly for scavenging birds such as the condor resulting from trains including high-speed trains. The commenter notes protective measures in the BARTR (Authority 2018b) for the construction period.

Potential operational impacts on special-status wildlife species, including California condor are discussed under Impact BIO #8 and mitigated for in the Draft EIR/EIS. The following avoidance and minimization measure would help to reduce the potential for bird strike mortalities, particularly resulting from condor attraction to security fencing:

BIO-IAMF#12: Design the Project to Be Bird Safe—Prior to final construction design, the Authority will ensure that the catenary system, masts, and other structures such as fencing are designed to be bird and raptor-safe in accordance with the applicable recommendations presented in Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 2006 (APLIC 2006) and Reducing Avian Collisions with Power Lines: State of the Art in 2012 (APLIC 2012). Applicable APLIC recommendations include, but are not limited to:
- Ensuring sufficient spacing of phase conductors to prevent bird electrocution
- Configuring lines to reduce vertical spread of lines and/or decreasing the span length if such options are feasible
- Marking lines to increase the visibility of lines and reduce the potential for collision
- Installing perch deterrents to discourage bird presence near project facilities

Additionally, the following mitigation measures are designed to reduce impacts on condors:

BIO-MM#55: Prepare and Implement a Weed Control Plan, which states the following:

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Potential adverse impacts, such as electrocution and train strikes/collisions, could occur on wildlife species. These are of particular concern for Fully Protected species such as the California condor… because “take” of these species cannot be authorized. Per the APLIC guidance, phased conductors would be designed a minimum of 10 feet apart in order to reduce the potential for California condor collision to a low probability.

BIO-MM#71: Implement California Condor Avoidance Measures during Helicopter Use, which would require that prior to construction-related uses of helicopters, the Project Biologist will coordinate with USFWS to establish that no California condors are present in the area. If California condors are observed in the area in which helicopters will operate, including the helicopter's flight pattern from its origination, during construction use and the return flight, helicopter use will not be permitted until the Project Biologist has determined that the California condors have left the area.

This mitigation measure is anticipated to be effective because it would restrict construction-related helicopter use wherever California condors are present; condor presence is easily detected by observation and routine electronic tracking. Implementation of this measure would not trigger secondary environmental impacts because it would not change the scope, scale, or location of construction activities beyond those that have been described as part of the B-P Build Alternatives.

BIO-MM#73: Implement Removal of Carrion that may Attract Condors and Eagles, which would use automated security monitoring and track inspections to detect fence failures and/or the presence of a carcass (carrion) within the right-of-way that could be an attractant to condors and eagles. Dead and injured wildlife found in the right-of-way will be removed… during operations when the train is not in operation. Fences would be designed to minimize condor perching and attractants such as carrion would be removed as soon as detected, as discussed in the measures above. The conclusion that impacts would be less than significant with implementation of mitigation is justified in the Draft EIR/EIS.

Refer to Response to Comment 777-305, contained in this chapter.

Response to Submission 777 (Ileene Anderson, Center for Biological Diversity, April 28, 2020) - Continued

777-317

The commenter states that the acreages referenced in the Draft EIR/EIS are inaccurate and that the mitigation measures proposed for special-status species are inadequate.

To clarify the number of acres of permanent impact stated in Section 3.7 Summary of Results in the Final EIR/EIS, the text has been modified to be consistent with the information reflected in Section 3.7 Tables 3.7-5 and 3.7-6 and Table S-7 in the Summary of this Final EIR/EIS. When the values in the tables are totaled there is overlap of the same acres, as it is common for species to share the same area of habitat. Total acres affected by the B-P Build Alternative alignments are discussed in the Summary section of the Final EIR/EIS. Correct acreages of impacts are adequately disclosed to the reader in the Draft EIR/EIS Section 3.7 tables and the Summary section (as noted), and therefore does not meet the requirements for recirculation per CEQA Guidelines Section 15088.5 or recirculation and supplementation under 40 C.F.R. §1502.9(a) and 40 C.F.R. §1502.9(c)(1)(ii).

The commenter states the typical habitat mitigation ratios for compensatory mitigation are 3:1 and that the proposed mitigation of 1:1 is inadequate. In response, the compensatory habitat mitigation ratios in the Draft EIR/EIS, and supporting documents, are variable, ranging from 0.5:1 to 3:1, depending on the type and quality of the affected habitat. Furthermore, the ratios specified in the Draft EIR/EIS are set to avoid significant impacts but it is acknowledged that the regulatory agencies may require higher ratios during the permitting process. In addition, the statement of “typical impact mitigation requirement ratio of 3:1”, is not accurate. While this may be true for certain impacts for projects with permittee responsible mitigation, it is often not the case for large-scale projects or regional Habitat Conservation Plans and Natural Community Conservation Plans, which generally take a more holistic view of the value of habitat conservation. Moreover, like here, the mitigation ratios are typically variable depending on the impact that would occur as well as the type and quality of the affected habitat.

The HSR is a large-scale infrastructure project and there are a number of factors that are considered in the development of impact assessment and mitigation approaches. The scale of the HSR is primarily by virtue of its length, as it is relatively narrow, and existing natural habitat on both sides of this project segment will be left largely intact. Because of the limited access to private property, the methods to assess project impacts

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was conservative and likely resulted in a significant overstatement of the amount of actual habitat impacts for the various species. The CMP approach to mitigation concentrates on high value habitat acquisition, with a focus on factors such as location, function, conservation value, and development threat, rather than acreage ratios, which, by their nature, can be somewhat arbitrary. Finally, as noted above, the ratios are minimums to avoid significant impacts, and the CMP must ultimately be approved by wildlife agencies that are charged with protecting the species and have high policy standards for compensatory mitigation to ensure that impacts are mitigated.

Response to Submission 777 (Ileene Anderson, Center for Biological Diversity, April 28, 2020) - Continued

777-318

The commenter states that the stockpile calculations referenced in the Draft EIR/EIS are inconsistent with the Impact BIO #10, Aquatic Resources, discussion on stockpile impacts.

The proposed stockpile area north of SR 58 near Bealville Road has been proposed as part of the Refined CCNM Design Option as an area for the construction contractor to place excess materials from project grading and tunneling. The stockpile area location was based on its proximity to the Refined CCNM Design Option construction area where the excess materials would be generated. Providing a stockpile area as close as possible to the construction area will minimize the length of truck haul trips and the associated vehicle miles traveled and vehicle emissions. The need for the construction contractor to use any of this stockpile area will depend upon how the Bakersfield to Palmdale Project Section is broken into construction packages for a future design-build contractor procurement. Without the identification of specific alternative locations for placement of excess materials in this comment, it is not possible to precisely estimate what impacts may result from hauling materials to these alternative locations. However, the greater distance would likely result in greater impacts at alternative sites.

Since the precise use of the site is unknown, the Draft EIR/EIS conservatively characterizes the entire area as potential permanent impact. Although the actual area is expected to be less than estimated in the EIR/EIS, the EIR/EIS provides sufficient detail to analyze potential environmental impacts. There is no new information that would require recirculation or supplementation of the Draft EIR/EIS.

Temporary impacts as a result of construction, such as staging, are discussed in Section 3.7.6.4.

As part of the project, BIO-IAMF#1 through BIO-IAMF#3 and BIO-IAMF#5 through BIO-IAMF#11 would be incorporated to avoid and/or minimize impacts on biological and aquatic resources from project construction, as applicable and discussed in Section 3.7.4.2 of this Final EIR/EIS. In particular, the implementation of BIO-IAMF#5, will include an assessment to avoid areas of important resources, such as blue oak woodland and wildlife movement opportunities to the extent feasible, and designate them as Environmentally Sensitive Areas. As the commenter notes, it may not be

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feasible to fully restore the entire area of subsoil placement, particularly if the entire area is used for that purpose. Therefore, BIO-IAMF#5 and subordinate IAMFs and mitigation measures, will provide implementation details for identification of restoration opportunities and methods. Toward this end, the Final EIR/EIS has incorporated measures for topsoil salvage and utilization, similar to those articulated in BIO-MM#2 and F-B LGA BIO-MM#48, for areas that are to be restored.

The Authority would also incorporate IAMFs to reduce and minimize impacts by designating a Project Biologist and species-specific and general biological monitors during construction (BIO-IAMF#1). In addition, the Authority would develop and implement a Biological Resources Management Plan to identify special-status species to be avoided during construction (BIO-IAMF#5). This plan would be a compilation of the biological resources avoidance and minimization measures applicable to the project section and other project environmental plans, such as the Restoration and Revegetation Plan and Weed Control Plan. Requirements have also been incorporated that would require the Authority to delineate Environmentally Sensitive Areas or environmentally restricted areas on final construction plans and in the field using measures such as flagging or fencing under direction of the project biologist. The Authority would require construction crews to attend Worker Environmental Awareness Program training and certify that they understand the regulatory agency requirements and procedures necessary to protect biological resources (BIO-IAMF#3). This would avoid some (but not all) direct impacts on special-status plant communities because it would establish that contractors must be aware of special-status plant communities occurrences and minimize impacts during construction.

Any permanent impacts of the stockpile area, i.e., those areas that cannot be avoided or restored will be mitigated through the CMP for permanent impacts.

Response to Submission 777 (Ileene Anderson, Center for Biological Diversity, April 28, 2020) - Continued

777-319

The commenter states that proposed mitigation measures focus on short-term construction, and long-term mitigation is deferred because it is included in plans and strategies to be developed in the future. In addition, the commenter feels that mitigation ratios stated are inadequate and below standards.

The plans required by the mitigation measures are typically developed during final design and prior to construction. These plans require detailed information that will be developed during final design and data from the pre-construction and protocol surveys that will be conducted prior to ground disturbing activities. In addition, development of these plans requires that the Authority have access to lands that it has not been granted access to at this time. These plans will ensure that impacts are properly mitigated.

There are a number of different biological impacts discussed in the EIR/EIS, some of which require compensatory mitigation. Many of the mitigation measures state that the ratios are proposed “unless a higher ratio is required pursuant to regulatory authorizations,” or similar. The EIR/EIS set ratios sufficient to mitigate impacts to a less than significant level, but acknowledged that it is a possibility that the regulatory agencies will impose higher ratios during the permitting process. In that case, the Authority would comply with the higher ratios. For example, BIO-MM#43 specifies a minimum 3:1 replacement ratio for affected Swainson’s hawk nest trees, and BIO-MM#46 specifies a 2:1 ratio for affected riparian habitat. Additionally, for compensatory mitigation proposed in the EIR/EIS, ratios are set as a minimum to avoid significant impacts and will be subject to regulatory agency approvals and authorizations.

Certain mitigation measures are focused on short-term construction impacts because those types of impacts and mitigation are well-understood based on construction mitigation measures that have been developed for a variety of infrastructure projects that have been implemented throughout California, including some ongoing HSR section construction projects. The compensatory habitat mitigation for long-term impacts is necessarily less specific, and will be further developed with additional site-specific information with oversight by agencies that regulate the species. However, the CMP requirements set forth adequate detail in terms of approach, goals and minimum conservation ratios, which provide performance standards that will ensure impacts will be mitigated. It is also acknowledged that the wildlife agencies retain permitting authority

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and may require higher ratios than identified in the Draft and Final EIR/EIS. Refer to Response to Comment 777-317, contained in this chapter, for additional discussion of the rationale for, and propriety of, the mitigation ratios described in the Draft EIR/EIS.

Response to Submission 777 (Ileene Anderson, Center for Biological Diversity, April 28, 2020) - Continued

777-320

The commenter states that BIO-MM#1 and BIO-MM#2 are inadequate because they are vague and do not provide enough detail in regard to the analysis of special-status plant species and communities.

This EIR/EIS identifies the IAMFs and mitigation measures that will work together to minimize construction impacts on special-status plants and plant communities as listed in Section 3.7, Biological and Aquatic Resources, in Table 3.7-14 under Impacts BIO #1, BIO #3, and BIO #6. Additionally, IAMFs and mitigation measures are listed for operational impacts on special-status plants and plant communities under Impacts BIO #7, BIO #9, and BIO #12.

The mitigation measures identified in Section 3.7 cannot be viewed in isolation and should be considered as complimentary measures that will work together to avoid significant impacts. With BIO-MM#1, for example, the Project Biologist will oversee the various other mitigation measures designed to reduce impacts on biological and aquatic resources during construction and prepare the plans that will provide instructions for the restoration after construction is completed, per BIO-MM#2.

As discussed in BIO-MM#2, “Prior to any ground disturbing activity, the Project Biologist will collect seeds and plant materials and stockpile and segregate the top four inches of topsoil from locations within the Work Area where species listed as threatened or endangered under the Federal Endangered Species Act (FESA), threatened, endangered, or candidate for listing under CESA, state-designated ‘Rare’ species, and California Rare Plant Rank 1B and 2 species were observed during surveys for use on off-site locations.” While the commenter questions why 1B.1 and 1B.2 plant species are not included as part of the salvage and relocation plan, BIO-MM#2 specifically references such species. Further, as suggested by the commenter, the plan will include species-specific salvage and relocation strategies, as appropriate.

Section 3.7.4.2 of the EIR/EIS provides more detail on the IAMFs that will be used during design, construction, and operation of the project, and Sections 3.7.7.1 and 3.7.7.2 provide more detail on the specific mitigation measures that are identified in Table 3.7-14.

777-320

The BIO-MMs list an effective range of requirements for the Project Biologist and aspects of the plans, including the plant species salvage plan, to ensure that impacts will be mitigated to a less than significant level. Because the Project Biologist must be qualified and approved for those activities by the United States Fish and Wildlife Service (USFWS) and CDFW (BIO-IAMF#1), it can be presumed that the Project Biologist is familiar with and will implement appropriate professional standards for the work, which include some of the considerations included in the commenter’s statements.

As noted in the comment, salvage and relocation of plant species is not always successful, and that is one of the reasons that compensatory mitigation focuses on the identification and preservation of habitat that will benefit a range of special-status species, and not just species that are listed under the federal and State endangered species acts. Salvage and relocation of topsoil for use in off-site locations will be a helpful supplement to this approach. However, there may be instances when salvage and relocation of one more endangered/threatened species is particularly desirable and feasible, and will be required by USFWS and/or CDFW. It is for these situations that the plant salvage plan will be applicable. BIO-MM#2 adequately lists specific elements that must be included in the plan, which will be prepared by biologists approved by USFWS and CDFW and with oversight from those agencies.

The commenter’s suggestions regarding critical protocols for stockpile storage and site selection are helpful and additional details have been added to BIO-MM#2 in this Final EIR/EIS. Similarly, guidelines developed by the Society for Ecological Restoration International may be helpful, and should be considered as part of BIO-MM#2, but a specific requirement to follow these guidelines is not appropriate, as the “state of the art” of habitat restoration evolves over time and such guidelines may not be completely relevant when a plant species salvage plan will be prepared. Finally, public review of a plant species salvage plan as part of the Draft EIR/EIS, is not required or feasible. This would be a highly technical document, based on specific site conditions and permit requirements that are not yet known.

Response to Submission 777 (Ileene Anderson, Center for Biological Diversity, April 28, 2020) - Continued

777-321

The commenter states that proposed mitigation measures focus on short-term construction impacts, and long-term impacts on biological resources are not adequately addressed. In addition, commenter suggests that mitigation ratios specified in BIO-MM#38 are inadequate and below standards.

For biological resources, permanent construction impacts and associated mitigation measures are detailed throughout Section 3.7.6.4 of this Final EIR/EIS, and long-term operations impacts and associated mitigation are detailed throughout Section 3.7.6.5. This comment does not specifically state what analysis is lacking; therefore, a more detailed response cannot be provided. See Response to Comment 777-321 regarding mitigation for short-term versus long term impacts.

BIO-MM#53, in Section 3.7.7.2 of the EIR/EIS requires preparation of a CMP for federally and state-listed plant species. This measure specifies that the mitigation approach and ratios be described in the CMP. The rationale for the compensatory mitigation ratios will be addressed in the CMP and will take into consideration species-specific requirements as well as the mitigation type (e.g., habitat preservation, enhancement, or restoration). Further, while BIO-MM#38 specifies a minimum 1:1 compensatory mitigation ratio, ratios are set as a minimum based on industry standards and will be subject to regulatory agency approvals and authorizations. It is acknowledged that regulatory agencies have final say, but the ratios in the EIR/EIS meet regulatory standards and are sufficient under CEQA. BIO-MM#38 acknowledges that the final mitigation ratios, as well as the proposed mitigation, will be subject to the regulatory authorizations issued by USFWS and CDFW under FESA and CESA. These laws are specifically designed to protect species.

777-322

The commenter states that the various plans required for compliance with the mitigation measures detailed in the Draft EIR/EIS are not available for public review and therefore cannot be reviewed for their adequacy to mitigate impacts.

The plans cited in this comment are typically developed during final design and prior to construction. These plans require detailed information that will be developed during final design and data from the pre-construction and protocol surveys to be conducted prior to ground-disturbing activities, per the mitigation measures outlined in Chapter 3 of the EIR/EIS. In addition, development of these plans require that the Authority have access to lands that have not been granted access to at this time.

The mitigation measures identified in the various resource sections in Chapter 3 of the EIR/EIS provide sufficient performance standards to ensure that impacts will be mitigated. The Authority will work closely with regulatory agencies and partner agencies to identify specific mitigation sites and implement the measures to reduce or avoid impacts.

In addition, the Authority will prepare an MMEP pursuant to NEPA. The MMEP is consistent with CEQA requirements for mitigation monitoring as set forth in Section 15097 of the CEQA Guidelines (Title 14 California Code of Regulations, Division 6, Chapter 3). The MMEP will identify responsible parties, timing of implementation, reporting criteria, and when the measure is complete. The MMEP will be considered for adoption at the time the Authority Board considers certification of the EIR and approval of the project. The MMEP will be part of the Record of Decision issued pursuant to NEPA, and all IAMFs and mitigation measures identified in this Final EIR/EIS will be included in the MMEP.

Response to Submission 777 (Ileene Anderson, Center for Biological Diversity, April 28, 2020) - Continued

777-323

The commenter states that the project impacts on oak woodland within the conservation area of Tejon Ranch are not clearly identified.

The White Wolf Conservation Easement allows for land acquisition for the installation of transportation facilities such as the Bakersfield to Palmdale Project Section. As noted in Response to Comment 777-318, contained in this chapter, the proposed stockpile area north of SR 58 near Bealville Road has been proposed as part of the Refined CCNM Design Option to provide an available area for the construction contractor to place excess materials from project grading and tunneling. Before identifying the proposed stockpile location, the Authority first looked for previously disturbed locations near the project site that could accommodate the quantity of material (up to 14 million cubic yards) that would need to be stockpiled; however, none were identified. Although in an area of oak woodlands, the stockpile area location is appropriate due to its proximity to the Refined CCNM Design Option construction area, where the excess materials would be generated. Providing a stockpile area as close as possible to the construction area will minimize the length of truck haul trips and the associated vehicle miles traveled and vehicle emissions. The need for the construction contractor to use any or all of this stockpile area will depend upon how the Bakersfield to Palmdale Project Section is broken into construction packages for a future design-build contractor procurement. While the project is legally consistent with the terms of the conservation easement, significant impacts to biological resources require mitigation, as additionally described in Response to Comment 777-318, contained in this chapter. Section 3.7 identifies impacts to oak woodlands and mitigation measures to reduce those impacts, including compensatory mitigation where necessary.

IAMFs and mitigation measures have been identified in Sections 3.7.4.2 and 3.7.7 that will provide for protection to special-status species and sensitive plant communities by identifying environmentally sensitive areas and protecting those from construction impacts, such as BIO-IAMF#1 through #3 and BIO-IAMF#5 through #12, BIO-MM#1, BIO-MM#55, BIO-MM#56, and BIO-MM#58. In addition, mitigation measures are identified for the protection of special-status plant species and sensitive plant communities, such as BIO MM#1, BIO-MM#6, BIO-MM#47, BIO-MM#50, BIO-MM#53, BIO-MM#54, BIO-MM#60, BIO-MM#61, and BIO-MM#75, and restoration for those species by revegetating and contouring the stockpile area for wildlife corridor access

777-323

under BIO-MM#2, BIO-MM#6, BIO-MM#35, BIO-MM#38, BIO-MM#46, BIO-MM#47, BIO-MM#50, and BIO-MM#53.

777-324

The commenter states that the EIR fails to apply and analyze BLM Conservation Management Actions (CMA) in the Desert Renewable Energy Conservation Plan (DRECP).

The Land Use Plan Amendment (LUPA) CMA analysis was included in the Draft EIR/EIS in Appendix 2-I: DRECP Applicability Analysis. As discussed in the DRECP Applicability Analysis, all of the LUPA CMAs listed in the comment are applicable to the project and were included in the analysis. The applicable CMAs identified in Appendix 2-I of the Final EIR/EIS will be implemented with the exception of LUPA-BIO-RIPWET-6, LUPA-BIO-RIPWET-7, LUPA-BIO-VEG-1 through LUPA-BIO-VEG-4, LUPA-BIO-VEG-6, LUPA-BIO-IFS-6, LUPA-BIO-IFS-7, LUPA-BIO-IFS-29, LUPA-BIO-IFS-30, LUPA-BIO-IFS-35 through LUPA-BIO-IFS-42, LUPA-LANDS-2, LUPA-SW-5, LUPA-SW-8, LUPA-SW-11 through LUPA-SW-13, LUPA-SW-15, LUPA-SW-17 through LUPA-SW-19, LUPA-SW-28, LUPA-SW-29, LUPA-SW-31, and LUPA-SW-32. These LUPA CMAs are not applicable because the resources, species, and activities covered by these measures do not occur within the Bakersfield to Palmdale Project Section. An explanation of how the requirements of the applicable LUPA CMAs are incorporated into the project is included in the DRECP Applicability Analysis.

777-325

In summary, the commenter refers generally to a number of concerns about the Draft EIR/EIS and requested that the environmental document be revised and re-circulated. To respond to the commenters detailed concerns, please refer to Response to Comment 777-304, contained in this chapter. In addition, the Center for Biological Diversity has been added to the Authority's mailing list.

Submission 769 (Robert Price, KGET TV, February 27, 2020)

Bakersfield - Palmdale - RECORD #769 DETAIL

Status :	Action Pending
Record Date :	4/28/2020
Affiliation Type :	Business and/or Organization
Submission Date :	2/27/2020
Interest As :	Business and/or Organization
Submission Method :	Program Info Line
First Name :	Robert
Last Name :	Price
Professional Title :	
Business/Organization :	KGET TV
Address :	
Apt./Suite No. :	
City :	Bakersfield
State :	CA
Zip Code :	0000
Telephone :	661-283-1717
Email :	17news@kget.com
Cell Phone :	
Email Subscription :	
Add to Mailing List :	Yes
EIR/EIS Comment :	Yes
Attachments :	Robert_Price_Transcription.pdf (42 kb)

769-801

Hi it's Robert Price at KGETTV in Bakersfield, I'm calling to request an electronic copies of the reports, uh, for the EIR as I understand will be released tomorrow morning. If you could uh, please, uh, well I'll give you a phone number and an email address. Phone number is 661-283-1717 that's 661-283-1717 email address is 17 numerals, 17news@KGET.com. Thanks a lot, bye.

Response to Submission 769 (Robert Price, KGET TV, February 27, 2020)

769-801

Refer to Standard Response BP-Response-GENERAL-02: Public Outreach on the Draft EIR/EIS.

The commenter requested a copy of the Draft EIR/EIS. The Authority emailed a link to the document on February 28, 2020.

Submission 786 (H. Tracey Brownfield, Land Veritas Corp., April 28, 2020)

Bakersfield - Palmdale - RECORD #786 DETAIL

Status :	Action Pending
Record Date :	4/30/2020
Affiliation Type :	Business and/or Organization
Submission Date :	4/28/2020
Interest As :	Business and/or Organization
Submission Method :	Project Email
First Name :	H. Tracey
Last Name :	Brownfield
Professional Title :	President
Business/Organization :	Land Veritas Corp.
Address :	1001 Bridgeway
Apt./Suite No. :	Suite 246
City :	Sausalito
State :	CA
Zip Code :	94965
Telephone :	415.729.3733
Email :	tracey@landveritas.com
Cell Phone :	
Email Subscription :	
Add to Mailing List :	
EIR/EIS Comment :	Yes
Attachments :	HSR Comment letter.pdf (3 mb)

Stakeholder Comments/Issues :

Good afternoon,

786-778 Land Veritas Corp, Bank Sponsor of the Petersen Ranch Mitigation Bank, submits the following comment letter for the High Speed Rail Bakersfield to Palmdale Section (SCH #2009082062). We appreciate the opportunity to provide comments on this important project for California. Attached as an appendix to this letter is a description of Petersen Ranch, as well as maps indicating how it can help provide mitigation options for the HSR project.

Please find our comment letter attached, and let us know if you have any questions.

We hope you and yours are safe and well during this time.

Thank you,
Andrew Cawley

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ANDREW CAWLEY, MESM |? ?Mitigation Banking Specialist |? ?d: 415.524.7537 |
o: 415.454.8868 x 1380 |? ?c: 510.768.7537 |? ?cawley@wra-ca.com
WRA, Inc. |? ?www.wra-ca.com |? ?2169-G East Francisco Blvd.,? ?
San Rafael, CA 94901 |? Emeryville |? San Diego | Fort Bragg |? ?Denver

Submission 786 (H. Tracey Brownfield, Land Veritas Corp., April 28, 2020) - Continued

LAND VERITAS

Land Veritas Corp.
1001 Bridgeway, Suite 246
Sausalito, CA 94969

April 28, 2020

California High Speed Rail Authority
770 L Street, Suite 620 MS-1
Sacramento, CA 95814

Subject: Draft EIR/EIS for the Bakersfield to Palmdale Project Section (SCH #2009082062)

Dear High-Speed Rail Authority:

Thank you for the opportunity to provide comments on the joint Draft Environmental Impact Report (EIR) and Environmental Impact Statement (EIS) published for the California High Speed Rail (HSR) Bakersfield to Palmdale (B-P) section.

Land Veritas Corp. is the Bank Sponsor of the Petersen Ranch Mitigation Bank (Bank), located in Los Angeles County. The Bank was approved in 2016 by the Lahontan Regional Water Quality Control Board (RWQCB), United States Army Corps of Engineers (USACE), the United States Environmental Protection Agency (EPA), and the California Department of Fish and Wildlife (CDFW) to sell mitigation credits for impacts to protected resources. The Bank includes over 4,100 acres of natural habitats, the regular management and maintenance of which is funded through a non-wasting endowment. Importantly, the Bank's Service Area, defining the area in which the Bank can sell credits, covers the Antelope Valley portion of the HSR B-P section.

The Bank sells credits which can be used to offset impacts regulated by Sections 401 and 404 of the Clean Water Act, Section 1602 of the California Fish and Game Code, the Porter Cologne Water Quality Act, the California Endangered Species Act (CESA) and the California Environmental Quality Act (CEQA). The Bank's credits include aquatic resources such as seasonal wetlands, ephemeral streams, alluvial floodplains, and riparian habitats, Swainson's hawk foraging credits, and covered habitats such as riparian forests, valley and foothill grasslands, mixed chaparral communities, and great basin scrub. Nearly all 4,100 acres of the Bank Property is credited for Swainson's hawk foraging habitat, and actively foraging Swainson's hawks have been observed onsite.

The Bank is located within important wildlife migratory corridors, and while it has already been credited for the resources listed above, it is also suitable habitat for several other special status plant and animal species that HSR could potentially impact. Wildlife species potentially impacted by HSR and observed at the Bank include but are not limited to Blainville's horned lizard, western pond turtle, loggerhead shrike, burrowing owl, northern harrier, and tricolored blackbird.

LAND VERITAS

Approximately 2,500 acres of the Bank Property are not yet under conservation easement. Mitigation projects can therefore be planned and implemented on unencumbered portions of the Bank Property to match specific project impacts for the B-P section, including the possible translocation of impacted special-status plant species.

Land Veritas has reviewed the HSR B-P Section DEIR/DEIS and presents the following comments on specific Biology Mitigation Measures (BIO-MM) included therein:

786-779

Prepare a Compensatory Mitigation Plan (CMP) for Species and Species Habitat (BIO-MM#53) and Aquatic Resources (BIO-MM#47): The CMPs defined in BIO-MM#53 and BIO-MM#47 identify several methods to provide mitigation for impacts to protected species, habitats, and aquatic resources, including purchasing mitigation credits from an agency-approved mitigation bank. Both the joint USACE and EPA 2008 Mitigation Rule (33 C.F.R. 325 and 332, 40 C.F.R. 230) and the state wetland policy for California (California State Water Resource Control Board, 2019) specify a preference for purchasing credits from approved mitigation banks over other forms of compensatory mitigation. This preference was established because mitigation banks avoid temporal loss of function to impacted resources, must be managed and funded in perpetuity, are protected via permanent conservation easement, and are subject to a high degree of regulatory oversight relative to other options. The CMPs defined in BIO-MM#53 and BIO-MM#47 should be written consistent with state and federal guidance and state a preference for the purchase of mitigation credits over other forms of compensatory mitigation to provide consistency with these policies and ensure impacts due to temporal loss are less than significant.

786-780

BIO-MM#47 - Prepare and Implement a CMP for Impacts to Aquatic Resources: Currently, BIO-MM#47 does not define a geographic area in which compensatory mitigation for aquatic resources must be located. Aquatic resource mitigation for impacts to Waters of the State and riparian habitats should take place within the HUC-8 of original impacts or at an approved mitigation bank with a service area that covers the impact sites to ensure functional replacement at the watershed level. Following this watershed approach to compensatory mitigation is required for the project to be consistent with joint USACE and EPA 2008 Mitigation Rule (33 C.F.R. 325 and 332, 40 C.F.R. 230) and the state wetland policy for California (California State Water Resource Control Board, 2019). As with other forms of mitigation, preference should be given for credits from approved mitigation banks, and mitigation ratios should distinguish between mitigation type. While we support the fact that mitigation ratios are provided for given aquatic resource types, ratios should be specified for selected mitigation types as well (e.g. preservation, enhancement, and rehabilitation) to ensure no net loss of aquatic resource function as the mitigating value of these different approaches are not equal.

786-781

BIO-MM#43 - Provide Compensatory Mitigation for Loss of Swainson's Hawk Habitat: Land Veritas agrees with HSR's determination to follow Central Valley guidance (Swainson's Hawk Technical Advisory Committee, 2000) for Swainson's hawk surveys within the Central Valley, and Antelope Valley guidance (California Energy Commission [CEC] and California Department of Fish and Game [CDFG], 2010) for surveys within the Antelope Valley, as Swainson's hawk populations within those two regions are distinct. However, while survey methods identified in the EIR follow these regional guidelines, the compensatory mitigation requirements outlined in BIO-MM#43 do not. Antelope Valley mitigation guidance calls for a minimum 2:1 mitigation ratio for impacts to Swainson's hawk foraging habitat impacted within a five-mile

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Submission 786 (H. Tracey Brownfield, Land Veritas Corp., April 28, 2020) - Continued

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786-781 radius of an active nest, that mitigation lands are located within the Antelope Valley Swainson's hawk breeding range, that adequate funding for long-term management of mitigation lands is included, and durable protection is provided via permanent conservation easement.

The California Environmental Quality Act clearly requires assessment of impacts to wildlife populations, (PRC § 21001(c), CCCR Title 14, Division 6, Chapter 3, §15065(a)(1)), as such the EIR should analyze the potential for significant impacts, and any required mitigation measures for the two distinct populations of Swainson's hawk (Antelope Valley and Central Valley) independently. The EIR does not adequately address the impacts associated with loss of foraging habitat on the Antelope Valley population of Swainson's hawk and Mitigation Measure (BIO-MM#43 should include compensatory mitigation provisions consistent with existing regional guidance. Additionally, the purchase of mitigation credits which meet the above criteria should be prioritized over other forms of mitigation as outlined in BIO-MM#53.

786-782 **BIO-MM#70 - Provide Compensatory Mitigation for Impacts on Tricolored Blackbird:** For species-specific mitigation, compensatory mitigation is typically required to be located in areas of documented use by the species. BIO-MM#70 should specify this requirement for tricolored blackbird. Given its reduced range and level of threat, this should be required to adequately contribute to the recovery of the species.

786-783 **BIO-MM#38 - Compensate for Impacts to Listed Plant Species:** Compensatory mitigation for impacts to federal- and state-listed plant species should differentiate between and assign appropriate mitigation ratios based on mitigation type (e.g. re-establishment, rehabilitation, enhancement, and preservation). These ratios should be determined based on species-specific requirements and likelihood of the success of a proposed mitigation solution. Additionally, translocation to suitable habitats should be listed as an allowable action within BIO-MM#38.

We thank you for the opportunity to provide comments on this project and hope you consider the Petersen Ranch Mitigation Bank as a future partner, as we can compensatory mitigation that achieves compliance while providing superior environmental outcomes.

Sincerely,

H. Tracey Brownfield
President, Land Veritas Corp.

tracey@landveritas.com
P: 415.729.3733

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References

California Energy Commission and California Department of Fish and Game. 2010. Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California. Sacramento, CA.

California State Water Resources Control Board. 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. Online: https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/procedures_conformed.pdf

Department of the Army, Corps of Engineers. 2008. Compensatory Mitigation for Losses of Aquatic Resources; Final Rule. Department of Defense 33 C.F.R. 325 and 332. Online: https://www.sac.usace.army.mil/Portals/43/docs/regulatory/Final_Mitigation_Rule.pdf

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Swainson's Hawk Technical Advisory Committee. 2000. Recommended Timing and Methodology for Swainson's hawk Nesting Surveys in California's Central Valley. Sacramento, CA.

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Submission 786 (H. Tracey Brownfield, Land Veritas Corp., April 28, 2020) - Continued

Appendix A

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Submission 786 (H. Tracey Brownfield, Land Veritas Corp., April 28, 2020) - Continued

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PETERSEN RANCH MITIGATION BANK

Bank Sponsor:
Land Veritas Corp
Contact: Tracey Brownfield
tracey@landveritas.com

Permitting & Marketing Consultant:
WRA, Inc.
Contact: Nate Bello
bello@wra-ca.com

Land Veritas Corp. 1001 Bridgeway, Suite 246, Sausalito CA 94965 p 415.729.3733

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Submission 786 (H. Tracey Brownfield, Land Veritas Corp., April 28, 2020) - Continued

PETERSEN RANCH MITIGATION BANK

Summary

Land Veritas (LV), a Women-Owned Business Entity, is the sponsor of The Petersen Ranch Mitigation Bank (Bank). The Bank was approved and received its first credit release in June 2016. The United States Army Corps of Engineers (Corps), Environmental Protection Agency (USEPA), Lahontan Regional Water Quality Control Board (Lahontan RWQCB) and California Department of Fish and Wildlife (CDFW) are signatory participants in the Interagency Review Team (IRT) that reviewed and approved the Bank over a 5+ year entitlement process.

Located in unincorporated Leona Valley, Los Angeles County, California, the Bank contains approximately 4,103 acres and consists of two properties: The Petersen Ranch Bank Property (approximately 3,789 acres) and the Elizabeth Lake Bank Property (approximately 314 acres), as shown in Exhibit A.

Implementing the Bank's Development Plan established/re-established, rehabilitated, enhanced, and/or preserved of hundreds of acres of aquatic features, including streams, wetlands, alluvial floodplains, and non-wetland riparian areas. These actions generated credits that can be used to mitigate for impacts authorized through Section 404 of the Clean Water Act (404 Credits), the Porter-Cologne Water Quality Control Act (PC Credits), Section 1600 of the California Fish and Game Code (1600 Credits), the California Environmental Quality Act (CEQA Credits) and the California Endangered Species Act (CESA Credits). The Bank Property contains habitat for Swainson's hawk (state threatened species) as well as other special-status species including, but not limited to, western pond turtle, tricolored blackbird and coast horned lizard, as well as several sensitive vegetation communities.

The Bank Properties are being established in multiple phases across six geographic areas (Areas A – F). Restoration of Area A of the Petersen Ranch Property and Area E of the Elizabeth Lake Property were completed in 2016. Subsequent phases will be constructed and incorporated into the Bank over time. The Bank Properties will be managed in perpetuity with funding provided by a non-wasting endowment. The Southwest Resource Management Association is a CDFW-approved non-profit land trust and holds both the conservation easement and endowment.

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REGULATIONS COVERED

The Bank has five credits categories that can mitigate for impacts associated with the following regulations:

404 Credits:

- Section 10 of the Rivers and Harbors Act,
- Section 404 of the Clean Water Act,
- Section 401 of the Clean Water Act,

Porter Cologne Credits:

- the Porter Cologne Water Quality Control Act,

1600 Credits:

- Section 1600 et seq. of the California Fish and Game Code,

Swainson's Hawk Credits:

- the California Endangered Species Act,

CEQA Credits:

- the California Environmental Quality Act

Though not a signatory to the Bank, the Los Angeles Regional Water Quality Control Board has authorized permittees to purchase credits from the Bank to satisfy 401 certification requirements.

SERVICE AREA

Attached are service areas for each category of credits that are available. Service areas are the areas in which Mitigation and Conservation Banks can sell credits; however, impacts outside of the service areas can use Bank credits on a case-by-case basis upon regulatory approval. The service area maps also show the approximate location of High Speed Rail alignment.

The Elizabeth Lake property is an inholding within the Angeles National Forest and therefore suitable for mitigation on federal lands (see attached maps). While the Elizabeth Lake property is located within the Santa Clara River watershed, the Petersen Ranch property is located at the headwaters of two major watersheds, as the divide between the Santa Clara River and Antelope Valley-Fremont Valley watersheds bisects the Ranch. This results in a large service area in which the Bank's credits can be sold.

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Submission 786 (H. Tracey Brownfield, Land Veritas Corp., April 28, 2020) - Continued

LAND VERITAS

PRICING

Each of the Bank's credit categories overlap to form a bundled credit that can be used to mitigate for resources under multiple jurisdictions simultaneously. As a result, each credit is assigned a "Price Tier" based on the highest valued component within the bundle. For example; a Chaparral CEQA credit that overlaps with a 404 credit is assigned a higher Price Tier than a Chaparral CEQA credit that cannot be used for 404 mitigation. There are twelve different credit price tiers, ranging from the highest for 404 re-establishment credits to the lowest for Swainson's hawk credits. Credit prices vary across a wide range, and can be provided through a direct consultation with the Bank Sponsor.

404 CREDITS AND PORTER COLOGNE CREDITS

404 Credits and PC Credits can mitigate for impacts associated with waters and wetlands of the United States and waters and wetlands of the State. All 404 Credits are either classified as re-establishment or preservation, including riparian and upland buffer preservation credits. These credits cover numerous habitats including:

- **Alluvial Floodplains**: Diverse alluvial fan habitats containing complexes of braided ephemeral streams and riparian habitats.
- **Ephemeral Streams**: Single thread seasonal streams and associated riparian habitats.
- **Freshwater Marsh**: Seasonal to Perennial wetlands containing cattails and rushes and supporting special status species including western pond turtle and tri-colored blackbird.
- **Open Water**: Mostly perennial deeply ponded areas providing important food and water sources for wildlife and supporting aquatic habitat for western pond turtle and amphibians.
- **Seasonal Wetland**: Seasonally flooded depressions and large meadow complexes dominated with wetland grasses, rushes and sedges.
- **Wetland Riparian**: Wetland habitats with understory similar to seasonal wetlands and a diverse shrub and tree canopy of mulefat, willows, elderberry, cottonwoods and other riparian species.

1600 CREDITS

1600 credits can be used to offset impacts to CDFW regulated resources authorized under a Lake and Streambed Alteration Agreement. These credits include the following habitats which are the same as those described under the 404 Credits and PC Credits, except where noted:

- Alluvial Floodplain
- Ephemeral Stream
- Freshwater Marsh
- Open Water
- Seasonal Wetland
- Wetland Riparian

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- **Non-wetland Riparian**: A diverse mixture of riparian habitats ranging from xeric desert riparian scrub to upland Fremont cottonwood forests.

For each of the above habitats the Bank has the following 1600 credit types:

- **Re-established:** Restoration of an upland habitat into an aquatic habitat in a location that was historically aquatic but had been converted to uplands through past human disturbance. This credit type comes from restoration activities that increase the amount of aquatic habitats within the Bank.
- **Rehabilitated:** Restoration of an existing, but degraded, aquatic habitat into a high quality habitat. This credit type comes from multiple restoration activities that work together to repair a previously impacted habitat to its natural condition.
- **Enhanced**: Improvement of an existing aquatic habitat through vegetation management or planting.
- **Preserved**: Protection of a high quality existing habitat.

SWAINSON'S HAWK CREDITS

Nearly the entire Bank generates foraging credits for Swainson's hawk. Potential nesting habitat has also been identified within the Bank, but nesting Swainson's hawks have not been observed.

CEQA CREDITS

CEQA credits can be used to offset impacts to natural vegetation communities. These credits cover multiple habitat types including the following:

- Bare Ground
- Chaparral
- Cismontane woodland, pinyon-juniper woodland
- Great Basin scrub
- Non-native woodland
- Open water
- Riparian forest
- Riparian scrub
- Seeps, meadows, marshes
- Valley and foothill grassland

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Submission 786 (H. Tracey Brownfield, Land Veritas Corp., April 28, 2020) - Continued

Attachment 1: Figures

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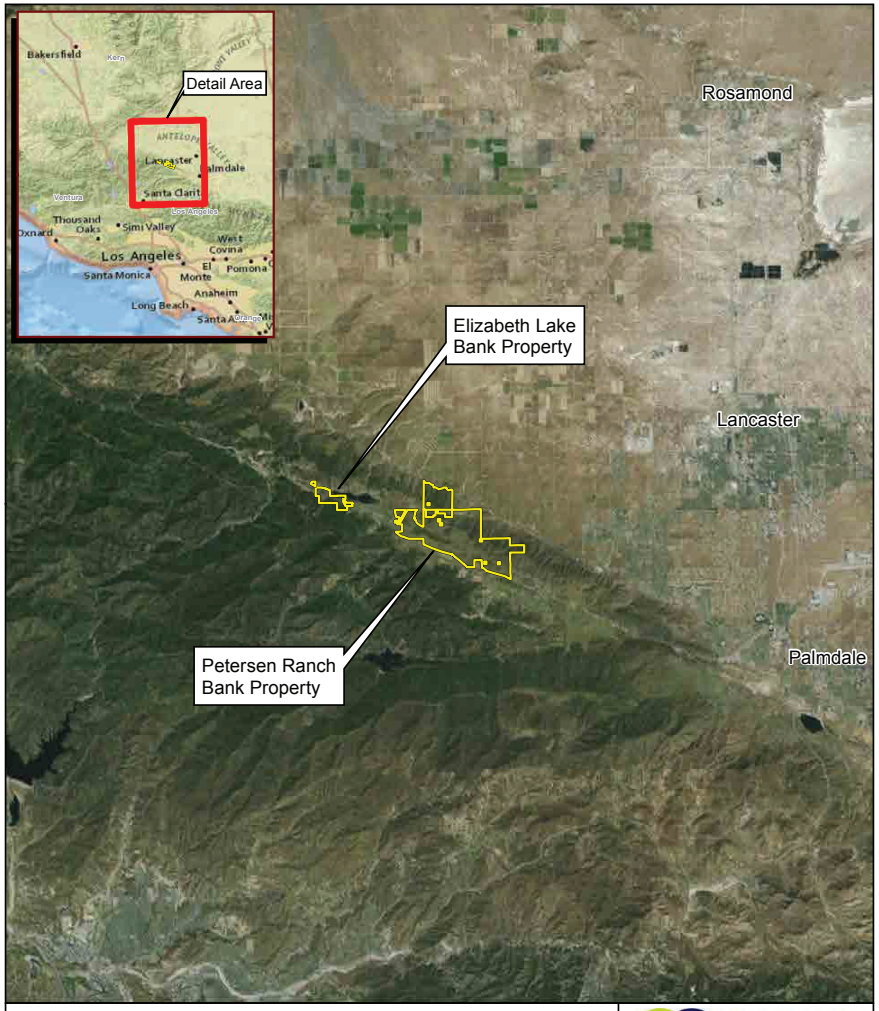
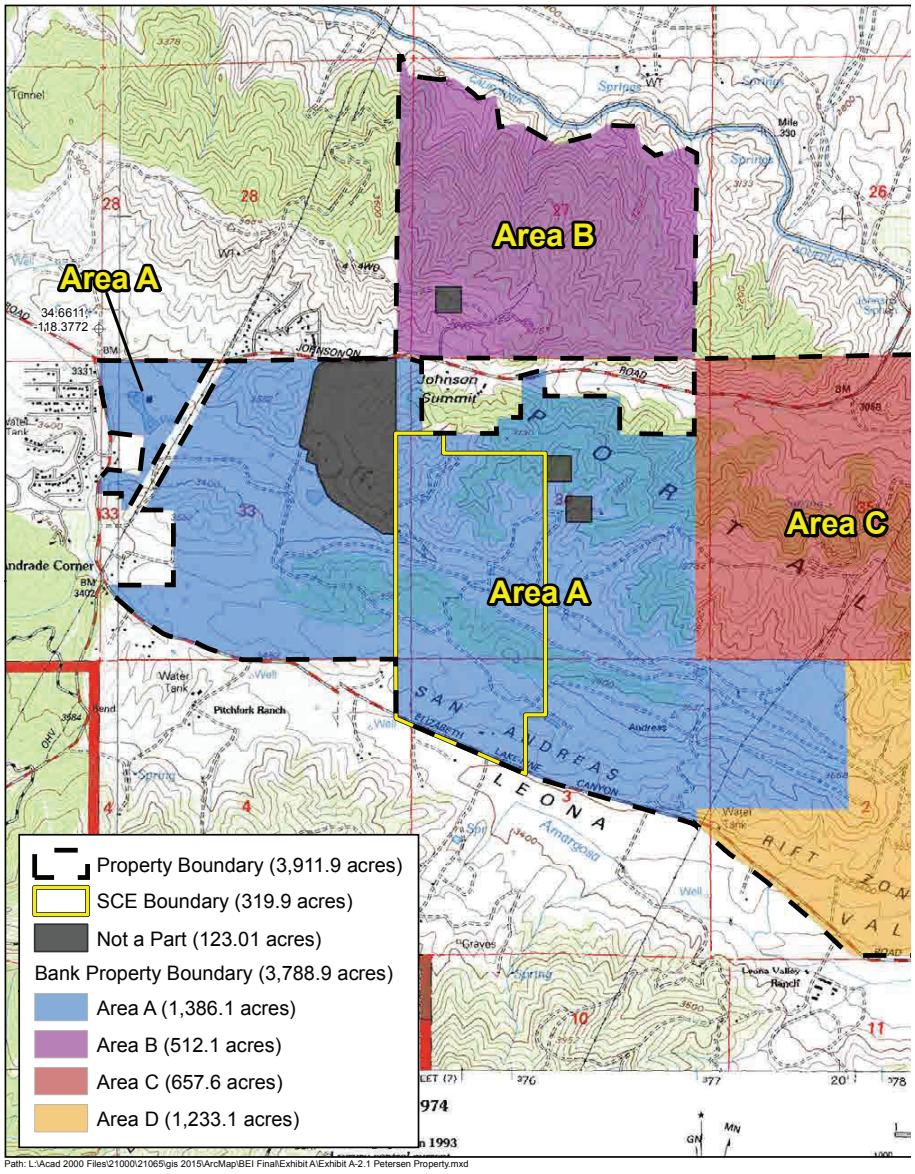
Submission 786 (H. Tracey Brownfield, Land Veritas Corp., April 28, 2020) - Continued





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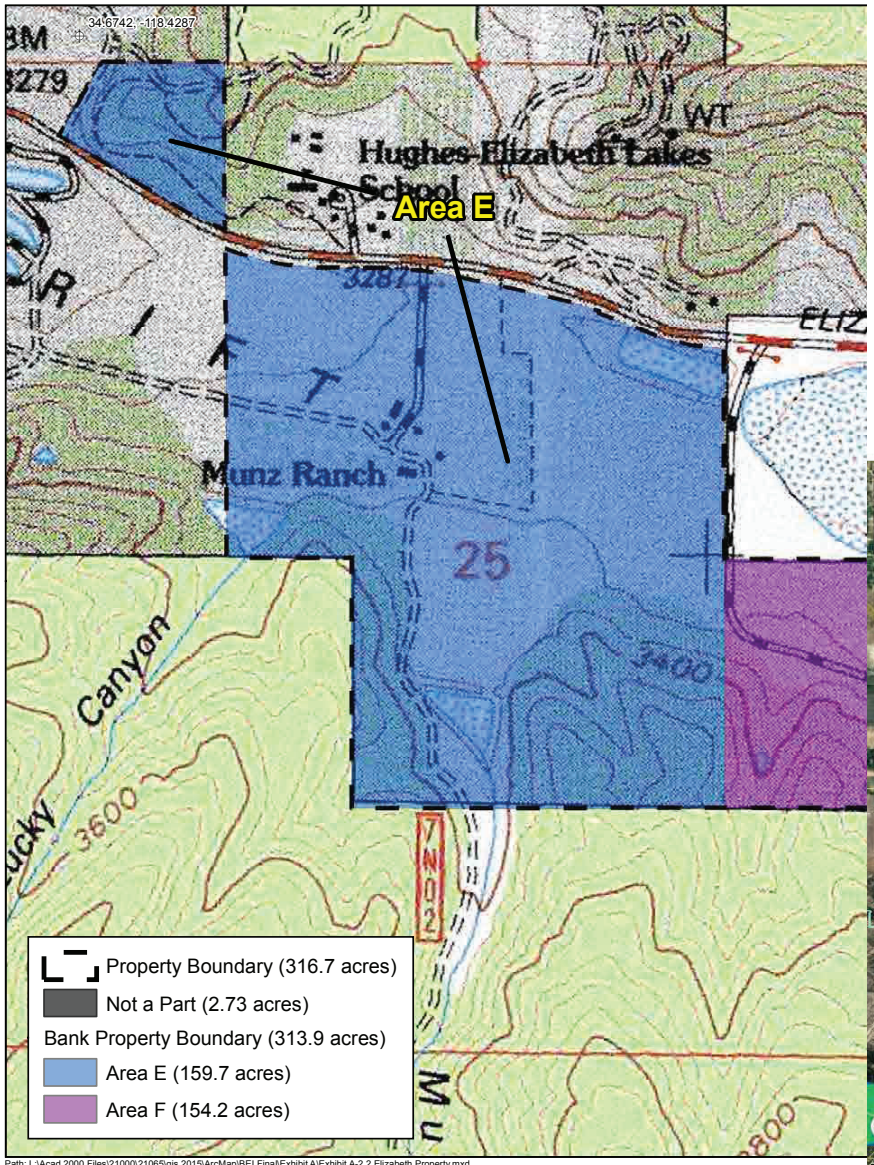
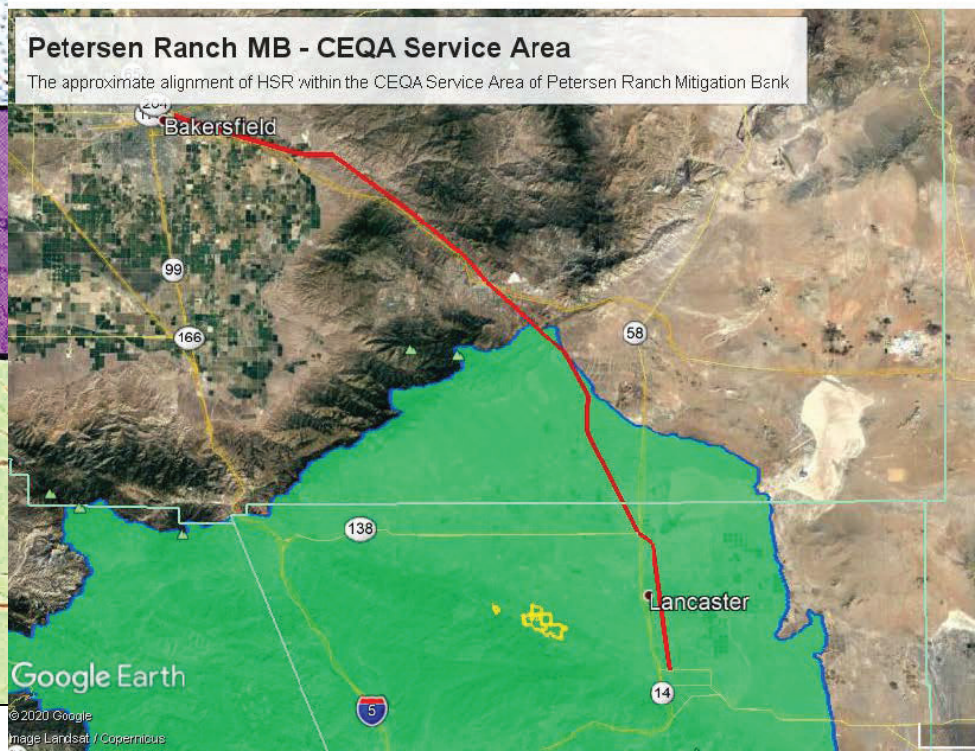
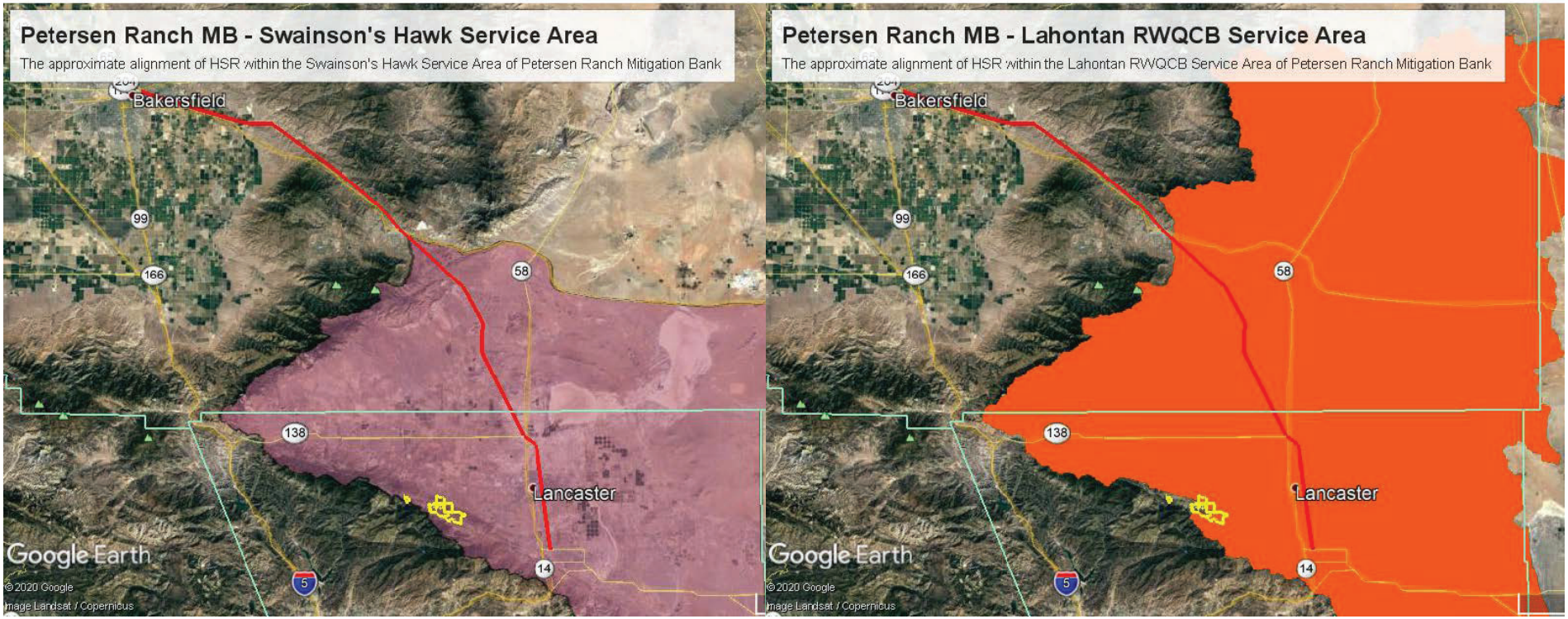
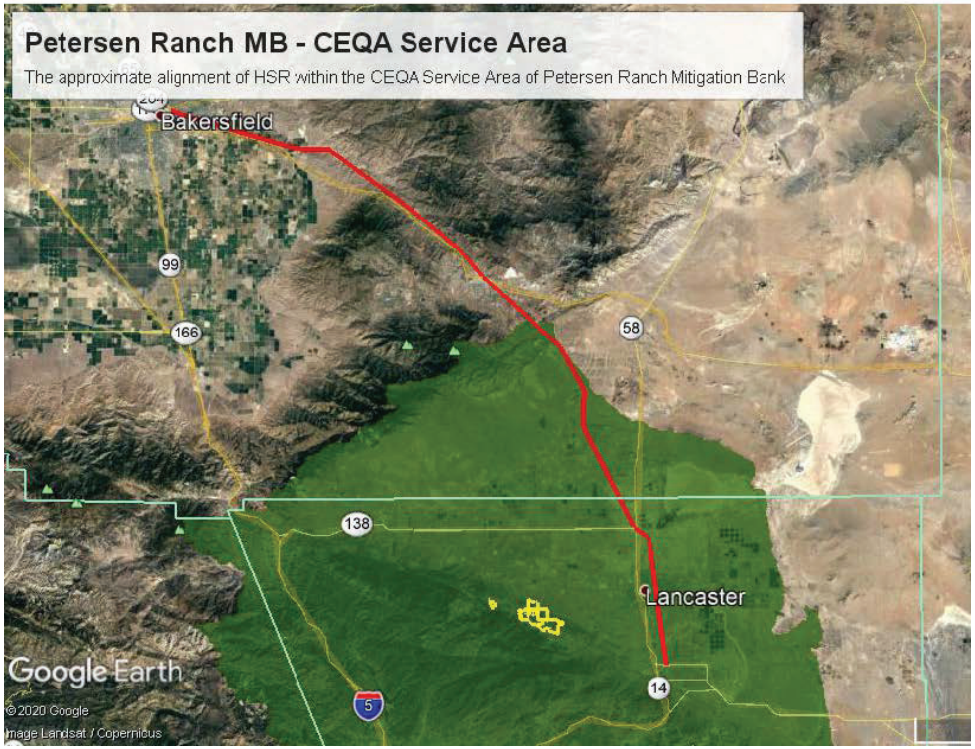




Submission 786 (H. Tracey Brownfield, Land Veritas Corp., April 28, 2020) - Continued



Submission 786 (H. Tracey Brownfield, Land Veritas Corp., April 28, 2020) - Continued



Response to Submission 786 (H. Tracey Brownfield, Land Veritas Corp., April 28, 2020)

786-778

The commenter indicates that an appendix has been attached to their comment letter. The appendix includes a description and maps of their property. The attachments were reviewed in considering the commenter's letter. No change has been made to the document in response to this comment.

786-779

The commenter correctly notes that the USACE and State Water Resources Control Board specify a preference for purchasing credits from an approved mitigation bank over other forms of compensatory mitigation.

BIO-MM#47 and BIO-MM#53, as written, list the purchase of credits from an agency-approved mitigation bank as the first option. The other compensatory mitigation options are allowable under existing state and federal guidance, including the USACE and USEPA 2008 Mitigation Rule and the State Water Resources Control Board's 2019 Procedures for Discharges of Dredged or Fill Material to Waters of the State. The compensatory mitigation approach will be determined in conjunction with the permitting agencies and through the preparation of CMPs that are consistent with current state and federal rules and regulations.

BIO-MM#53 and BIO-MM#47 have been written consistent with state and federal guidance.

786-780

The commenter states that BIO-MM#47 does not define a geographic area in which compensatory mitigation for aquatic resources must be located. The commenter also states that a watershed approach should be followed and that preference should be given for credits from approved mitigation banks, and mitigation ratios should distinguish between mitigation type.

BIO-MM#47 generally specifies the compensatory mitigation methods, mitigation ratios, and content of the CMP that will be prepared to address impacts on aquatic resources. As stated in the mitigation measure, the CMP will "address the needs of the watershed or ecoregion." As discussed in Response to Comment 786-779, contained in this chapter, the CMP will include a watershed-based approach. The CMP will also identify the appropriate mitigation ratios associated with the type of mitigation (e.g., preservation, enhancement, rehabilitation), as specified by the commenter. The CMP will ultimately be subject to agency review and approval as part of the regulatory permitting processes administered by the USACE, State Water Resources Control Board, and CDFW.

Response to Submission 786 (H. Tracey Brownfield, Land Veritas Corp., April 28, 2020) - Continued

786-781

The commenter agrees with the Authority's determination to follow Central Valley guidance (Swainson's Hawk Technical Advisory Committee, 2000) for Swainson's hawk surveys within the Central Valley, and Antelope Valley guidance (California Energy Commission and California Department of Fish and Game 2010) for surveys within the Antelope Valley. However, the commenter also states that the EIR/EIS does not adequately analyze and distinguish between the impacts on the Central Valley and Antelope Valley Swainson's hawk populations. The commenter also adds that the compensatory mitigation requirements outlined in BIO-MM#43 do not meet regional guidelines (i.e., CDFW's "Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California").

Section 3.7.4.5, Field Surveys, from the EIR/EIS and Section 5.4.2.9, Raptor Surveys and Studies, from the BARTR (Authority 2018b) specify the survey methodology for Swainson's hawk. As noted by the commenter, these sections reflect that the survey methodologies address the distinct Swainson's hawk populations. Section 6.3.10 and Appendix N of the BARTR, which reflect the detailed Swainson's hawk survey findings and results, indicate where nest sites were identified and distinguish between the suitability of foraging habitat in the Central Valley (Bakersfield) and the Antelope Valley. Thus, the EIR/EIS does consider the two populations independently. Appropriate compensatory mitigation will be determined for the populations in these two areas based on survey and habitat information in conjunction with CDFW. Additionally, in Section 3.7.7.2 of this Final EIR/EIS, BIO-MM#43 specifies minimum criteria for impacts on Swainson's hawk nesting trees and habitat. The compensatory mitigation ratios proposed in this Final EIR/EIS for impacts on special-status species are set as a minimum and will be subject to regulatory agency approvals and authorizations. In this case, the CMP described in BIO-MM#53 will address impacts on Swainson's hawk, and the mitigation approach and ratios described in the CMP will be reflective of the impacts and current mitigation standards for this species, subject to CDFW approval.
With regard to the commenter's assertion that the purchase of mitigation bank credits be prioritized over other compensatory mitigation options, BIO-MM#53 includes the purchase of credits from an agency-approved mitigation bank, as well as other compensatory mitigation options (protection of habitat in perpetuity and/or payment of in-lieu fees) that are all allowable under existing state and federal guidance. The ultimate compensatory mitigation approach for impacts on Swainson's hawk will be determined in conjunction with CDFW and through the preparation of the CMP, subject

786-781

to CDFW approval.

786-782

The commenter states that compensatory mitigation for tricolored blackbird should be located in areas of documented use by the species.

As stated in Section 3.7.7.2 of this Final EIR/EIS, and in accordance with BIO-MM#70, suitable tricolored blackbird nesting mitigation habitat will be located within close proximity to the nearest breeding colony observed within the last 15 years and will be subject to CDFW approval. BIO-MM#53 requires the preparation of a CMP for special-status species and species habitat. The specific approach to compensatory mitigation for tricolored blackbird will be determined in conjunction with CDFW and through the preparation of the CMP to ensure that the mitigation sufficiently contributes to the recovery of the species.

Response to Submission 786 (H. Tracey Brownfield, Land Veritas Corp., April 28, 2020) - Continued

786-783

The commenter states that the mitigation ratios for listed plant species should be determined based on the mitigation type and that translocation of plants to suitable habitats should be included as a mitigation option in BIO-MM#38.

As described in Section 3.7.7.2 of this Final EIR/EIS, and in accordance with BIO-MM#53, a CMP for federally and state-listed plant species will be prepared. This measure specifies that the mitigation approach and ratios be described in the CMP. The rationale for the compensatory mitigation ratios will be addressed in the CMP and will take into consideration species-specific requirements as well as the mitigation type (e.g., habitat preservation, enhancement, or restoration). Further, while BIO-MM#38 specifies a minimum 1:1 compensatory mitigation ratio, this measure also indicates that the final mitigation ratios, as well as the proposed mitigation solution, will be subject to the regulatory authorizations issued by USFWS and CDFW under FESA and CESA, which consider species-specific requirements and the likelihood of success of a mitigation solution.

Regarding the potential for translocation of plants to suitable habitats, BIO-MM#38 specifies that the mitigation will be based on the number of acres of plant habitat directly affected, as opposed to individual plant population impacts. As such, translocation of plants is not addressed in BIO-MM#38. Instead, topsoil salvage, seed collection, and relocation or propagation of special-status plant species are addressed in BIO-MM#2. If required by the USFWS or CDFW, a plant species salvage plan will be prepared and will address any proposed translocation of listed plants.

Submission 768 (John Broome, Loop Ranch LLC, April 28, 2020)

Bakersfield - Palmdale - RECORD #768 DETAIL

Status :	Action Pending
Record Date :	4/28/2020
Response Requested :	
Affiliation Type :	Business and/or Organization
Submission Date :	4/28/2020
Interest As :	Business and/or Organization
Submission Method :	Project Email
First Name :	John
Last Name :	Broome
Professional Title :	Representative
Business/Organization :	Loop Ranch LLC
Address :	
Apt./Suite No. :	
City :	
State :	
Zip Code :	0000
Telephone :	
Email :	jsbroomejr@hotmail.com
Cell Phone :	
Email Subscription :	Bakersfield to Palmdale
Add to Mailing List :	Yes
EIR/EIS Comment :	Yes

Stakeholder Comments/Issues :

To whom it may concern,

I appreciate the opportunity to comment on the DEIR for the Bakersfield to Palmdale stretch of the HSR.

I am John Broome the owner's representative for the Loop Ranch LLC which owns property on both sides of Hwy 58 upon which approximately eleven miles of the pathway for the HSR is currently proposed to be constructed.

768-804 I have been contacted in past years on the proposed HSR, however in the case of the DEIR I only became aware of its existence and the comment period recently. With such a large section of the proposed alignment being located on our property I'd have thought I would have been contacted directly and had more chance for input into the DEIR. This was not the case. I strongly feel the given timeline to properly evaluate a 15,000 page document in the Covid-19 environment simply doesn't provide the opportunity to adequately understand the document and the impacts created to the environment and our ranch operations by the alignment suggested.

768-805 Our ranch is a cattle operation and clearly the alignment would have severe impacts on our operation. Essential aspects of our operation exist on both sides of the proposed route and mitigation factors would be needed. Cattle migration and movement would be dramatically impacted. Safety to our herd and employees would be a major concern. I don't feel this has been addressed properly.

768-806 The Loop Ranch represents a significant portion of the wildlife corridor that connects two major mountain ranges. Placing a ground level HSR project would have tremendous adverse impacts on the corridor which is essential to the migration of many species. I don't feel the DEIR adequately addresses this concern. The importance of the connectivity of the two mountain ranges and the need for wildlife being able to migrate through this area cannot be overstated.

768-807 The proposed alignment appears to be eliminating the Broome Road overpass. This overpass is essential to our ranch operations access and additionally it may play a future role in wildlife migration. This would be a major loss to the ranch and the area.

Please consider that this process needs more time with further review and input by interested and affected parties. To rush this process is unwise given the restrictions in being able to provide understanding and input under the Covid-19 pandemic. I encourage you to provide more opportunity for public review and input before adopting the Draft EIR.

Sincerely,

John Broome

Response to Submission 768 (John Broome, Loop Ranch LLC, April 28, 2020)

768-804

Commenter asks why they were not contacted directly concerning project impacts including the acquisition of some of his ranch land. The commenter was included in noticing for release of the Draft EIR/EIS, which included information about the public hearing, as well as provided notice of the extension of the comment period and the change in format of the public hearing.

Additionally, the commenter has met with the Authority regularly for updates on impacts to the Loop Ranch property. Per Table 9-1 in this Final EIR/EIS, the Authority met with Loop Ranch on March 3, 2011, March 6, 2013, and June 28, 2016.

Outreach also contacted the stakeholder to request meetings (most recently May 2019 and June 2020). Per emails from the stakeholder and the stakeholder's representatives, the stakeholder has declined these requests for meetings.

768-805

Although the Bakersfield to Palmdale Project Section would affect individual agricultural operations by directly converting agricultural land to a nonagricultural use, and/or by disrupting or removing the infrastructure that supports these agricultural lands, such as irrigation systems (e.g., ditches, drains, pipelines, and wells), power supplies, and access roads, the Bakersfield to Palmdale Project Section is being designed to minimize impacts on agricultural operations to the greatest extent feasible. For example, the Authority will relocate irrigation facilities if necessary, and pursuant to PU&E-IAMF#2, will ensure that the relocated facilities are operational prior to disconnecting the existing facility to the maximum extent feasible. Where the Bakersfield to Palmdale Project Section would cross existing roads at-grade, which would affect property access and equipment crossing, new grade-separated crossings would be built. While new grade separated intersections could change vehicle and equipment movements, the B-P Build Alternatives would maintain access to agricultural lands.

The Authority will also work with landowners to consolidate properties in order to keep remnant parcels in agriculture. Agriculture relocation would depend on several variables, including the requests of the displaced farm owners, and cannot be accurately predicted. In some cases, production would not be easy to replace because of the limited availability of suitable land, difficulties related to land ownership, and challenges related to any permitting that may be required to continue production at a new site. Even with this assistance, there would be potential for temporary disruption to agricultural operations as production is reallocated between owners and where severed parcels are transferred to adjoining owners. For information regarding socioeconomic issues, such as effects on agricultural businesses, agricultural revenue loss, and agricultural job losses associated with the permanent conversion of agricultural lands, see Section 3.12, Socioeconomics and Communities, of this Final EIR/EIS. The Authority is sensitive to the importance of these disruptions to agricultural operations, including the acquisition of all or a portion of infrastructure needed for agricultural operations.

As described in Section 3.12, Socioeconomics and Communities, of this Final EIR/EIS, the HSR project's temporary effects on agricultural access would be minimized through compliance with AG-IAMF#5, Temporary Livestock and Equipment Crossings. This IAMF would reduce potential impacts related to agricultural access from construction by requiring the Authority to coordinate temporary livestock and equipment crossings to

Response to Submission 768 (John Broome, Loop Ranch LLC, April 28, 2020) - Continued

768-805

minimize impacts on livestock movement, as well as routine operations and normal business activities, during the construction period. The project's permanent effects on agricultural access would be minimized through compliance with AG-IAMF#3, Farmland Consolidation Program, and AG-IAMF#6, Equipment Crossings. AG-IAMF#3 reduces impacts on agricultural farmland by administering a farmland consolidation program to sell remnant agricultural parcels to neighboring landowners. These remnant parcels can be combined with adjacent farmland properties to provide for continued agricultural use on the maximum feasible number of remnant parcels. Program implementation would reduce the amount of agricultural lands converted to nonagricultural use by HSR construction and operation. AG-IAMF#6 would reduce potential permanent operations impacts on agricultural property owners by requiring the Authority to coordinate the realignment of any affected access roads. AG-IAMF#6 would also require affected access roads to be realigned to provide livestock and equipment crossings to minimize impediments to routine agricultural operations and normal business activities from long-term project operations.

To address potential significant impacts associated with the permanent indirect conversion of Important Farmland to a nonagricultural use from access disruptions, the Authority would implement Mitigation Measure SO-MM#4, which requires the Authority to evaluate each partial-property acquisition and determine if the acquisition would affect access to the parcel. If so, the contractor must evaluate opportunities for providing modified access to allow continued use of agricultural lands and facilities.

Regarding the safety of the cattle herd and ranch workers, approximately 7 miles of the Refined CCNM Design Option alignment crosses the parcels owned and occupied by Loop Ranch LLC. Of the approximate 7 miles, approximately 3.3 miles (3 separate segments of approximately 0.25 mile, 2.5 miles, and 0.8 miles) would be located at-grade. The remaining approximately 3.7 miles would be on an elevated track or within an underground tunnel as shown on Pages TT-D1407 through TT-D1414 of the Alignment Plans for the Refined CCNM Design Option in Volume 3 of this Final EIR/EIS. Current cattle migration and movement operations could continue in areas where the HSR track is elevated or within an underground tunnel.

No revisions have been made to this Final EIR/EIS in response to this comment.

768-805

768-806

The commenter does not feel the Draft EIR/EIS adequately addresses wildlife corridor crossings.

Chapter 2, Section 2.3.5, of this Final EIR/EIS discusses the various grade separation features, including wildlife crossings that have been designed for the project. As shown in Table 2-25 of this Final EIR/EIS, the project would include 9 tunnels of varying length located throughout the project. Additional detail about the 53 viaduct openings and the 9 tunnel openings between the fenced surface rail segments is provided in Table 2-1 of the WCA (Appendix I to the BARTR [Authority 2018b]). The 9 tunnels are located primarily through the mountainous Tehachapi region and range in length from 0.30 mile (2,997 feet) to 2.36 miles (9,504 feet), with a median tunnel length of 0.99 mile (5,250 feet). The 53 elevated viaduct sections range from 0.04 mile (189 feet) to 2.94 miles (12,500 feet), with the median viaduct span being 0.09 mile (367 feet). Wildlife can freely pass over the underground tunnel sections and cross under the elevated viaduct sections. The additional wildlife crossings are designed to provide additional opportunities across at-grade surface segments. These crossings in the project design are expected to maintain genetic connectivity for numerous plant and animal species, including listed species. The focal species analyzed are representative of the ranges of species found at this geography, including a variety of habitat requirements and range of mobility. The Authority believes that this analysis adequately evaluates impacts on wildlife corridor crossings from the project.

Response to Submission 768 (John Broome, Loop Ranch LLC, April 28, 2020) - Continued

768-807

The commenter raises concerns related to HSR project effects on ranch operations as a result of the elimination of the Broome Road overpass, as well as the effects on wildlife migration stemming from removal of this overpass.

See Response to Comment 768-805, contained in this chapter, regarding impacts on agricultural operations.

Regarding removal of the overpass, the Broome Road overpass would not be removed and there is a 0.57-mile (3,000-foot) elevated viaduct that extends over Broome Road and SR 58. Therefore, access and wildlife migration crossing would not be affected.

Submission 717 (Lisa Harmon, Mead & Hunt, Inc | M & H Architecture, Inc, April 9, 2020)

Bakersfield - Palmdale - RECORD #717 DETAIL

Status :	Action Pending
Record Date :	4/17/2020
Response Requested :	Yes
Affiliation Type :	Business and/or Organization
Submission Date :	4/9/2020
Interest As :	Business and/or Organization
Submission Method :	Project Email
First Name :	Lisa
Last Name :	Harmon
Professional Title :	Aviation/Environmental Planner
Business/Organization :	Mead & Hunt, Inc | M & H Architecture, Inc
Address :	180 Promenade Circle
Apt./Suite No. :	Suite 240
City :	Sacramento
State :	CA
Zip Code :	95834
Telephone :	916.993.4650
Email :	Lisa.Harmon@meadhunt.com
Cell Phone :	530.574.7620
Email Subscription :	
Add to Mailing List :	
Stakeholder Comments/Issues :	

717-232 One of my clients, Karina Drees of the Mohave Airport District, has asked me to review these project documents.
May I please have access to the electronic versions?

Thanks,
Lisa

Lisa Harmon | Aviation/Environmental Planner
Mead & Hunt, Inc | M & H Architecture, Inc
180 Promenade Circle, Suite 240 |Sacramento, CA 95834
Direct: 916.993.4650 / Mobile: 530.574.7620
lisa.harmon@meadhunt.com<mailto:lisa.harmon@meadhunt.com> |
www.meadhunt.com<http://www.meadhunt.com/>
File too large to email? Click
here<https://newforma.meadhunt.com/UserWeb/Transfers/PersonalTransfer.aspx?personal=lisa.harmon%40meadhunt.com>.

EIR/EIS Comment :	Yes

Response to Submission 717 (Lisa Harmon, Mead & Hunt, Inc | M & H Architecture, Inc, April 9, 2020)

717-232

Refer to Standard Response BP-Response-GENERAL-02: Public Outreach on the Draft EIR/EIS.

The commenter requested access to electronic copies of the Draft EIR/EIS. After follow-up contact with the commenter on April 20, 2020, she stated she had accessed the documents on the Authority's website and rescinded her request for electronic copies of the documents to be sent to her.

Submission 726 (Lisa Harmon, Mead & Hunt, Inc | M & H Architecture, Inc, April 15, 2020)

Bakersfield - Palmdale - RECORD #726 DETAIL

Status :	Action Pending
Record Date :	4/17/2020
Response Requested :	Yes
Affiliation Type :	Business and/or Organization
Submission Date :	4/15/2020
Interest As :	Business and/or Organization
Submission Method :	Project Email
First Name :	Lisa
Last Name :	Harmon
Professional Title :	Aviation/Environmental Planner
Business/Organization :	Mead & Hunt, Inc | M & H Architecture, Inc
Address :	180 Promenade Circle
Apt./Suite No. :	Suite 240
City :	Sacramento
State :	CA
Zip Code :	95834
Telephone :	916.993.4650
Email :	Lisa.Harmon@meadhunt.com
Cell Phone :	530.574.7620
Email Subscription :	
Add to Mailing List :	
Stakeholder Comments/Issues :	

726-233 I have written to you previously (4/10) to request an electronic copy of this document. The review period is closing soon.

Thank you,
Lisa

Lisa Harmon | Aviation/Environmental Planner
Mead & Hunt, Inc | M & H Architecture, Inc
180 Promenade Circle, Suite 240 |Sacramento, CA 95834
Direct: 916.993.4650 / Mobile: 530.574.7620
lisa.harmon@meadhunt.com<mailto:lisa.harmon@meadhunt.com> |
www.meadhunt.com<http://www.meadhunt.com/>
File too large to email? Click
here<https://newforma.meadhunt.com/UserWeb/Transfers/PersonalTransfer.aspx?personal=lisa.harmon%40meadhunt.com>.

EIR/EIS Comment :	Yes

Response to Submission 726 (Lisa Harmon, Mead & Hunt, Inc | M & H Architecture, Inc, April 15, 2020)

726-233

Refer to Standard Response BP-Response-GENERAL-02: Public Outreach on the Draft EIR/EIS.

The commenter requested access to electronic copies of the Draft EIR/EIS. After follow-up contact with the commenter on April 20, 2020, she stated she had accessed the documents on the Authority's website, and rescinded her request for electronic copies of the documents to be sent to her.

Submission 791 (Jairo Lopez, National Chavez Center/Cesar Chavez Foundation, April 28, 2020)

Bakersfield - Palmdale - RECORD #791 DETAIL

Status :	Action Pending
Record Date :	4/30/2020
Affiliation Type :	Business and/or Organization
Submission Date :	4/28/2020
Interest As :	Business and/or Organization
Submission Method :	Project Email
First Name :	Jairo
Last Name :	Lopez
Professional Title :	Staff Attorney
Business/Organization :	National Chavez Center/Cesar Chavez Foundation
Address :	PO Box 62
Apt./Suite No. :	
City :	Keene
State :	CA
Zip Code :	93531
Telephone :	
Email :	jlopez@chavezfoundation.org
Cell Phone :	
Email Subscription :	
Add to Mailing List :	
EIR/EIS Comment :	Yes
Attachments :	CCF-NCC DEIR Comments - signed.pdf (313 kb)

Stakeholder Comments/Issues :

Good Morning Everyone,

I hope you're all doing well and keeping safe.

Please find attached to this email a copy of the National Chavez Center/Cesar Chavez Foundation's comment letter on the Authority's Draft Environmental Impact Report. A hardcopy of the comment letter will be sent to the Authority as well.

Please let us know if you have any questions. We look forward to meeting with you all in the near future. Thank you.

Best Regards,

Jairo Lopez
Staff Attorney

From: Jairo Lopez
Sent: Tuesday, April 28, 2020 9:44 AM

To: Rushing, Brett@HSR <Brett.Rushing@hsr.ca.gov>; Carr, Jeff@HSR <Jeff.Carr@hsr.ca.gov>; stephanie.perez@dot.gov <stephanie.perez@dot.gov>; Sarah Stokely <sstokely@achp.gov>; Navecky, David <David.Navecky@stb.gov>; agirado@blm.gov <agirado@blm.gov>; djstorm@blm.gov <djstorm@blm.gov>; Andrade, Ruben <Ruben_Andrade@nps.gov>; Hendricks, Nancy <nancy_hendricks@nps.gov>; elaine_jackson-retondo@nps.gov <elaine_jackson-retondo@nps.gov>; dedwards@planning.lacounty.gov <dedwards@planning.lacounty.gov>; George_Kline@blm.gov <George_Kline@blm.gov>; tharter@chukchansi-nsn.gov <tharter@chukchansi-nsn.gov>; jruiz@chukchansi-nsn.gov <jruiz@chukchansi-nsn.gov>; LClauss@sanmanuel-nsn.gov <LClauss@sanmanuel-nsn.gov>; abrierty@sanmanuel-nsn.gov <abrierty@sanmanuel-nsn.gov>; lvalbuena@sanmanuel-nsn.gov <lvalbuena@sanmanuel-nsn.gov>; JMauck@sanmanuel-nsn.gov <JMauck@sanmanuel-nsn.gov>; SPowers@tachi-yokut-nsn.gov <SPowers@tachi-yokut-nsn.gov>; RJeff@tachi-yokut-nsn.gov <RJeff@tachi-yokut-nsn.gov>; RBarrios@tachi-yokut-nsn.gov <RBarrios@tachi-yokut-nsn.gov>; rpennell@tmr.org <rpennell@tmr.org>; sbarnett@tmr.org <sbarnett@tmr.org>; leannewalkergrant@tmr.org <leannewalkergrant@tmr.org>; colin.rambo@tejonindiantribe-nsn.gov <colin.rambo@tejonindiantribe-nsn.gov>; Polanco, Julianne@Parks <Julianne.Polanco@parks.ca.gov>; OEscobedo@TEJONINDIANTRIBE-NSN.GOV <OEscobedo@TEJONINDIANTRIBE-NSN.GOV>; Gayline.Hunter@tulerivertribe-nsn.gov <Gayline.Hunter@tulerivertribe-nsn.gov>; jairo.avila@tataviam-nsn.us <jairo.avila@tataviam-nsn.us>; tuleriverenv@yahoo.com <tuleriverenv@yahoo.com>
Cc: Paul S. Park <paulp@chavezfoundation.org>; Abigail Cruz <acruz@chavezfoundation.org>; Doug Carstens <dpc@cbcearthlaw.com>; Erica Kachmarsky <EKachmarsky@swca.com>; Heather Gibson <Hgibson@swca.com>; Dennis Dahlin <djdahlin@gmail.com>; Dennis Arguelles <darguelles@npca.org>; rsundergill@npca.org <rsundergill@npca.org>; Brian Turner <BTurner@savingplaces.org>; Sharee Williamson <SWilliamson@savingplaces.org>; Betsy Merritt <emerritt@savingplaces.org>; HSR section106consultation@HSR <section106consultation@hsr.ca.gov>; McLoughlin, Mark@HSR <Mark.McLoughlin@hsr.ca.gov>; cheitzman@californiapreservation.org <cheitzman@californiapreservation.org>; Jaime Loichinger <jloichinger@achp.gov>; katherine.zeringue@dot.gov <katherine.zeringue@dot.gov>
Subject: National Chavez Center/Cesar Chavez Foundation's Comments to Draft Environmental Impact Report

Good Morning Everyone,

I hope you're all doing well and keeping safe.

Please find attached to this email a copy of the National Chavez Center/Cesar Chavez Foundation's comment letter on the Authority's Draft Environmental Impact Report. A hardcopy of the comment letter will be sent to the Authority as well.

Please let us know if you have any questions. We look forward to meeting with you all in the near future. Thank you.

Best Regards,

Jairo Lopez
Staff Attorney

Submission 791 (Jairo Lopez, National Chavez Center/Cesar Chavez Foundation, April 28, 2020) - Continued

April 28, 2020

Brian Kelly
Chief Executive Officer
California High-Speed Rail Authority
770 L Street, Suite 620 MS-1
Sacramento, CA 95814

Via email: Bakersfield_Palmdale@hsr.ca.gov

RE: Comments on February 2020 Draft Project Environmental Impact Report/ Environmental Impact Statement for the Bakersfield-to-Palmdale Project Section of the California High-Speed Rail Program

Dear Mr. Kelly:

On behalf of the César Chávez Foundation (CCF) and National Chávez Center (NCC), we appreciate the opportunity to review the February 2020 Draft Project Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Bakersfield-to-Palmdale Project Section. We have reviewed the documentation provided in the Draft EIR/EIS in accordance with the National Environmental Policy Act of 1969 (NEPA) (42 U.S. Code [U.S.C.] §4321 et seq.), the California Environmental Quality Act (CEQA) (Public Resources Code §21000 et seq.), and Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended) and 36 Code of Federal Regulations (CFR) Part 800. Our review is focused on potential impacts to the Nuestra Señora Reina de La Paz and the NCC, a National Historic Landmark District (NHLD) and National Monument (NM) (La Paz NHLD/NM) and is informed by additional documentation shared throughout the Section 106 process and the Section 106 Finding of Effect (FOE) circulated to consulting parties on April 10, 2020.

As acknowledged in the Draft EIR/EIS, the federal government prioritizes the recognition of historic resources and seeks their protection through federal regulations. To meet the regulatory standard of documentation and analysis, the California High-Speed Rail Authority (the Authority) must fully identify and consider the significance of the La Paz NHLD/NM and assess the potential environmental impacts of its proposed actions.

The EIR/EIS follows the Advisory Council on Historic Preservation's (ACHP's) guidance for federal agencies to coordinate compliance with Section 106 while meeting the requirements of NEPA. Consequently, the EIR/EIS followed NHPA criteria for adverse effect, no adverse effect, or no effect to historic properties (36 CFR Part 800.5). Findings were documented in the FOE and are reflected in the EIR/EIS. The EIR/EIS, however, was published before the circulation of the revised April 2020 FOE. The NCC notes where there is a discrepancy in the FOE related to

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Submission 791 (Jairo Lopez, National Chavez Center/Cesar Chavez Foundation, April 28, 2020) - Continued

the Refined César Chávez National Monument (CCNM) Design Option for the La Paz NHLD/NM that requires revision to the EIR/EIS.

791-392 Tasked with protecting and preserving the La Paz NHLD/NM, the NCC carefully considered the information outlined in the EIR/EIS and the recently released April 2020 FOE. The involvement of the NCC in assessing the project for potential effects on the La Paz NHLD/NM has been consistent since the earliest recognition of the resource being within the area of potential effects, through its current 30 percent design phase in proximity to La Paz, and will remain so throughout the continued development of the design, its construction, and the operation of the project.

I. SUMMARY OF COMMENTS

791-393 Our review of the February 2020 EIR/EIS, the recently released April 2020 FOE, and additional documentation shared during the Section 106 process reveals extensive and concerning shortcomings regarding the La Paz NHLD/NM. The FOE establishes an insufficient foundation of information from which the EIR/EIS renders its impact analysis, calling into question the finding of no adverse effect to the La Paz NHLD/NM. The Authority has not met its obligation under NEPA, NHPA, and CEQA to adequately consider the La Paz NHLD/NM, the potential effects of the project proposed, and appropriate minimization measures. Given the 30 percent level of design established and previous considerations of very similar alternatives that concluded that the project would result in an adverse effect, it is especially problematic that the Authority presents a finding of no adverse effect to the La Paz NHLD/NM in the Draft EIR/EIS.

791-394 The April 2020 FOE concludes that the Refined CCNM Design Option would result in no adverse effect, with conditions. These conditions include continued engagement of consulting parties and subsequent reviews of plans by the State Historic Preservation Officer (SHPO) and consulting parties as the project design is advanced beyond the current level of 30 percent. This conditionality of the "no adverse effect" conclusion is critical and must be reflected in the EIR/EIS.

791-395 The EIR/EIS suffers from insufficient information and analysis. First, the NCC has repeatedly reviewed alternatives with the Authority and consulting parties and, in each instance, has expressed the need for the project to consider the national significance of the resource and any possibility, first and foremost, of avoiding the resource geographically. Consistent requests that a full avoidance alternative be identified and considered are still unanswered in the EIR/EIS and revised FOE documentation. Instead, both the EIR/EIS and FOE have been revised to provide more anecdotal information about some of the considerations of the Interstate 5 (I-5) corridor without providing a full description and consideration of this alignment option or any other full avoidance alternative.

791-396 Throughout the Section 106 consultation process, the NCC has reviewed every iteration of alternatives proposed to identify how each alternative potentially affects the resource and to consider proposed minimization efforts. In these evaluations, the NCC has consistently raised significant concerns about the level of understanding related to the resource and the project to date, and the great potential for harm in each of the alternatives proposed. The description of the property in the EIR/EIS and FOE continues to be severely lacking and limited in scope, avoiding the necessary identification of character-defining features of the contributors to the La Paz NHLD/NM. This insufficient foundation then undermines the effects analysis. Some of the criteria of adverse effects under Section 106 of the NHPA and 36 CFR 800 are completely absent, while others are not sufficiently considered. Minimization measures are identified that do not directly relate to an identified project effect, and others are understudied or insufficiently described. The effects analysis is inadequate in each of its considerations, which consist of visual impacts (from minor to significant), noise impacts (moderate to severe), required changes to the surrounding landscape (insufficiently described in the EIR/EIS and FOE), and construction impacts. The effects analysis fails to consider impacts to the access and use of the La Paz NHLD/NM.

The NCC finds that the EIR/EIS relies on insufficient information and analysis to fully identify and address the potential harms that the project would introduce and, therefore, does not adequately minimize these effects. As a result, the finding of no adverse effect is unfounded and unsubstantiated. The Authority has not met the threshold required under NEPA and NHPA to support a no adverse effect conclusion. Any finding of no adverse effect on the La Paz NHLD/NM must be conditioned on continued consultation and review of design plans to ensure avoidance and minimization of any impacts as the design plans evolve.

II. THE EIR/EIS DOES NOT PRESENT SUFFICIENT DOCUMENTATION OR ANALYSIS TO SUPPORT A FINDING OF NO ADVERSE EFFECT TO THE LA PAZ NHLD/NM

A. Alternatives 1, 2, 3, 5, CCNM, and Refined CCNM

791-397 The EIR/EIS presents Alternatives 1, 2, 3, and 5, the CCNM Design Option, and the Refined CCNM Design Option. Alternatives 1, 2, 3, and 5 would result in direct audible and visual effects to the La Paz NHLD/NM. The Authority presented a minimization option (the CCNM Design Option) to the Section 106 consulting parties due to significant concerns raised by the parties regarding the significant adverse effects that initial alternatives would all introduce. The Authority described that there were constraints on constructing an alignment that would completely avoid adverse effects. The NCC and other consulting parties noted that alignment options remained always constrained to the original, very narrow margin around the La Paz NHLD/NM, with fixed points at Tehachapi to the east and around Highway 223 to the west, based on engineering constraints in that limiting boundary. No alternatives that deviate from this overall alignment have been presented. The NCC and other parties also noted that had the

791-398 Authority made an effort to identify and consider the La Paz NHLD/NM as a potential historic resource before its 2012 designations, or to document the resource and its character-defining features after its designation, less impactful alternatives could have been considered well before

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Submission 791 (Jairo Lopez, National Chavez Center/Cesar Chavez Foundation, April 28, 2020) - Continued

791-398 this section of the rail became locked into such a narrowly defined corridor where seismic constraints and the topography severely restrict the potential to modify the route.

791-399 The Section 106 consultation process continued with the Authority introducing revised alternative options near La Paz and consulting parties being asked whether any of the options minimized adverse effects to the historic resource. The EIR/EIS notes specific changes made by the Authority throughout that consultation related to the CCNM Design Option and the Refined CCNM Design Option including a greater distance from La Paz, a soundwall along the proposed viaduct, and tinting of the soundwall to make it blend better with the surrounding landscape. Despite these efforts by the Authority, the NCC has maintained that the effects of both the CCNM Design Option and the preferred Refined CCNM Design Option still have not been adequately shown to be non-adverse to the historic resource.

791-400 The EIR/EIS acknowledges that Alternatives 1, 2, 3, and 5 would result in adverse visual and audible effects and that the CCNM Design Option would result in adverse visual effects, but audible effects of the CCNM Design Option are minimized by a soundwall that contributes to that significant visual effect. The Refined CCNM Design Option is described in the EIR/EIS as not introducing any adverse effects. The NCC disagrees with this conclusion. Instead, given the 30 percent design level of the project to date, the NCC has agreed with other consulting parties that a finding of no adverse effect is only appropriate if it is accompanied by the condition that continued engagement between the Authority, the NCC, and other consulting parties will be conducted through the design and construction phases of the project. The April 2020 FOE notes this condition in the finding for the Refined CCNM Design Option but does not specify the reason for the condition. The purpose of the condition is not just to continue the engagement of consulting parties, but rather to ensure that no adverse effect is introduced by the project to the La Paz NHLD/NM as the project advances through the design and construction phases.

B. Lack of Comparative Analysis of Alternatives

791-401 The EIR/EIS and April 2020 FOE introduce a preferred alternative that is not thoroughly described and that has not been compared to other similar alternatives that the Authority proposed during the Section 106 consultation process. The absence of a comparative analysis is particularly problematic because all of the proposed alternatives to date have been placed in the same narrow geographic region in close proximity to the La Paz NHLD/NM, and all have had the same endpoints. They each have been found to have the same potential to introduce visual and noise impacts, changes to the surrounding landscape, and construction impacts. It remains unclear why the Authority presents the preferred alternative as capable of minimizing effects to the La Paz NHLD/NM, when all the similar alternatives that were discussed previously were described as having a potentially adverse effect on the resource.

The Refined CCNM Design Option, the preferred alternative analyzed in the FOE, was not described alongside other alternatives in the design option screening reports that the NCC and consulting parties reviewed and discussed at various meetings with the Authority. Options

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791-401 known as B, D, and J were previously identified, and comparative data was presented in the June 2019 *Design Options Screening Report for the Nuestra Señora Reina de la Paz National Historic Landmark/César E. Chávez National Monument* and August 2019 *Addendum Design Options Screening Report for the Nuestra Señora Reina de la Paz National Historic Landmark/César E. Chávez National Monument*, whereas the selected preferred alternative, a refinement of Option D (identified as the Refined CCNM Design Option in the EIR/EIS), is not clearly described, nor shown in a comparative analysis with the other alternatives.

The FOE states that the Refined CCNM Design Option ("Refined Option D") minimizes effects to La Paz NHLD/NM "to an equal or greater degree than all the others and would be less costly and complex to build and maintain than some." However, in reviewing other alternatives considered, Design Option J, as presented in the August 2019 Addendum to the Screening Report, would have a lesser effect on the NHLD. Option J was at a lower elevation and would not require the same degree of earthwork. Option B was further away, horizontally, from the La Paz NHLD/NM. A comparison of Refined CCNM Design Option to Option B, J, and "Refined Option D" should be included in the EIR/EIS and FOE documentation.

The preferred alternative, the Refined CCNM Design Option, is not further from the La Paz NHLD/NM or lower in elevation than previously described alternatives, and it requires more substantial earthwork. Information provided does not clarify why this closer and higher elevation option is now preferred or why the Authority considers that it minimizes effects to the La Paz NHLD/NM to an equal or greater degree than previously considered alternatives such as B and J.

As previously stated in the NCC's October 1, 2019, Screening Report Comments Letter, the project continues to be constrained to its original, very narrow margin around the La Paz NHLD/NM, with fixed points at Tehachapi to the east and around Highway 223 to the west, based on engineering constraints in that limiting boundary. No alternatives that deviate from this overall alignment have been presented. Any new alternatives within that restrictive margin have been shown to be infeasible since any alternative within the area must follow necessary but restrictive design and seismic guidelines.

791-402 The selection of the preferred alternative, the Refined CCNM Option, is described in the FOE as requiring the most extensive earthwork in the form of an earthen berm. The earthen berm is described as 1,700 feet long and would vary in height from 10 to 80 feet above the existing ground surface. The berm is also described as needing to be constructed to the same height as the catenary for the high-speed rail, which is described as having a height of at least 20 to 30 feet. An estimated 2 to 14 million cubic yards of excess material would need to be removed and stockpiled under this design. Inadequate detail is presented about the extent of cut and fill and the design of the berm; such detail is needed to fully assess effects of this major design feature on the La Paz NHLD/NM.

Submission 791 (Jairo Lopez, National Chavez Center/Cesar Chavez Foundation, April 28, 2020) - Continued

C. Lack of Avoidance Alternative

791-403 In the Summary section, the EIR/EIS acknowledges that one "area of controversy" related to the project is the potential for "impacts on La Paz" (p. S-45). Due to the sensitivity surrounding this NHL and NM-designed historic resource, it is imperative for the Authority to have first considered whether avoidance of the resource would have been feasible in its project planning efforts.

Through a years-long consultation effort, the NCC has consistently met with the Authority and all consulting parties, and, in each correspondence, has reiterated the need for the project to consider the extraordinary significance of the resource and any possibility of first and foremost avoiding the resource geographically. Information regarding the Authority's effort to identify and consider an avoidance alternative was altogether absent in the earliest development of the project and phases of documentation.

The draft and revised April 2020 FOE have provided more information regarding earlier routes and feasibility considerations. While the EIR/EIS presents the most thorough and clear information to date regarding the evolution of the preferred route and alternatives, the EIR/EIS is still lacking a true avoidance alternative and thereby continues to introduce a significant risk to the La Paz NHLD/NM without an attempt to avoid that risk.

By not presenting an adequate full avoidance alternative, the Authority has not met its obligations under NEPA and NHPA regarding the La Paz NHLD/NM. The Authority has received consistent requests from the NCC for the identification of a true avoidance alternative and for full consideration of any alternative that avoids adversely affecting the La Paz NHLD/NM. Instead of meeting this necessary and appropriate request, made available to historic resources by the regulatory framework, the EIR/EIS continues to lack a full avoidance alternative.

As avoidance options have not been fully considered and presented, there has been no public consideration of an avoidance alternative. The EIR/EIS and FOE documents state that one of the
791-404 Authority's goals in the selection of alternatives was to minimize environmental impacts. The FOE presents Options 3, 3A, 4, and 4A, which would avoid the Tehachapi/Keene area altogether and thus avoid the La Paz NHLD/NM. The FOE does not explain why these options (3, 3A, 4, and 4A) were eliminated during the screening evaluation process. The diagram suggests that the Bakersfield to Sylmar Alignment Options 3, 3A, 4, and 4A would involve less challenging terrain than options to the east or to the west. A thorough explanation of why Options 3, 3A, 4, and 4A were eliminated from analysis must be given, since these options would allow complete avoidance of impacts to the La Paz NHLD/NM.

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791-405 In previous requests for avoidance, the NCC has pointed out that design options have all been bound to the two endpoints through which the Authority has channeled all design options and discussions. If a thorough effort to consider avoidance had already occurred, the design options considered would not be limited to this narrow margin along the boundary of the La Paz NHLD/NM. The outstanding oversight of not initially acknowledging the presence of a potential nationally significant cultural and historic resource and then not seeking an avoidance option when that resource was designated as a NHLD/NM has allowed the long-standing Tehachapi route to define the Authority's efforts as they concern La Paz.

791-406 The Authority prepared a September 4, 2018, *Memorandum regarding Consideration of Alternatives to Avoid Adverse Effect to the Chavez National Monument*. The five-page Memorandum referenced Tunnels 4, 5, and 6, with the third and fourth pages containing a section entitled "Consideration of Alignment Shifts to Avoid All Impacts on CCNM." A one-page illustration attached to the Memorandum specified such items as "Tall Viaduct in Canyon" and "Longer Tunnel in More Mountainous Terrain." The CCF and NCC responded that the two-page consideration and one-page illustration of an avoidance alternative were inadequate. No further avoidance information has been presented by the Authority for analysis. While the design options presented by the Authority have since changed substantially, this avoidance information has not been included or revised in the most recent Section 106 consultation materials.

791-407 As discussed in our October 2019 comment letter on the Design Options Screening Report and Addendum, the NCC reminds the Authority that, under California law, the fact that an alternative would increase costs is not sufficient to show that it is infeasible. An alternative that avoids significant impacts may not be rejected merely because it would cost more. Rather, evidence showing that the alternative would be impracticable is required. "The fact that an alternative may be more expensive or less profitable is not sufficient to show that the alternative is financially infeasible. What is required is evidence that the *additional* costs or lost profitability are sufficiently severe as to render it impractical to proceed with the project." (*Uphold Our Heritage v. Town of Woodside* (2007) 147 Cal.App.4th 587, 599 [quoting *Citizens of Goleta Valley v. Board of Supervisors, supra,* 197 Cal.App.3d at p. 1181, italics added].) We do not believe it would be impractical to proceed with the high-speed rail project even if additional costs for complete avoidance of impacts to the La Paz NHLD/NM were incurred. Documentation presented by the Authority to date fails to support such a conclusion.

The NCC reiterates our October 2019 request for additional information as to how much alignment shifts in other portions of the high-speed train system have cost. For example, in April 2016, the Authority prepared the Bakersfield-to-Palmdale Project Section Supplemental Alternatives Analysis Report. This report showed a significant shift of the proposed alignment between 2010 and 2012 to avoid parts of Mojave and a shift between 2012 and 2016 to avoid parts of Rosamond. (SAA, p. I-13.) How much did each of these alignment shifts cost in monetary terms? How much did each alignment shift change the environmental impacts of the

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791-407 alignment? We seek to place the proposed shift of alignment related to the La Paz NHLD/NM in context of other shifts in system alignment.

791-408 The Authority is required by CEQA and NEPA to study a reasonable range of alternatives. (*Natural Resources Defense Council v. Morton* (D.C. Cir. 1972) 458 F.2d 827, 836.) The I-5 Corridor alignment has repeatedly been advanced as a potential avoidance alternative but has been improperly omitted from the alternatives analysis in both the Program Environmental Impact Report/Environment Impact Statement (Program EIR/EIS) and subsequent documents. (e.g., California Farm Bureau Federation Letter dated October 19, 2012, re: Fresno to Bakersfield Revised Draft EIR/Supplemental Draft EIS Comment). Since 2017 the CCF and NCC have consistently requested that the Authority properly analyze the feasibility of avoidance alternatives.

Perhaps in response to the repeated requests by the NCC for the Authority to fully evaluate the I-5 corridor avoidance option, FOE documentation provides further information about particular aspects of the I-5 Corridor but does not provide the necessary full description and analysis of the I-5 Corridor as an avoidance alternative. The FOE also incorrectly suggests that the option was previously under public consideration. The "High-Speed Train…Screening Evaluation," which occurred in 2001 (La Paz FOE p. 4-1), was an internal review and would not have been publicly considered. Whether this "Screening Evaluation" was publicly circulated must be addressed because otherwise these options are believed to have been eliminated by the time there was a publicly circulated document: the Program EIR/EIS in 2005 (La Paz FOE p. 4-4). If no public review of the I-5 Corridor has been allowed, this alignment, which would avoid the La Paz NHLD/NM, has not been fully considered before being dismissed in the Program EIR/EIS.

Given the lack of conclusive information on the I-5 Corridor consideration in the FOE, the following information is excerpted from the NCC's comment letter on the Design Options Screening Report, dated October 1, 2019.

In 1995, the High-Speed Rail Commission studied three broad corridors: coastal, I-5, and SR-99. Early analysis stated the following advantages of the I-5 Corridor:

> **Interstate 5 (1-5) Corridor**
>
> *The I-5 Corridor best serves the end-to-end markets. This corridor offers the shortest distances, lowest capital costs, fastest Los Angeles to San Francisco Bay Area travel times, and the highest overall ridership forecasts.*
>
> (Taylor et al., January/February 1997, California HSR Corridor Evaluation and Environmental Constraints Analysis. *Journal of Transportation Engineering*, p. 6.)
>
> *Based on the ridership estimates of this study, the I-5 Corridor will maximize the emission reductions because of higher ridership and minimal localized carbon monoxide emissions (due to minimal urban land cover).*

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791-408 (Parsons Brinckerhoff/JGM, November 1995, *Preliminary Environmental Constraints and Impacts Analysis*. Last sentence of the bulleted paragraph "High Speed Rail Air Quality Analysis Background Emission Sources: Emissions from Modal Shifts," 10th page of Appendix A, page 102 of PDF document, available at http://www.calhsr.com/wp-content/uploads/2013/09/Environmental-Constraints-and-Impacts-Analysis-November-1995.pdf.)

Although these statements were contained in a preliminary report, they are as applicable today as they were when they were made.

The Program EIR/EIS approved in 2005 stated the reasons for eliminating the I-5 Corridor alternative from analysis in the High-Speed Rail Program EIR/EIS:

> In summary, while the I-5 Corridor could provide better end-to-end travel times compared to the SR-99 corridor, the I-5 Corridor would result in lower ridership and would not meet the current and future intercity travel demand of Central Valley communities as well as the SR-99 corridor. The I-5 Corridor would not provide transit and airport connections in this area, and thus failed to meet the purpose and need and basic objectives of maximizing intermodal transportation opportunities and improving the intercity travel experience in the Central Valley area of California as well as the SR-99 corridor. For these reasons the I-5 Corridor was dismissed from further consideration in this Program EIR/EIS.
>
> (Program EIR/EIS 2-35. Available at: http://www.hsr.ca.gov/docs/programs/eir-eis/statewide_final_EIR_vol1ch2.pdf.)

However, the reasons for rejecting analysis of the I-5 Corridor altogether are not adequate under NEPA or CEQA. An alternative is not infeasible merely because it fails to meet every purpose and objective of the agency (*Natural Resources Defense Council v. Morton* (D.C. Cir. 1972) 458F.2d 827, 836; CEQA Guidelines section 15216.6(a) ["An EIR shall describe a range of reasonable alternatives to the project, or to the location of a project, which would feasibly attain *most* of the basic objectives of the project ...", emphasis added].) The feasibility and relative merits of the I-5 Corridor should have been explored in the Program EIR/EIS so that the public and public agencies could compare it to other alternatives. This is especially true since, from several perspectives, the I-5 Corridor alternative appears to be the Least Environmentally Damaging Practicable Alternative.

In response to comments raising the possibility of using the I-5 Corridor, the Authority has sometimes referred to the 2005 Program EIR/EIS and earlier corridor evaluation studies, claiming that the I-5 Corridor was eliminated based on previous studies. However, *the I-5 Corridor has never been properly studied* in a document subject to public and peer review through the EIR or EIS review process. Before proceeding with any further review, this omission of the I-5 Corridor from public analysis must be rectified.

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In *Natural Resources Defense Council v. Morton,* 458 F.2d 827 (D.C. Cir. 1972), the court affirmed a district court holding that the Department of the Interior's Final EIS failed to adequately discuss the alternatives to the proposed leasing of offshore lands. On remand, the Department of the Interior attempted to comply with the court's decision by supplementing its final EIS with an addendum, which discussed reasonable alternatives to the proposed action. Because the new material had never been circulated for comment as required by Section 102(2)(C) of NEPA, the district court refused to accept the statement as modified:

> If this addendum is to be considered a part of the Final [EIS], then it must be subjected to the same comment and review procedures outlined by § 4332(2)(C) of NEPA, as was required for the original Final [EIS] which did not contain the addendum when it was first circulated. (*Natural Resources Defense Council v. Morton,* 337 F. Supp. 165, 172 (D.D.C. 1972.)

Thus, federal courts require information to be included directly in the EIS document itself, so it may be subject to the comment and review procedures required by NEPA for an EIS. CEQA has similar requirements (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 442.)

If the Authority identifies an avoidance alternative and then determines that avoidance is not feasible, the environmental documentation should share that determination and supporting analysis in full. The Authority is required to either fully analyze the I-5 Corridor option as a full avoidance alternative or identify a different full avoidance alternative. As the I-5 route fully avoids the La Paz NHLD/NM, lacking any other full avoidance alternative, the Authority is required to fully evaluate this option.

D. Background of Alignment Development

791-409

FOE documentation includes a section entitled "Planning to Minimize Harm," which summarizes the history of project design alternatives as they relate to the La Paz NHLD/NM. The information presented in this section is misleading because all options presented throughout the multi-year Section 106 consultation process have been restrictively placed in a narrow geographic area in close proximity to the resource and all would

- have visual impacts (from minor to significant),
- have noise impacts (moderate or severe),
- require changes to the surrounding landscape, and
- have potential construction impacts.

The EIR/EIS summarizes the Authority's effort to introduce the CCNM Design Option to Section 106 consulting parties in September 2018, including the distribution of a memorandum documenting the Authority's analysis of alignments that would fully avoid effects to the La Paz NHLD/NM. The Authority sought to explain why those alignments were not being advanced for

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further study. In November 2018, the Authority circulated to consulting parties a draft FOE for the Bakersfield to Palmdale Project Section, which referenced the September 2018 avoidance memorandum and noted that consulting is ongoing regarding avoidance options. In their comments on the FOE report, several consulting parties, including the National Park Service (NPS), requested additional analysis of avoidance alternatives for the CCNM. In response to those comments, the Authority undertook further analysis of potential avoidance alignments for the CCNM as part of the Section 106 consultation process. In October 2019, the Authority developed design options to minimize effects to the La Paz NHLD/NM in response to coordination and comments from consulting parties, selecting a Refined CCNM Design Option, because it accomplishes the most avoidance and minimization of effects.

While the EIR/EIS summary of the Authority's efforts is accurate in outlining the documentation submitted to consulting parties and their relation to the draft FOE, it is inaccurate to suggest that the Refined CCNM Design Option stems from coordination with the consulting parties. The consulting parties did ask for the alignment to be moved as far away as possible from the La Paz NHLD/NM due to concerns that the alignments shared by the Authority would indeed introduce a significant adverse effect on the resource. However, the NCC and consulting parties repeatedly requested that the distance be greater, where there would be no audible or visual effects to minimize. The NCC has not concurred that the effect of a project in such close proximity can be minimized. The fixing of the endpoints of the alignment as it runs opposite the historic resource is a constraint set by the Authority. The NCC and other consulting parties have requested that the Authority be more flexible with regards to such a nationally significant resource as the La Paz NHLD/NM, given the regulatory requirements for its particular consideration and protection.

The NCC has carefully considered every alternative proposed and, with information made available, has tried to share how each alternative potentially affects the resource and whether effects could be minimized. In these evaluations, the NCC has identified significant concerns about the level of understanding regarding the resource and the problem this poses when evaluating the alternatives and the great potential for harm to the La Paz NHLD/NM in each of the alternatives proposed. The NCC finds that the EIR/EIS continues to lack the information necessary to fully identify and address the potential harms that the project would introduce and, therefore, cannot adequately propose appropriate minimization measures to alleviate project effects.

E. Insufficient Consideration of Historic Property

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The EIR/EIS correctly states that the federal government places importance on historic resources and requires their identification and the consideration of potential project impacts. However, while the historical background provided in the EIR/EIS regarding the La Paz NHLD/NM is accurate, the information is insufficient to fully identify the resource, much less to consider potential project impacts. The EIR/EIS and FOE document the historic resource's listing in the

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National Register of Historic Places (NRHP) in 2011, under Criteria A and B, and Criteria Consideration G, the California Register of Historical Resources listing in 2011, and designation as an NHL and NM in 2012. The EIR/EIS then states that NHL designation by the Secretary of the Interior identifies historic sites that "possess exceptional value as commemorating or illustrating the history of the United States." As noted, these designations afford the La Paz NHLD/NM special protections and give the NPS authority to preserve and maintain the resource's national historical significance.

The EIR/EIS appropriately notes that the La Paz NHLD/NM possesses exceptional historical significance at the national level within the areas of the agriculture industry, social history, Hispanic heritage, and political history because of its role as the headquarters of the United Farm Workers, the first permanent agricultural labor union established in the history of the U.S., and for its association with César Chávez, the founder of the United Farm Workers and to date the most important Latino leader in the history of the U.S. The property is accurately described as including 23 buildings, one site, and three structures that are contributing elements of the historic property. What is not included is any documentation or consideration of character-defining features related to those buildings, the site, or structures. The FOE's description of the property's boundaries is also included, but without enough consideration of how the cultural landscape within and beyond the borders of the resource is connected to its significance. The EIR/EIS continues that the historical significance of this NHL property comes from its connection to the agriculture industry, social history, Hispanic heritage, and political history, but again cultural landscape is not included in this statement.

FOE and previous documentation efforts upon which the EIR/EIS relies are not supported by a survey of the historic resource or new documentation on its significance but, rather, present a literature review of documentation prepared prior to the proposed project. As a result, the resource is not esuficiently documented to conduct the necessary effects analysis. Standard documentation is completely absent, and other information is restricted in scope rather than comprehensive or is included without discussion. The April 2020 FOE includes Attachment C – Existing Site Plan, which is a map taken directly from the Cultural Landscape Inventory. The map does not show the relative location of the project and is not referenced in the effects analysis or elsewhere in the FOE. Also absent in the FOE is any photo documentation for this resource, which is of the highest national significance. Where descriptions of the property are provided, there is often incomplete information or inaccurate emphasis placed to support effects findings. The FOE notes instances where previous documentation on the resource is not accurate or fully comprehensive, and, yet, despite a years-long effort to consider various alignments within close proximity to the resource, there has been no effort by the Authority to consider the resource fully in relation to and preparation for this documentation and its proposed project.

Consistent with NCC's comment letters on the December 2018 FOE and the December 2019 FOE, the revised April 2020 FOE still lacks a detailed description of character-defining features for contributing resources within the La Paz NHLD/NM. The FOE summarizes the NRHP and

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NHLD nominations, as well as the Cultural Landscape Inventory (CLI), merely listing contributing resources without considering their character-defining features or how these contributors lend to the significance, integrity, and designations of the La Paz NHLD/NM. The district designation of the La Paz NHLD/NM lends additional importance to any information that can be collected, given the dynamic nature of the resources present and their still insufficiently documented relationship with the setting and cultural landscape within the boundaries of the district and beyond.

Documentation from the NRHP, NHLD, and NM designations and the CLI were not written for the project proposed. While it is necessary to consider these documents in full and to build upon the foundation they provide, it is equally critical that a documentation effort related to this proposed project be undertaken that identifies the character-defining features for each contributing resource that may be affected by the project because previous documents used by the Authority do not provide this information. The NCC has repeatedly requested that this effort occur during the multi-year Section 106 consultation process. While the Authority has repeatedly visited the site to consider viewpoints where the project might be visible, the resource remains without a list of character-defining features and a consideration of how its contributors, significance, and integrity relate to the project. Photo-documentation, mapping, and a survey of contributors, as they relate to the project, should have been conducted. Such a documentation effort is standard practice and is required in order to assess potential impacts to a resource and to inform minimization and mitigation efforts relative to this historic resource, where an impact is found. Some features of the property may be affected by the undertaking to a greater extent than others, so a delineation of the character-defining features is critical to an adequate effects analysis.

Although designation documentation for the La Paz NHLD/NM extensively considers the cultural landscape and its relationship to the significant people and the events of the historic resource, within and outside of its boundary, this documentation has never fully identified the character-defining features of the contributors or how they relate to the cultural landscape and its setting and views. The EIR/EIS presents a short summary because it is based on the foundation of the FOE. The FOE provides only a review of previous documentation without noting or correcting this lack of information as a basis for considering the project. Without a full understanding of the cultural landscape, the FOE does not adequately consider the historic resource.

In its October 1, 2019, comment letter on the Design Options Screening Report and Addendum, the NCC noted that the NHLD nomination describes the use of La Paz's surroundings as fluid and significant to all themes of the property's significance and also defines a specific boundary for the NHLD related to the ownership and period of significance of the site. One of the interpretive themes assigned to the resource is the theme of "Home as Refuge," relevant to how the surroundings of La Paz provided Chávez with the solitude, open space, and comfort to reflect on the movement he led, and reminiscent of the homeland of farm workers who joined the

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791-410 movement and in stark contrast to the dry and flat agricultural fields where they worked. This very relevant historic theme was previously absent in documentation efforts by the Authority. The revised April 2020 FOE introduces this theme but does not consider potential effects to these aspects of the historic resource.

F. Insufficient Effects Analysis

791-411 The EIR/EIS impacts analysis is insufficient because the Authority does not meet the threshold for a compliant effects analysis under Section 106 of the NHPA and 36 CFR 800.5. Under these regulations, an effect is considered adverse when the effect on a historic property may diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration is given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's NRHP eligibility. Adverse effects may include reasonably foreseeable effects caused by the project that may occur later in time, be farther removed in distance, or be cumulative. The documentation lacks the information necessary to fully consider the historic resource and address the potential effects that would be introduced and, therefore, does not adequately minimize these effects. As a result, the finding of no adverse effect is unsubstantiated.

Consideration of the La Paz NHLD

791-412 An analysis of the potential effects of a project on a historic resource must rely on a thorough documentation and consideration of the property's contributing resources and the character-defining features of each. An adverse effect occurs when a project may directly or indirectly diminish the integrity of the historic property by altering any of the characteristics that lend to its designation. As the FOE does not fully document the La Paz NHLD, the effects analysis in the EIR/EIS and FOE does not fully address potential effects to the resource. The Authority has maintained that new documentation relevant to the La Paz NHLD/NM was not required because the effects of the project would only be visual and audible. The NCC has consistently reiterated, however, the importance of documenting the entire significance of the La Paz NHLD/NM to consider all potential effects to the property.

In addition, the FOE narrowly defines viewpoints and visuals that are not fully anchored by the resource and its relationship to its setting. By focusing exclusively on specific viewpoints and not on actual contributing resources to the district and how they lend to its integrity and significance, many of the potential effects of the proposed project are completely left out of the EIR/EIS and FOE documentation and others are minimized or misrepresented. In this case, the setting has been shown to be intertwined with so many elements of the overall significance of the site that the analysis should not be limited to a restricted set of viewpoints exclusively rather than the totality of all that has already been documented and additional data that should have been prepared.

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Criteria of Adverse Effect

791-413 Despite stating that the effects analysis applied the Criteria of Adverse Effect in accordance with the Section 106 Programmatic Agreement (PA), the FOE does not address *all* of the necessary criteria. Projects introduce an adverse effect if they diminish the integrity of a property's location, design, setting, materials, workmanship, feeling, and/or association. Both changes in the character of the property's setting and introduction of visual and/or audible effects are examples of adverse effects, and the project would introduce both. Following each of the related criteria is required to prepare a complete analysis of project effects and how they relate to the aspects of a resource that lend to its significance.

The application of the criteria of adverse effect under 36 CFR 800.5(a)(2)(iv**)** is not adequate or accurately representative of the property or the potential effects of the project. The Authority has not identified the uses of the property, so there is no support for the assertion that there are no effects to its use. The many uses of the property are dynamic and involve all the landscape within the boundaries of the La Paz NHLD/NM and have relationships to the setting offsite. The NCC has noted often throughout the Section 106 consultation process that pathways are already in use that relate to the proposed project and that increased use of pathways is currently being planned. Public and community use of the property and its various functions must be fully considered.

The application of the criteria of adverse effect under 36 CFR 800.5(a)(2)(v), introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features, is also incorrect. The Authority needs to delineate character-defining features of the contributors to the NHLDand then from this foundation assess which would be affected by the project. Those effects must directly address contributing features as they relate to the visible, atmospheric, and audible elements of the property and assess how these same elements of the project will or will not affect the resource.

Guidelines for the Treatment of Cultural Landscapes

791-414 Given the absence of a comprehensive introduction of each of the contributing resources within the NHLD, the effects analysis is not structured to address any of the potential effects to the district sufficiently and avoids some potential effects altogether. While the effects analysis section refers to the *Guidelines for the Treatment of Cultural Landscapes,* as requested by NCC in our comments on the December 2018 FOE, the effects analysis does not fully incorporate the relevant guidelines into the analysis in concluding that there is no adverse effect to the La Paz NHLD/NM. As previously requested by NCC, the EIR/EIS and FOE must consider the following relevant guidelines:

1. Change and Continuity

There is a balance between change and continuity in all cultural resources. Change is inherent in cultural landscapes…in spite of a landscape's constant change, a property can still

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exhibit continuity of form, order, use, features, or materials. **Preservation treatments seek to secure and emphasize continuity.**

La Paz NHLD/NM's cultural landscape is the site of an important event or activity, reflects cultural traditions, and other patterns of settlement or land use. This significance is derived from local, regional, and national importance. The potential for the project to adversely affect the La Paz NHLD stems in part from the existing continuity in the cultural landscape that lends to the significance of the historic resource.

2. Geographical Context

The surroundings of a cultural landscape, whether an urban neighborhood or rural farming area … may contribute to its significance and its historic character and should be considered prior to treatment. The setting may contain component landscapes or features which fall within the property's historic boundaries. It also may be comprised of [*sic*] separate properties beyond the landscape's boundaries, and perhaps those of the National Register listing. The landscape context can include the overall pattern of the circulation networks, views and vistas into and out of the landscape, land use, natural features, clusters of structures, and division of properties.

The surroundings of La Paz NHLD/NM's cultural landscape contribute to its significance and need to be considered fully when assessing potential effects of the undertaking. The setting contains component landscapes or features that fall within the property's historic boundaries and outside the boundaries. The potential for the project to have an adverse effect on the La Paz NHLD and the significant setting that is beyond La Paz NHLD/NM's boundary must be adequately considered.

3. Use

Historic, current, and proposed use of the cultural landscape must be considered prior to treatment selection.

The EIR/EIS and FOE do not address whether there are potential impacts on the variety of uses outlined by the NCC above in the description of the property within the boundary of the La Paz NHLD/NM. The mission of the NCC is to promote and preserve the legacy of César Chávez through his images and words, as well as the grounds where he spent his last years, including the NM, where César Chávez's grave lies amidst the Memorial Gardens and where thousands of visitors pass through every year to pay homage. The NCC further honors César Chávez's work and legacy through the promotion and coordination of events throughout the year at the site. Days of service, student youth summits, educational workshops, group retreats and conferences, and private and public celebrations attract thousands of visitors to the historic site. Through all these efforts, the NCC carries on César Chávez's legacy of equipping and inspiring people from all walks of life to build better lives for themselves and their communities. By not fully documenting and addressing the variety of uses that are significant within and outside the boundary of the resource, the full potential for effects to use is not considered in the FOE.

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The FOE outlines how the NPS carried out a special resource study of sites related to the significance of the life of Chavez and the farm labor movement in order to determine appropriate methods for preserving and interpreting the sites but does not describe current and ongoing NPS planning for the La Paz NHLD/NM that is directly related to the resource and the proposed project. Lacking information about current planning and functions that the NPS oversees at the property, as well as the NCC operations and uses of the property, the effects analysis is simply not adequate or accurate. The conclusion cannot be made that the project will have no effects on the use of the property if the current use and ongoing planning efforts are not defined and considered.

The NCC provided information on the NCC Long-Term Interpretive Plan in its October 1, 2019, comment letter on the Design Options Screening Report and Addendum. The following information was presented in that comment letter and is repeated here because this information is not presented in the FOE documentation. In revising the FOE and considering the new preferred alternative, the Authority must consider the full extent of how the La Paz NHLD/NM is interpreted and used today and how those elements may evolve over time. In November 2018, the CCNM and Pacific West Regional Office of the NPS prepared the *NCC Long-Term Interpretive Plan* to provide information regarding the future direction of and planning considerations for the La Paz NHLD/NM. The Interpretive Plan identifies and directs long-term development plans for the La Paz NHLD/NM and notes that the NCC Master Plan and NPS Cultural Landscape Report will also both be updated.

The NPS owns and manages 1.9 acres of the national monument and retains a conservation easement over another 8.6 acres of the site for resource protection and access to other historically significant buildings, structures, and associated landscapes located adjacent to the NPS lands. A steady flow of approximately 17,000 visitors a year arrive at La Paz, and the NPS and NCC are tasked with producing and managing visitor experiences throughout the property.

In addition to the NCC's historic buildings, landscapes, and features, the Interpretive Plan notes that the park has chronological layers of history that predate La Paz, including its geology, use by American Indians, quarry, and tuberculosis sanatorium. Research and interpretation efforts will be made to more fully understand the history of the resource. Most of the significant buildings within the La Paz NHLD/NM are not currently open to or accessible to the public, and the NPS plans to make these resources more accessible to the public. The natural setting that existed at La Paz during Chavez's time continues to contribute to the sense of peace, tranquility, respite, and refuge that current residents and visitors value at La Paz. The Interpretive Plan considers opportunities to improve the interpretation of the cultural landscape in the historic district and to allow visitors to access more of the elements that tell its story.

Interpretive themes provide a framework for what the NPS seeks to share about a resource's purpose and significance. The Interpretive Plan outlines one theme, "La Paz as a peaceful refuge," as representing how La Paz fostered both work and creativity. Chavez planned his

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791-414 campaigns and found community but also sought refuge and recovery. A second theme, "La Paz as a peaceful landscape," notes that visitor experiences with mountains, trails, and cultivated gardens are essential to understanding the historic resource.

The NPS plans to assess all existing pathways, identify those with interpretive potential, and develop a schedule for maintenance to ensure safety, accessibility, and sustainability. The Interpretive Plan seeks to encourage able visitors to walk the monument through a comprehensive trail plan. A variety of trails will provide tranquility and reflection, physical activity, recreation, an opportunity to walk in the movement's footsteps, spiritual connection and renewal, and appreciation of the still-present natural environment surrounding La Paz. NPS also plans to make Helen's Park, the barbecue area, the Memorial Garden, and the Garden of the Southwest more accessible with signage to remind visitors of Chavez's connection with the environment of La Paz.

Improved access throughout the La Paz NHLD/NM on existing paths and trails and within gardens and other public open spaces may increase the potential for the project to introduce a visual impact. The ongoing plan to improve the visitor experience, while also revising and enhancing interpretive efforts related to the historic resource and cultural landscape, must be considered when assessing project impacts.

Analysis of Potential Effects of Project Alternatives

791-415 Until recently, the Authority was unclear on how to define effects as "direct" or "indirect," with this issue being clarified through discussions with consulting parties. The Authority also only recently determined that effects would not be significant and adverse. Throughout much of the consultation process to date, it was suggested that the Authority was aware of the significant adverse effects that the project would impose on the La Paz NHLD/NM. In light of the recent finding that the effect of the Refined CCNM Design Option would be non-adverse, it is imperative that a full understanding of how the Authority reached its conclusion for this and all alternatives be shared and based on documentation of the resource itself.

The EIR/EIS correctly states that Section 110(f) of the NHPA protects NHLs to a greater standard than other historic properties. Section 110(f) of the NHPA requires that federal agencies exercise a higher standard of care when considering undertakings that may "directly and adversely" affect NHLs. It also calls for the responsible federal agency to undertake, "to the maximum extent possible," planning and actions as may be necessary to minimize harm to such a landmark. The EIR/EIS then states that this applies only when an undertaking is both direct and adverse. The Authority contends that Alternatives 1, 2, 3, and 5 result in adverse visual and noise effects to La Paz, while the CCNM Design Option results in adverse visual effects to La Paz. The Authority also contends that the Refined CCNM Design Option would not introduce any adverse effect and was introduced through coordination and comments from consulting parties.

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791-415 While the NCC agrees with the EIR/EIS that the Refined CCNM Design Option accomplishes the most avoidance and minimization of effects, of the six alternatives described, we do not agree that it would result in no adverse effect to La Paz. Rather, the NCC requests that the Authority revise the EIR/EIS to be consistent with the April 2020 FOE that notes that the effect of the Refined CCNM Design Option would be non-adverse with the condition that continued consultation and engagement with consulting parties enable the further review of the design and construction of the project. While both documents need to be consistent and reflect the agreement with this condition, the NCC requests that the condition be revised in both documents to state that the condition is for the continued engagement of consulting parties with the addition of the following language: *through the design and construction of the project for the continued protection of the La Paz NHLD/NM*.

791-416 The NCC contends that the development of all analyzed alternatives within a tight geographical area in close proximity to the resource renders all of the alternatives more similar in potential effect than the Authority presents. The Refined CCNM Design Option is the least adverse to the La Paz NHLD/NM in terms of visual and audible effects; however, the NCC holds that this option will still be adverse. Much of the resource's significance is related to the cultural landscape within its boundaries and just beyond, with views from the Three Peaks to and from the resource and its many contributing buildings and structures. Without relying on a survey and analysis of character-defining features and how they contribute to the significance of the resource and given the 30 percent level of design to date, it is not possible to fully assess the potential for effects. The introduction of a high-speed rail system requiring massive construction in close proximity to the cultural landscape and within views surrounding the resource is enough information to suggest there is the potential for an adverse effect.

The EIR/EIS notes that the FOE documentation establishes the sources and methods the Authority used to analyze potential impacts to cultural resources. These methods apply to both NEPA and CEQA and describe the analysis of visual, audible, and vibration-related impacts on cultural resources related to both construction and operation. For purposes of this analysis, the EIR/EIS notes that a "direct" effect includes any effects involving physical encroachment (temporary or permanent) within the boundary of the historic property, as well as those that may not physically impact the historic property but would introduce visual or audible impacts that alter its character-defining features. An "indirect" effect includes reasonably foreseeable effects that would occur later in time (e.g., effects resulting from induced growth) or are farther removed in distance. The NCC contends that this is a problematic approach to considering effects and other consulting parties have also sought to clarify how the cultural landscape of the La Paz NHLD/NM is considered in the effects analysis throughout the Section 106 consultation process. The character-defining features of the historic resource have not been documented previously, nor by the Authority in the preparation of technical studies supporting the EIR/EIS. The entire effects and impacts analysis for the La Paz NHLD/NM is insufficient and inaccurate because of this lack of documentation.

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791-417 There is no avoiding the significant adverse effects and impacts that would impact the La Paz NHLD/NM if the Authority selects Alternatives 1,2, 3, 5 or the CCNM Option. These alternatives introduce unmitigable visual and audible impacts that would significantly alter the cultural landscape and views within and beyond the boundaries of the La Paz NHLD/NM. No amount of minimization efforts or appropriate mitigation would make those alternatives acceptable per the federal guidance on the appropriate treatment of historic resources.

The Refined CCNM Option is noted as the preferred alternative in the FOE and is the most successful alternative of those presented in the EIR/EIS to reduce potential impacts to the historic resource. While the Refined CCNM Option is less impactful than the earlier alternatives proposed, its alignment remains as restrictive as all of the alternatives the Authority has limited the project to when it runs adjacent to the La Paz NHLD/NM. The alternative was not designed collaboratively with the NCC and other consulting parties, but rather evolved from efforts by the NCC and other parties to move the project as far from the La Paz NHLD/NM as possible within the restrictive framework defined by the Authority. Project requirements and feasibility are certainly factors that limit the movement of the alignment within the area surrounding La Paz, but the endpoints framing the La Paz NHLD/NM have not been flexible. The result is a limitation on the extent of revision that can occur to the alternatives, which can only move so far north and south of the historic resource while the endpoints at Tehachapi to the east and around Highway 223 to the west remain the same. Within that limited approach other environmental factors including fault lines and lack of access to surrounding properties made any other alternative impossible.

Given the constrained alternative options presented to the NCC and consulting parties by the Authority, the consultation process has not led to genuine new alternatives that can be compared. Rather, a series of very similar alternatives with limited differences among them have been presented and the discussion has centered around which of those is least adverse.

791-418 While the EIR/EIS finds that Alternatives 1, 2, 3, and 5, as well as the CCNM Design Option, would each result in adverse visual effects to La Paz historic property, the Authority proposes that the CCNM Design Option would reduce noise and visual impacts to the La Paz NHLD/NM with the inclusion of a soundwall as a project feature to reduce the noise levels to a less than adverse level. In addition, the EIR/EIS proposes the implementation of mitigation measures that could further avoid, minimize, or mitigate adverse effects to this historic property, including visual screening (CUL-MM#9). To minimize and mitigate visual effects, the Authority may also consider design refinements and project features that could reduce visual effects. Further mitigation specific to noise (N&V-MM#1 through N&V-MM#6) and visual impacts (AVQMM#1 through AVQ-MM#7) are also noted as applicable to La Paz.

As part of its discussion of the CCNM Design Option, the EIR/EIS states that efforts between the Authority and consulting parties have identified other opportunities to avoid and minimize the project effects of this alternative and include visual minimizations such as the color of the

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791-418 viaduct and plant screening. The EIR/EIS notes that these are minimization efforts and project details rather than mitigation.

791-419 The EIR/EIS then presents the Refined CCNM Option, stating that none of the characteristics of the historic property that qualify it for inclusion in the NRHP would be affected in a manner that would diminish the integrity of the property's location, design, materials, workmanship, feeling, or association. Although the setting outside of La Paz would be altered, the EIR/EIS contends that alteration would be minimal, distant, and low on the horizon, only visible from a few locations within the historic property, and would not make the setting any less isolated. With the inclusion of the berm and soundwall as project features, audible effects would be avoided. As described in the EIR/EIS, the Refined CCNM Design Option would result in No Adverse Effect to La Paz.

The NCC categorically disagrees with both the finding related to the CCNM Design Option Alternative and Refined CCNM Design Option Alternative as they relate to the La Paz NHLD/NM. As long as the analysis of project effects by the Authority lacks consideration of the historic resource's character-defining features, there will not be an accurate assessment of effects. The NCC has also repeatedly and consistently called for a consideration of the boundaries of the resource with relation to its cultural landscape. Without such information the impact of the alternatives cannot be accurately assessed.

The NCC finds that both the CCNM Design Option and Refined CCNM Design Option would adversely affect and impact the La Paz NHLD/NM and that minimization efforts would not render the visual and audible effects of the alternatives less than adverse and significant. The NCC does not agree that a selection of plants and choice of color of the soundwall would lessen the impact rendered by the inclusion of the soundwall itself, and the significant changes required to the landscape by its introduction and construction.

In order to minimize or avoid the visibility of the Refined CCNM Design Option from the La Paz NHLD/NM, the project requires extensive earthworks in the form of an earthen berm. The earthen berm is described as 1,700 feet long and would vary in height from 10 to 80 feet above the existing ground surface. The berm is also described as needing to be constructed to the same height as the catenary for the high-speed rail, which is described in the main document as having a height of at least 20 to 30 feet. An estimated 2 to 14 million cubic yards of excess material would need to be removed and stockpiled under this design. Inadequate detail is presented about the extent of cut and fill and the design of the berm; such detail is needed to fully assess effects of this major design feature on the La Paz NHLD/NM. Consideration of how this construction technique alters dust, noise, vibration, truck trips, and construction schedule is also not included.

Taking at face value the notion that the earthen berm would be the only visible element introduced by the project, a 1,700-foot-long, 10- to 80-foot-tall earthen berm (required to be at least as tall as a catenary) is a substantial visual intrusion to a landscape that has otherwise not

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791-419 been altered since Chavez's time. Given the extent of this artificial element that will be introduced into the landscape, modeling would be required in order to assess potential effects.

Minimization Measures

791-420 The NCC finds that minimization measures proposed in the EIR/EIS and FOE are not described adequately to substantiate the claim that the identified potential effects to the La Paz NHLD/NM would be minimized to a less than adverse effect. Significant concern is also raised with the introduction in the EIR/EIS and FOE of minimization measures that would be applied for the La Paz NHLD/NM where relevant project effects have not been identified by the Authority. These specific minimization efforts, related to dust mitigation and truck and construction schedules, are identified for effects to the La Paz NHLD/NM and yet the Authority has not identified those effects specific to the resource. The inclusion of this information in the EIR/EIS and FOE leads the NCC to wonder if the Authority is aware of dust, vibration, and construction effects to the La Paz NHLD/NM that are not shared in the documentation and detailed in the effects analysis.

III. Ongoing Consultation Through Design and Construction of the Project

791-421 The NCC does not agree with these key findings as presented in the EIR/EIS and in the FOE. The Authority relies on insufficient documentation and effects analysis to reach the conclusion that the Refined CCNM option would be non-adverse to the La Paz NHLD/NM. The NCC notes the advancement of the design level to 30 percent for the area surrounding La Paz compared to the 15 percent reached elsewhere, an effort achieved through Section 106 consultation.

Considering the level of detail that remains to be developed, the NCC agrees with the April 2020 FOE inclusion of "with conditions" in the finding of "no adverse effect." The FOE notes that the Authority will impose conditions to require the continued engagement of consulting parties and subsequent review of plans by the SHPO and consulting parties as the project design is advanced beyond its current level of 30 percent. The EIR/EIS must be revised to reflect this conditional finding as stated in the FOE. The EIR/EIS and FOE need to be consistent in this important finding.

In addition to the need for the finding presented in the EIR/EIS and FOE to include "with conditions," the NCC requests a revision to the conditional language to read: "*no adverse effect with condition of continued engagement through the design and construction of the project for the continued protection and preservation of the La Paz NHLD/NM*." The NCC will be submitting a response to the April 2020 FOE and will include this comment. The engagement of consulting parties in ongoing review is the means by which the protection and preservation of the resource will be ensured, along with the minimization measures that will keep each aspect of the project's potential effects under careful review and minimized to a less than adverse level.

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791-421 In addition, through Section 106 consultation it has been agreed that the Memorandum of Agreement for the Bakersfield-to-Palmdale segment will specifically outline the terms of the continued engagement of the Section 106 consulting parties with regards to the La Paz NHLD/NM. The NCC looks forward to collaborating with the Authority and consulting parties to draft a consultation plan that enables the project to continue to evolve past its current 30 percent design level in much the way that it already has through the Section 106 consultation effort, in which the NCC and other consulting parties have sought to render a non-adverse effect on the unprecedented historic resource (nationally and especially within the significant geographical footprint of the proposed project) in accordance with the goals of NEPA and CEQA.

We look forward to consulting further with the Authority and all consulting parties about the need to more fully consider this nationally significant historic resource and the information presented in the EIR/EIS and FOE as part of the ongoing Section 106 consultation process. We strongly encourage the Authority to consider the revisions requested in this EIR/EIS response letter so that the EIR/EIS and FOE remain consistent and ensure the ability for continued consultation efforts given the dynamic nature of the project and extraordinary national significance of the La Paz NHLD/NM.

Please feel free to contact us directly at the number above; our historic resource consultants at SWCA Environmental Consultants, Heather Gibson or Erica Kachmarsky, at 626-240-0587; or our special legal counsel Douglas Carstens at 310-798-2400, ext. 1.

Sincerely,

Paul Park

General Counsel

Cc:

Sarah C. Stokely, Advisory Council on Historic Preservation

Julianne Polanco, California State Historic Preservation Officer

Lucinda Woodward, California Office of Historic Preservation

Elaine Jackson-Retondo, National Park Service

Ruben Andrade, National Park Service

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Nancy Hendricks, National Park Service
Elizabeth Merritt, National Trust for Historic Preservation
Brian Turner, National Trust for Historic Preservation
Ron Sundergill, National Parks Conservation Association
Dennis Arguelles, National Parks Conservation Association
Cindy Heitzman, California Preservation Foundation

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791-392

The commenter states the National Chavez Center has reviewed the Draft EIR/EIS and has been involved in discussions about the alternatives and the potential effects on the national monument from the beginning to the present stage of design. The National Chavez Center will continue to be involved through construction.

The Authority recognizes the important role the National Chavez Center has played in the development of the analysis contained in this Final EIR/EIS and will continue to work with them on this project.

791-393

The concerns raised by the commenter are acknowledged. The Authority has made a reasonable good faith effort to consider the effects of the undertaking on La Paz and to reduce harm to La Paz to the maximum extent possible. As a result of these efforts, the Authority has determined that the undertaking would result in a no adverse effect on La Paz with conditions, a finding that has received the concurrence of the State Historic Preservation Officer (SHPO) and the National Park Service (NPS).

791-394

The discussion of La Paz in Section 3.17.9.2, Built Resources, of this Final EIR/EIS has been updated to include the no adverse effect with conditions determination for La Paz, consistent with the April 2020 Finding of Effect (FOE) for La Paz (Authority 2020c). As discussed in the FOE, the Authority, in the memorandum of agreement (MOA), will stipulate the continued engagement of consulting parties and milestone review of plans by the SHPO and consulting parties as the project design is advanced beyond its current level of 30 percent. As will be memorialized in the MOA and described fully in an associated Built Environment Treatment Plan (BETP), the Authority will work closely with the SHPO, Advisory Council on Historic Preservation (ACHP), and consulting parties to reach agreement on a comprehensive plan for design review at various stages of project development.

791-395

Refer to Standard Response BP-Response-Section 3.17 CUL-01: César Chávez National Monument.

Chapter 4 in Appendix C (FOE for La Paz) of the FOE (Authority 2020c) provides an extensive discussion of the development of the HSR alignment alternatives dating back to 2001, including summaries of the technical evaluations performed that screened out alternatives. The full descriptions of these alternatives are provided in the 2005 Statewide Program EIR/EIS (Authority and FRA 2005). A potential I-5 alignment was considered and eliminated from further study in the 2005 Statewide Program EIR/EIS. In that document, the Authority and FRA determined that I-5 is not a reasonable alternative for detailed consideration. Although the I-5 corridor could provide better end-to-end travel times between San Francisco and Los Angeles compared with alignment alternatives that follow the SR 99 corridor, it would not meet basic project objectives.

Since the designation of La Paz as a National Historic Landmark in 2012, the Authority has continued to examine alternatives that would avoid adverse effects on La Paz. These alternatives analyses are documented in Section 2.3.12, Range of Potential Alternatives, of this Final EIR/EIS and in the Design Options Screening Report for the César E. Chávez/Nuestra Señora Reina de la Paz National Historic Landmark (Authority 2019a) and the Addendum to the Design Options Screening Report for the César E. Chávez/Nuestra Señora Reina de la Paz National Historic Landmark (Authority 2019b). The FOE also concluded that the Refined CCNM Design Option does geographically avoid the resource because of the changes and refinements made to avoid and minimize effects on the historic property. Included among these changes was moving the alignment farther northeast, away from La Paz.

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791-396

The FOE (Authority 2020c) is consistent with the Programmatic Agreement (Authority 2011), applies the criteria of adverse effect (36 CFR 800.5), and follows the guidelines for documentation (36 C.F.R. 800.11). The technical reports presenting the identification of historic properties received SHPO concurrence and the FOE addresses those historic properties. The FOE also addresses the character-defining features of La Paz that are affected by the project, specifically the character-defining views identified in the Cultural Landscape Inventory (NPS 2014). As discussed in Chapter 8 of the FOE, the Refined CCNM Design Option minimized the introduction of visual elements into the overall setting of the property and avoided effects entirely from one character-defining view, the entrance driveway, where it is not visible. The project also minimized visual effects on the character-defining view of Three Peaks from La Paz by moving the project farther from the National Historic Landmark to the northeast. These changes included reducing the height of the structures and visually screening the project from La Paz by adding a vegetated berm. The Refined CCNM Design Option would not have an adverse effect on the National Historic Landmark because of these design changes. The project would not be visible from most vantage points within the National Historic Landmark, including the two character-defining views. Where the project is visible, it would be far enough in the distance and visually screened to the point that it would not rise to the level of a visual intrusion. The character-defining view of Three Peaks from La Paz would not be adversely affected because none of the project elements would be placed between La Paz and Three Peaks. Furthermore, the project would not be visible to an observer from Three Peaks looking toward La Paz because the Refined CCNM Design Option would be behind the observer. The setting of La Paz and the views would continue to be overwhelmingly dominated by the natural topography and vegetation of the foothills of the Tehachapi Mountains. Furthermore, introduction of a transportation corridor is consistent with the close proximity of other transportation corridors that pass by the National Historic Landmark within its setting. This discussion from the FOE has been added to Section 3.17, Cultural Resources, in this Final EIR/EIS.

As requested in the last paragraph of this comment, the Authority is developing an MOA, that will require the continued engagement of consulting parties and milestone review of plans by the SHPO and consulting parties as the project design is advanced beyond its current level of 30 percent. As will be memorialized in the MOA and described fully in an associated BETP, the Authority will work closely with SHPO, ACHP, and consulting

791-396

parties to reach agreement on a comprehensive plan for design review at various stages of project development.

791-397

The commenter acknowledges that Alternatives 1, 2, 3, 5, the CCNM Design Option, and the Refined CCNM Design Option are evaluated in the EIR/EIS and that the design options were introduced during the course of the Section 106 consultation process, and that engineering constraints informed the alignments of the alternatives. The consideration of alternatives is well documented in the EIR/EIS and FOE. Refer to Response to Comment 791-395, contained in this chapter.

791-398

Refer to Response to Comment 791-395, contained in this chapter, regarding consideration of alternatives that would follow different alignments than SR 58 and would thus avoid La Paz.

791-399

Section 3.17.9.2, Built Resources, of this Final EIR/EIS provides substantiated analysis that concludes that under the Refined CCNM Design Option, none of the characteristics of the historic property that qualify it for inclusion in the National Register of Historic Places would be affected in a manner that would diminish the integrity of the property's location, design, materials, workmanship, feeling, or association. Although the setting outside of La Paz would be altered, the alteration would be minimal, distant, and low on the horizon; would only be visible from a few noncharacter-defining locations within the historic property; and would not make the setting less isolated. With the inclusion of the berm and soundwall as project features, audible effects would be avoided. The discussion of La Paz in this Final EIR/EIS has been updated to reflect the analysis provided in the April 2020 FOE.

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791-400

The commenter states that "the NCC has agreed with other consulting parties that a finding of no adverse effect is only appropriate if it is accompanied by the condition that continued engagement between the Authority, the National Chavez Center, and other consulting parties will be conducted through the design and construction phases of the project". The Authority agrees with this and committed to the following in its letter to the SHPO dated May 28, 2020:

"As discussed in the FOE, the Authority, in the memorandum of agreement (MOA), will impose conditions to require the continued engagement of consulting parties and subsequent review of plans by the SHPO and consulting parties as the project design is advanced beyond its current level of 30 percent. As will be memorialized in the MOA and described fully in an associated Built Environment Treatment Plan (BETP), the Authority will work closely with SHPO, ACHP, and consulting parties to reach agreement on a comprehensive plan for design review at various stages of project development.

Upon receiving your concurrence with the conditional finding of no adverse effect for La Paz, the Authority will engage consulting parties in the development of the MOA and BETP and expect to execute the MOA and finalize the BETP in February 2021.

The MOA will include stipulations regarding design review, continued consultation, and dispute resolution along with required components of the BETP such as schedule, review milestones, communication plan, mitigation and avoidance procedures, inadvertent damage protocols, and a plan for reassessment of effects to La Paz if design changes occur. The MOA will also include a stipulation for resolution of disputes or disagreements.

The BETP will provide a detailed description of measures developed to avoid, minimize, or mitigate adverse effects on historic properties resulting from the undertaking. It will also include descriptions of protective measures that will be implemented to protect historic properties and to avoid unanticipated adverse effects on La Paz and other historic properties. The BETP will also describe specific and appropriate levels of investigations, preparations, and treatment measures that will be undertaken by HSR and their consultants prior to construction, during construction, and after construction."

791-400

791-401

The commenter states that the Preferred Alternative "is not thoroughly described and that has not been compared to other similar alternatives that the Authority proposed during the Section 106 consultation process."

The FOE provides a 30-page description of all elements of the Preferred Alternative, including the alignment and various features such as tunnels, viaducts, and traction power substations. Chapter 3 of this Final EIR/EIS provides a comparative analysis of the Preferred Alternative with the other B-P Build Alternatives considered. Other alternatives evaluated but screened out during the Section 106 consultation process are addressed in the Design Options Screening Report for the César E. Chávez/Nuestra Señora Reina de la Paz National Historic Landmark (Authority 2019a) and the Addendum to the Design Options Screening Report for the César E. Chávez/Nuestra Señora Reina de la Paz National Historic Landmark (Authority 2019b). A summary of the screening evaluation provided in these two reports has been added to Section 2.4.2.6, Refined CCNM Design Option, in this Final EIR/EIS. This summary discusses the criteria used in the evaluation that resulted in the Refined CCNM Design Option, which was then included in the EIR/EIS. With regard to the commenter's concern that "the project continues to be constrained to its original, very narrow margin around the La Paz NHLD/NM, with fixed points at Tehachapi to the east and around Highway 223 to the west, based on engineering constraints in that limiting boundary," the reasons for rejecting other alignments are explained in Section 2.3.12 in the EIR/EIS and Section 4 of the April 2020 FOE.

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791-402

The analysis in Section 3.16 of this Final EIR/EIS relied on visual simulations without a berm for a conservative analysis. From key viewpoints in La Paz, there is a slight distant view of the Revised CCNM Design Option but with the berm the Revised CCNM Design Option would not be visible. The berm itself was evaluated in the consideration of visual effects in the FOE for La Paz. The Authority is committed to developing an MOA, which that will require the continued engagement of consulting parties and milestone review of plans by the SHPO and consulting parties as the project design is advanced beyond its current level of 30 percent.

791-403

Refer to Response to Comment 791-395, contained in this chapter, regarding consideration of alternatives as part of the 2005 Statewide Program EIR/EIS that would follow different alignments than SR 58 and would thus fully avoid La Paz.

791-404

Refer to Responses to Comments 791-395 and 791-401, contained in this chapter, regarding consideration of alternatives as part of the 2005 Statewide Program EIR/EIS that would follow different alignments than SR 58 and would thus fully avoid La Paz. The Authority recognizes the national significance of La Paz as a National Historic Landmark, which is why the Authority has committed the time and funding resources to explore alternatives that would avoid and minimize adverse effects at La Paz while still achieving the project purpose and objectives.

As noted, alternatives evaluated but screened out during the Section 106 consultation process are addressed in the Design Options Screening Report for the César E. Chávez/Nuestra Señora Reina de la Paz National Historic Landmark (Authority 2019a) and the Addendum to the Design Options Screening Report for the César E. Chávez/Nuestra Señora Reina de la Paz National Historic Landmark (Authority 2019b). A summary of the screening evaluation provided in these two reports was added to Section 2.4.2.6, Refined CCNM Design Option, in this Final EIR/EIS. The summary discusses the criteria used in the evaluation that resulted in the Refined CCNM Design Option, which was then included in the EIR/EIS.

791-405

Refer to Response to Comment 791-395, contained in this chapter, regarding consideration of alternatives as part of the 2005 Statewide Program EIR/EIS that would follow different alignments than SR 58 and would thus fully avoid La Paz. The Authority recognizes the national significance of La Paz as a National Historic Landmark, which is why the Authority has committed the time and funding resources to explore alternatives that would avoid and minimize adverse effects at La Paz while still achieving the project's purpose and objectives.

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791-406

The September 4, 2018, memorandum cited in this comment included the following conclusion explaining why the "Tall Viaduct in Canyon" and "Longer Tunnel in More Mountainous Terrain" would not be evaluated any further:

Shifting the HSR alignment to the degree necessary to completely avoid indirect adverse effects on the Cesar E. Chavez National Monument is not practicable for the following reasons:

It would significantly increase the complexity and risk of constructing the Bakersfield to Palmdale Project Section.
It would significantly increase the construction cost of the Bakersfield to Palmdale Project Section as a result of longer tunnels, taller bridges, and associated infrastructure (an additional $650 to $750 million, compared to an additional $50 million for the minimization alternative).
It would increase operations and maintenance requirements due to longer access roads and longer tunnels.
It would increase general environmental impacts due to longer alignment length, longer access roads, and a wider alignment footprint.
It would require a new at-grade roadway crossing of the UPRR for an access road.
It would complicate the design of five evacuation zones, introducing new safety issues.
It would require construction on top of an existing UPRR tunnel.

Because of these factors, the Authority has determined that these alternatives are not viable.

791-407

The comment states that an alternative that avoids significant impacts may not be rejected merely because it would cost more and also requests that the Authority document what additional costs and reduction of environmental impacts resulted from previous alignment shifts to avoid Mojave (Authority 2012) and Rosamond (Authority 2016).

As noted in Response to Comment 791-406, contained in this chapter, other factors, including constructability, operations/maintenance, safety, and environmental impacts, were considered in rejecting the "Tall Viaduct in Canyon" and "Longer Tunnel in More Mountainous Terrain" avoidance alternatives.

As documented in the 2012 SAA, the selection of the "New T3" alignment (which avoided Mojave) for further study was based on the following reductions of environmental impacts:

Reduced traffic circulation, wetland, and waterway impacts
Fewer sensitive noise receptors along the alignment
Fewer conflicts with existing and planned wind turbines and solar farms
Avoids traversing BLM land in the Mojave area
Avoids land use and utility conflicts near Mojave Airport

As documented in the 2016 SAA (Appendix A, 2015 Alternatives Screening Memorandum), the selection of the "Alternative 2" alignment in place of the previous "T3" alignment for further study was based on reducing impacts on more densely populated portions of Rosamond, including areas with low-income and/or minority populations (environmental justice populations).

Additionally, the Authority discussed the Mojave and Rosamond alignment shifts with the consulting parties in an October 16, 2019 consultation meeting, during which HSR program staff explained that the costs associated with those alignment shifts were not likely calculated at the time they were developed, so it would be difficult to compare them with the cost estimates for the alignment shifts at La Paz. However, the HSR staff explained that based on the shorter alignment distances and fewer miles of engineered structures, the refined alignments in Mojave and Rosamond would likely cost less than

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791-407

the previous alignments in those vicinities.

It is also important to note that with the Refined CCNM Design Option, impacts on La Paz are less than significant under CEQA.

791-408

The commenter indicates that the Authority is required by CEQA and NEPA to evaluate a reasonable range of alternatives, including the I-5 Corridor, and states that the I-5 Corridor alignment was improperly omitted from the evaluation of avoidance options as part of the consultation performed, and ongoing, in accordance with Section 106. Further, the commenter states that the I-5 Corridor was never studied in a document subject to public review. Refer to the Response to Comment 791-395, contained in this chapter, for further information on the development of the HSR alignment alternatives. The Authority's evaluation of the I-5 Corridor alignment has been available for review and comment as part of the EIR/EIS process, including the 2005 Statewide Program EIR/EIS. Information regarding the I-5 Corridor alignment, and the reasons it has been rejected, is also included in this EIR/EIS.

791-409

The Draft EIR/EIS carefully considered the potential effects on La Paz. Effects from the proposed B-P Build Alternatives and CCNM Design Options were discussed in detail and compared within the Draft EIR/EIS. Section 3.17, Cultural Resources, and Chapter 4, Final Section 4(f)/6(f) Evaluations, of this Final EIR/EIS have been updated to incorporate additional information from the April 2020 FOE as well as from the Draft BETP. The BETP provides a detailed description of measures developed to avoid, minimize, or mitigate adverse effects on historic properties, including La Paz. It also includes descriptions of protective measures that will be implemented to protect historic properties and to avoid unanticipated adverse effects on La Paz and other historic properties. The BETP also describes specific and appropriate levels of investigations, preparations, and treatment measures that will be undertaken by the Authority and its consultants prior to, during, and after construction.

791-410

This comment is on the April 2020 FOE, stating that the FOE provides insufficient information on the character-defining features of La Paz necessary to evaluate effects on the resource and lacks discussion of the cultural landscape of La Paz. As noted in this comment, these concerns have been an ongoing topic during the Section 106 consultation process. The Authority has worked diligently to address these concerns and provide information sufficient for evaluating effects of the project on the character-defining features of La Paz. The Authority's efforts to identify the character-defining features of La Paz relied on robust documentation, including inventory, evaluation, and survey documents prepared for La Paz historic property. The National Register of Historic Places nomination, the National Monument designation, and documents including the Cultural Landscape Inventory and the Cultural Landscape Overview were specifically reviewed and used in the FOE analysis. A detailed review of these documents was also conducted to ensure that all significant aspects of the property are considered in the Final EIR/EIS analysis. These documents are considered sufficient to establish the effects analysis for La Paz. As such, the Authority's efforts to identify the character-defining features of La Paz were reasonably adequate. Efforts to identify historic properties and their character-defining features were documented in the Historic Architectural Survey Report (HASR; Authority 2018e), which received SHPO concurrence. As stated in Response to Comment 791-400, contained in this chapter, the Authority is committed to continued engagement with the consulting parties and milestone review of plans by the SHPO and consulting parties as the project design is advanced beyond its current level of 30 percent. As will be memorialized in the MOA and described fully in the BETP, the Authority will continue to work closely with SHPO, ACHP, and consulting parties to reach agreement on a comprehensive plan for design review at specific stages of project development.

Response to Submission 791 (Jairo Lopez, National Chavez Center/Cesar Chavez Foundation, April 28, 2020) - Continued

791-411

Section 3.17, Cultural Resources, and Chapter 4, Final Section 4(f)/6(f) Evaluations, of this Final EIR/EIS have been updated to incorporate additional information from the April 2020 FOE as well as from the BETP in support of a determination of no adverse effect with conditions. Under the Refined CCNM Design Option, none of the characteristics of the historic property that qualify it for inclusion in the National Register of Historic Places would be affected in a manner that would diminish the integrity of the property's location, design, materials, workmanship, feeling, or association. Although the setting outside of La Paz would be altered, the alteration would be minimal, distant, and low on the horizon; would only be visible from a few locations within the historic property; and would not make the setting any less isolated. With the inclusion of the berm and soundwall as project features, adverse audible effects would be avoided. This analysis was described in the April 2020 FOE and the SHPO and the NPS have concurred with the Authority's finding of no adverse effect on La Paz with conditions.

791-412

This comment is on the April 2020 FOE and stated that by focusing exclusively on specific viewpoints and not on actual contributing resources to the district and how they lend to its integrity and significance, many of the potential effects of the proposed project are completely left out of the EIR/EIS and FOE documentation, while others are minimized or misrepresented. Refer to Response to Comment 791-410, contained in this chapter. This Final EIR/EIS has been updated with information from the April 2020 FOE, which applied the criteria for adverse effect defined in 36 C.F.R. Part 800.5. The views shown in the visual simulations in the FOE were developed in consultation with SHPO and the consulting parties. The views include the two character-defining views, as well as additional vantage points from several contributing resources identified during consultation. The La Paz historic property has been thoroughly documented and evaluated in the National Register of Historic Places nomination, the National Historic Landmark nomination, and the Cultural Landscape Inventory prepared by the NPS (2014). The FOE fully analyzes all contributing elements of the property potentially affected by the project and adequately discusses La Paz in relation to the criteria of adverse effect.

791-413

As described in the FOE, the Refined CCNM Option would not physically alter or use La Paz in any way. Construction and operation of the Refined CCNM Design Option would not alter the character of the property's use because no aspect of the project will restrict access to the property or materially alter the property. The project would not deter the property from being used as a refuge or retreat because the character of the setting would not materially change from its condition during the period of significance, which included two busy transportation corridors: a highway and a freight rail line. The project would be more than 0.5 mile from the boundary of La Paz, well beyond the existing freight rail line. As such, the introduction of an HSR line that is visually screened by a vegetated berm and mitigated for noise by a soundwall would allow the setting of the property to provide the same qualities of refuge and retreat it provided during the historic period and that it provides in the present. This covers application of the criteria of adverse effect under 36 C.F.R. 800.5(a)(2)(iv).

The only part of the project that would be visible from La Paz is a contoured vegetated berm that completely shields the at-grade rail of the project from view by observers at La Paz. The tunnel portal, the viaduct over Tweedy Creek, the nearest communications tower, and the nearest paralleling station would not be visible from La Paz because they are shielded by topography. Project noise would be reduced to no effect with the inclusion of the berm along the cut/fill sections of at-grade rail and a soundwall on the Tweedy Creek viaduct. This covers application of the criteria of adverse effect under 36 C.F.R. 800.5(a)(2)(v). For the full application of the criteria of adverse effect, refer to the FOE, Appendix C.

Response to Submission 791 (Jairo Lopez, National Chavez Center/Cesar Chavez Foundation, April 28, 2020) - Continued

791-414

IAMFs were developed as part of the proposed project. Specifically, CUL-IAMF#4, Relocation of Project Features when Possible, has been accomplished through the development of the Refined CCNM Design Option in response to concerns raised by consulting parties. Relocating project features is consistent with the NPS Guidelines for the Treatment of Cultural Landscapes that advises consideration of factors such as the geographical context and use. The analysis recognizes that the geographical context of the La Paz cultural landscape includes views and natural features, and documents the actions taken to minimize and avoid adverse effects by the implementation of CUL-IAMF#4. Furthermore, the project would not use any part of La Paz, and implementation of CUL-IAMF#4 has avoided and minimized any potential changes to the use of the property as a refuge or retreat by relocating project features further distant into the setting through minimizing and avoiding visual and noise intrusion.

791-415

IAMFs were developed as part of the proposed project. Specifically, CUL-IAMF#4, Relocation of Project Features when Possible, has been accomplished through the development of the Refined CCNM Design Option in response to concerns raised by consulting parties. Relocating project features is consistent with the NPS Guidelines for the Treatment of Cultural Landscapes that advises consideration of factors such as the geographical context and use. The analysis recognizes that the geographical context of the La Paz cultural landscape includes views and natural features, and documents the actions taken to minimize and avoid adverse effects by the implementation of CUL-IAMF#4. Furthermore, the project would not use any part of La Paz, and implementation of CUL-IAMF#4 has avoided and minimized any potential changes to the use of the property as a refuge or retreat by relocating project features further distant into the setting through minimizing and avoiding visual and noise intrusion.

791-416

The Authority's efforts to identify historic properties for this project included inventory and evaluation of cultural resources. That effort included both the incorporation of the robust documentation previously prepared for the La Paz property, as well as inventory and evaluation analysis conducted for this project. The HASR (Authority 2018e) identified the character-defining features of the La Paz property based on the previous documentation and survey efforts. The results of the research and identification effort were presented in the HASR, which received SHPO concurrence. The combined project identification work and previous documentation presented in the HASR were used to ensure all significant aspects of La Paz were considered in the analysis of effects. These included the National Register of Historic Places nomination, the National Historic Landmark nomination, the National Monument designation, the Cultural Landscape Inventory and the Cultural Landscape Overview, among other studies. This documentation and the conclusions of the HASR were incorporated and cited in the April 2020 FOE, which also received SHPO concurrence. The Authority maintains this is sufficient documentation on which to establish the effects analysis for La Paz.

791-417

Refer to Standard Response BP-Response-Section 3.17 CUL-01: César Chávez National Monument.

This comment again expresses concern regarding the geographic limits wherein alternatives that fully avoid La Paz were not considered. Refer to Responses to Comments 791-395 and 791-401, contained in this chapter.

791-418

The Authority acknowledges that it has worked with consulting parties to identify opportunities to avoid and minimize the project's effects. The Authority agrees that the EIR/EIS proposes the implementation of mitigation measures that could further avoid, minimize, or mitigate adverse effects on this historic property, including visual screening (CUL-MM#9), and proposes to minimize and mitigate visual effects by potentially considering design refinements and project features that could reduce visual effects. Further mitigation specific to noise (N&V-MM#1 through N&V-MM#6) and visual impacts (AVQ-MM#1 through AVQ-MM#7) are also noted as applicable to La Paz.

Response to Submission 791 (Jairo Lopez, National Chavez Center/Cesar Chavez Foundation, April 28, 2020) - Continued

791-419

The significance of La Paz has been studied and evaluated in detail, as presented in the La Paz National Register of Historic Places nomination, the subsequent National Historic Landmark nomination and park foundation documents, and a Cultural Landscape Inventory prepared by the NPS. The character-defining features, boundary, significant themes, and periods of significance as defined in these studies were used in the FOE and the EIR/EIS (refer to the References section of the FOE). The studies identify and define the boundary of La Paz as a historic property and conclude that the current defined boundary includes all features that contribute to the historic property. The landscape inventory also concludes that the adjacent lands outside the boundary do not contribute to the significance of the historic property (NPS 2014: 13). The landscape inventory identifies many contributing elements and character-defining features, and the FOE identified which contributors and character-defining features could potentially be adversely affected by the project. The conclusion was that no physical alteration would occur to the boundary or contributing elements of the La Paz historic property within the boundary. With conditions imposed to address noise and visual elements, the FOE also concluded that the project would have no adverse effect on the setting or the character-defining features of La Paz. The analysis presented is therefore complete.

The FOE presented the analysis of the potential noise and visual effects, and also provided visual simulations, showing the avoidance and minimization features in place. As the design progresses beyond 30 percent, the milestone reviews will include updating the visual simulations with the updated design data to ensure that the avoidance and minimization conditions are met. The berm itself will be consistent with existing hilly topography, scale, and native vegetation. The visual simulations depict what will be visible to observers from the various vantage points on the La Paz property, and this will continue to be updated in subsequent milestone reviews. The FOE concluded that the conditions imposed, including the soundwalls and vegetated berm, along with the other elements of the design refinements included in the Refined CCNM Design Option, would result in no adverse effect. SHPO concurred in the FOE findings. Refer to Response to Comment 791-396, contained in this chapter, as well.

791-420

In the MOA and the BETP, the Authority has stipulated the continued engagement of consulting parties and milestone review of plans by the SHPO and consulting parties as the project design is advanced beyond its current level of 30 percent. The BETP will describe all minimization treatments and will include construction dust control and all other treatments identified for implementation at the La Paz historic property, as well as planning for response to unanticipated effects. It should be noted that Section 3.3 of this Final EIR/EIS discusses dust control measures that will be required of the project (AQ-IAMF#1) as well as regulatory requirements to control dust emissions (Section 3.3.2.3 of this Final EIR/EIS). Section 3.4.6.3 of this Final EIR/EIS discusses vibration impacts associated with the project are discussed under Impacts N&V #2 and N&V #5 and identifies that construction related and operations impacts would be less than significant with the implementation of Mitigation Measures N&V-MM #2 and N&V-MM #5, respectively. All potential impacts resulting from the Bakersfield to Palmdale Project Section known to the Authority have been disclosed.

791-421

Section 3.17, Cultural Resources, and Chapter 4, Final Section 4(f)/6(f) Evaluations, of this Final EIR/EIS have been updated to incorporate additional information from the April 2020 FOE as well as from the BETP in support of a determination of no adverse effect with conditions. As requested in this comment, the condition for the continued engagement of consulting parties has added, “through the design and construction of the project for the continued protection of the La Paz NHLD/NM” to this Final EIR/EIS.

Submission 778 (Betsy Merritt, National Trust for Historic Preservation, April 28, 2020)

Bakersfield - Palmdale - RECORD #778 DETAIL

Status :	Action Pending
Record Date :	4/30/2020
Response Requested :	
Affiliation Type :	Business and/or Organization
Submission Date :	4/28/2020
Interest As :	Business and/or Organization
Submission Method :	Project Email
First Name :	Betsy
Last Name :	Merritt
Professional Title :	Deputy General Counsel
Business/Organization :	National Trust for Historic Preservation
Address :	2600 Virginia Ave., NW
Apt./Suite No. :	Suite 1100
City :	Washington
State :	DC
Zip Code :	20037
Telephone :	202-297-4133
Email :	emerritt@savingplaces.org
Cell Phone :	
Email Subscription :	
Add to Mailing List :	
EIR/EIS Comment :	Yes
Attachments :	NTHP comments on Draft EIR-EIS for Cal. High-Speed Rail Bakersfield-Palmdale Apr 28 2020.pdf (198 kb)

Stakeholder Comments/Issues :

Please see the attached comments from the National Trust for Historic Preservation on the Draft EIR/EIS for the Bakersfield-to-Palmdale section of the California High-Speed Rail project.
Thank you for considering these comments.

778-422

Sincerely,
Betsy Merritt

Elizabeth Sherrill Merritt, Deputy General Counsel
National Trust for Historic Preservation
2600 Virginia Ave. NW, Suite 1100
Washington, DC 20037
202-297-4133

[https://nthp-savingplaces.s3.amazonaws.com/2017/02/06/13/21/32/409/NTHP_LOGO_RGB_Tagline_email.png]

National Trust *for* Historic Preservation
Save the past. Enrich the future.

April 28, 2020

Brian Kelly
Chief Executive Officer
California High-Speed Rail Authority
770 L Street, Suite 620 MS-1
Sacramento, CA 95814

Via email: Bakersfield_Palmdale@hsr.ca.gov

Re: Comments on Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the California High-Speed Rail Project, Bakersfield-to-Palmdale Section

Dear Mr. Kelly:

The National Trust for Historic Preservation[1] submits these comments in response to the Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Bakersfield-to-Palmdale Section of the California High-Speed Rail project. In addition, we support the detailed comments submitted by the National Chávez Center. Our review is focused on potential impacts to the Nuestra Señora Reina de la Paz, a National Historic Landmark (NHL), and the César E. Chávez National Monument (jointly referred to as the La Paz NHL/Chávez National Monument). The extraordinary national historic significance of this site warrants the highest degree of protection from adverse impacts, and the serenity of the setting surrounding the site is a fundamental character-defining feature that is especially vulnerable to impacts from noise and visual intrusions.

The EIR/EIS Does Not Present Sufficient Documentation or Analysis to Support a Finding Of No Adverse Effect to the La Paz NHL District and the César E. Chávez National Monument.

Since the February 2020 Draft EIR/EIS was issued almost two months *before* the release of the revised April 2020 Finding of Effect (FOE) under Section 106 of the NHPA, there is a discrepancy between the two documents, regarding the effects of the project on the La Paz NHL/Chávez National Monument. This discrepancy needs to be reconciled by revising the EIR/EIS.

[1] The National Trust for Historic Preservation in the United States is a private nonprofit organization chartered by Congress in 1949 to "facilitate public participation" in the preservation of our nation's heritage, and to further the historic preservation policy of the United States. *See* 54 U.S.C. § 312102(a). The National Trust has participated since December 2018 as a consulting party in connection with the review of this project under Section 106 of the National Historic Preservation Act, *id.* § 306108.

The Watergate Office Building 2600 Virginia Avenue NW Suite 1100 Washington, DC 20037
E law@savingplaces.org P 202.588.6035 F 202.588.6272 www.savingplaces.org

Submission 778 (Betsy Merritt, National Trust for Historic Preservation, April 28, 2020) - Continued

778-422 The Draft EIR/EIS is premised on a finding that the Refined CCNM Design Option would have No Adverse Effect on the La Paz NHL/Chávez National Monument. By contrast, the No Adverse Effect finding in the April 2020 FOE for the Refined CCNM Design Option is dependent upon compliance with specific conditions. Those conditions include the continued engagement and subsequent reviews of plans by the State Historic Preservation Officer (SHPO) and consulting parties as the project design is advanced beyond the current level of 30 percent, in order to ensure that adverse impacts will be avoided and minimized as the design plans are refined. This "Conditional" No Adverse Effect finding, which is also explicitly reflected in the determinations by the National Park Service, represents a crucial distinction from the unconditional determination in the Draft EIR/EIS, and it must be revised.

778-423 ***Construction Impacts.*** The construction impacts are one aspect of the proposed project that are inadequately evaluated. Ironically, the massive earthen berm that is proposed near the La Paz NHL/ Chávez National Monument, in order to reduce the visual impact of the project *post*-construction, would substantially exacerbate the adverse impacts of the construction process itself. The earthen berm is described as 1,700 feet long and up to 80 feet high. An estimated 2 to 14 million cubic yards of excess material would need to be removed and stockpiled under this design. The adverse impacts of this massive construction process on the La Paz NHL/Chávez National Monument would be extreme, including dust, noise, vibration, and traffic from the massive trucks carrying the dirt.

778-424 ***Cultural Landscape and Setting.*** Another issue that fails to receive adequate consideration in the Draft EIR/EIS is the adverse impact of the project on the setting and the cultural landscape that extends beyond the designated boundaries of the La Paz NHL/Chávez National Monument, and is integral to the historic significance of the site. Instead, the analysis of impacts tends to be improperly limited to the political boundaries of the designated National Monument,[2] and the designated boundaries of the NHL District,[3] without considering the inherent significance of the surrounding landscape. Among other things, this landscape served as a personal refuge for César Chávez, who frequently walked among the hills and savored the serenity of those views. In addition, the 21st-century visitors to the La Paz NHL/Chávez National Monument will not be limited to the designated boundaries, but many will be spending time walking in the surrounding landscape, literally following in the footsteps of César Chávez. As a result, the setting is intertwined with so many elements of the site's overall significance that the analysis of visual impacts should not be limited to a restricted set of viewpoints, but instead, needs to be more holistic, and needs to be based on additional research rather than just preexisting documentation.

[2] The Antiquities Act requires that National Monument designations must "be confined to the *smallest area* compatible with the proper care and management of the objects to be protected," 54 U.S.C. § 320301(b) (emphasis added). Accordingly, this designation by its very nature encompasses less than the full area of historic significance.

[3] The NHL District also does not include the entire area that has historic significance, but only the area with the most "exceptional value to the nation as a whole," 36 C.F.R. § 65.2(a), and with the highest degree of integrity, *see id.* § 65.4(a).

778-425 **The Draft EIS/EIR Fails to Consider a True Avoidance Alternative.**

We appreciate the efforts that have been made to reduce the potential adverse effects of the project on the La Paz NHL/Chávez National Monument, including the most recent proposals to add a sound wall, and a large landscaped berm as a visual barrier. However, the chosen corridor is very narrowly defined, because the topography, along with seismic and engineering constraints, severely limit the ability to realign the route. As a result, even the least harmful alignments developed to date within that narrow corridor will not ensure that adverse impacts will be avoided.

778-426 Furthermore, the Refined CCNM Design Option is not necessarily the least harmful alternative within that narrow corridor. For example, Option J was at a lower elevation, and thus would not require the same degree of earthwork to shield its visual impact. And Option B was further away from the La Paz NHL/Chávez National Monument. A more detailed comparison of the Refined CCNM Design Option to Option B, Option J, and "Refined Option D" should be included in the EIR/EIS and FOE documentation, in order to ensure that adverse impacts are minimized.

778-427 The National Chavez Center has provided detailed information, both in its current comments on the Draft EIR/EIS, and in prior comments, about the advantages of the I-5 Corridor as an alternative that would truly "avoid" the adverse impacts, and would likely qualify as the Least Environmentally Damaging Practicable Alternative (LEDPA), under 40 C.F.R. § 230.10(a). Yet the I-5 Corridor has not been adequately evaluated, and was prematurely dismissed. As the Center discusses in detail, agencies are required to consider a "reasonable range" of alternatives, and an alternative cannot be deemed "infeasible" merely because it fails to meet every single purpose and objective of the agency. An alternative that avoids significant impacts may not be rejected merely because it would cost more. Rather, the agency must show that the additional costs are so extreme that they would render it impractical to proceed with the project.

Conclusion

Thank you for considering the comments of the National Trust for Historic Preservation.

Sincerely,

Elizabeth Merritt

Elizabeth S. Merritt
Deputy General Counsel

cc: Sarah C. Stokely, Jaime Loichinger, and Reid Nelson, Advisory Council on Historic Preservation
Stephanie Perez, Environmental Protection Specialist, Federal Railroad Administration

Submission 778 (Betsy Merritt, National Trust for Historic Preservation, April 28, 2020) - Continued

Katherine Zeringue, Federal Preservation Officer, Federal Railroad Administration
Elaine Jackson-Retondo, National Park Service
Ruben Andrade, National Park Service
Nancy Hendricks, National Park Service
Brett Rushing, Cultural Resources Program Manager,
California High-Speed Rail Authority
Julianne Polanco, California SHPO
Kathleen Forrest, California Office of Historic Preservation
Paul Park, General Counsel, National Chávez Center
Doug Carstens, Chatten-Brown, Carstens & Minteer LLP

Response to Submission 778 (Betsy Merritt, National Trust for Historic Preservation, April 28, 2020)

778-422

The comment states that the Draft EIR/EIS does not present sufficient documentation or analysis to support a finding of no adverse effect on the La Paz National Historic Landmark District and the Cesar E. Chavez National Monument because the EIR/EIS text is inconsistent with the finding of no adverse effect with conditions presented in the April 2020 FOE. Table 3.17-3, Section 106 Technical Reports and Concurrence, in this Final EIR/EIS has been revised to reflect the FOE date of April 2020. The text in this Final EIR/EIS has also been revised for consistency with the finding of no adverse effect with conditions from the April 2020 FOE.

778-423

Although construction of the earthen berm would require significant earthwork, the Draft EIR/EIS presents IAMFs and mitigation measures to avoid, minimize, and mitigate dust, noise, vibration, and traffic impacts during construction. TR-IAMF#1 through TR-IAMF#9, TR-IAMF#11, and TR-IAMF#12 provide specific requirements that would address potential circulation and emergency access impacts related to road closures, construction vehicles and equipment, staging areas, and reconstruction and construction of transportation facilities. AQ-IAMF#1, Fugitive Dust Emissions, would be employed during construction to control fugitive dust emissions. Mitigation Measure F-B LGA N&V-MM#1 and N&V-MM#1 would be implemented to ensure that all construction noise would not exceed FRA standards and that construction noise impacts would remain less than significant under CEQA. Additionally, and as discussed in the April 2020 FOE, N&V-IAMF#1 would be implemented to minimize noise and vibration impacts within 1,000 feet of sensitive receptors, while TR-IAMF#7 would be implemented to identify construction truck routes that could be affect sensitive receptors.

778-424

The commenter states that the adverse impact of the project on the setting and the cultural landscape that extends beyond the designated boundaries of the La Paz National Historic Landmark/Chavez National Monument fails to receive adequate consideration in the Draft EIR/EIS. The commenter suggests a holistic approach to visual impacts, including additional research, rather than relying on pre-existing documentation and a restricted set of key viewpoints. Refer to Response to Comment 791-414, contained in this chapter, which addresses these same concerns. The discussion of La Paz in Section 3.17, Cultural Resources, of this Final EIR/EIS has been revised to include the expanded discussion of the setting of La Paz provided in the April 2020 FOE. Comments regarding further identification and evaluation of character-defining features, contributing resources, and the surrounding landscape beyond the national historic landscape boundary were taken into account but did not result in revisions to the FOE. The significance of La Paz was thoroughly evaluated in the National Register nomination, the National Historic Landmark nomination, and a recent Cultural Landscape Inventory by the NPS (NPS 2014). The FOE provided analysis of the historic property and its character-defining features, including views of and from the project. These efforts concluded that the current historic property boundary includes all features that contribute to the property and also concluded that the adjacent lands do not contribute to the significance of the historic property.

778-425

Refer to Standard Response BP-Response-Section 3.17 CUL-01: César Chávez National Monument.

This comment expresses concern regarding the geographic limits wherein alternatives that fully avoid La Paz were not considered. Refer to Responses to Comments 791-395 and 791-401, contained in this chapter, which address this same issue.

Response to Submission 778 (Betsy Merritt, National Trust for Historic Preservation, April 28, 2020) - Continued

778-426

Refer to Standard Response BP-Response-Section 3.17 CUL-01: César Chávez National Monument.

The commenter suggests that the Refined CCNM Design Option is not the least harmful alternative, and that a more detailed comparison of the Refined CCNM Design Option to Option B, Option J, and Refined Option D should be included in the Final EIR/EIS and FOE. Alternatives evaluated but screened out during the Section 106 consultation process are addressed in the Design Options Screening Report for the César E. Chávez/Nuestra Señora Reina de la Paz National Historic Landmark (Authority 2019a) and the Addendum to the Design Options Screening Report for the César E. Chávez/Nuestra Señora Reina de la Paz National Historic Landmark (Authority 2019b). A summary of the screening evaluation provided in these two reports has been added to Section 2.4.2.6, Refined CCNM Design Option, in this Final EIR/EIS. This summary discusses the criteria used in the evaluation that resulted in the Refined CCNM Design Option, which was then included in the EIR/EIS.

Additionally, the visual simulations included in Attachment A of the FOE show that Option B and Option J would be more visually noticeable than the Refined CCNM Design Option.

778-427

Refer to Standard Response BP-Response-GENERAL-01: Alternatives.

A potential I-5 alignment was considered and eliminated from further study in the 2005 Statewide Program EIR/EIS. In that document, the Authority and FRA determined that I-5 is not a reasonable or practicable alternative for detailed consideration. Although the I-5 corridor could provide better end-to-end travel times between San Francisco and Los Angeles compared with alignment alternatives that follow the SR 99 corridor, as stated on Page 3.15-29 of the 2005 Statewide Program EIR/EIS the I-5 route would have the potential to impact slightly more sensitive plant communities, wetlands, and non-wetland waters than the SR 58/Soledad Canyon route. As stated in Chapter 2 of this Final EIR/EIS, the Authority and FRA relied on program EIR/EIS documents to select the SR 58/Soledad Canyon route for further study between Bakersfield and Palmdale. Therefore, the project EIR/EIS for the Bakersfield to Palmdale Project Section focuses on alignment alternatives along the general SR 58 and Union Pacific Railroad (UPRR) corridor.

Additionally, the 2005 Statewide Program EIR/EIS identified that the I-5 Corridor would have crossed five or six major seismic faults through the Tehachapi Mountains and would have included 23 miles of tunnels, some longer than 5 miles each. This option would have followed the San Gabriel fault for over 20 miles, triggering high seismic and constructability issues. This section would have sustained grades above 3.0 percent for over 20 miles, reducing train speed and increasing power consumption, Therefore from a seismic safety and constructability standpoint, this alignment did not meet basic project objectives.

The Authority's evaluation of the I-5 Corridor alignment has been available for review and comment as part of the EIR/EIS process, including the 2005 Statewide Program EIR/EIS. Information regarding the I-5 Corridor alignment, and the reasons it has been rejected, is also included in this Final EIR/EIS.

Submission 763 (Ben Barry, Pacific Crest Trail Association, April 27, 2020)

Bakersfield - Palmdale - RECORD #763 DETAIL

Status :	Action Pending
Record Date :	4/27/2020
Response Requested :	
Affiliation Type :	Business and/or Organization
Submission Date :	4/27/2020
Interest As :	Business and/or Organization
Submission Method :	Project Email
First Name :	Ben
Last Name :	Barry
Professional Title :	Southern Sierra Regional Representative
Business/Organization :	Pacific Crest Trail Association
Address :	11380 Kernville Road
Apt./Suite No. :	
City :	Kernville
State :	CA
Zip Code :	93238
Telephone :	916-847-4393
Email :	bbarry@pcta.org
Cell Phone :	
Email Subscription :	Bakersfield to Palmdale
Add to Mailing List :	Yes
EIR/EIS Comment :	Yes
Attachments :	PCTA Response - HSR Burbank to Palmdale EIS.pdf (816 kb)

Stakeholder Comments/Issues :

Hello,

Please see the attached PCTA response to the HSR Burbank to Palmdale EIS.

Benjamin Barry
Southern Sierra Regional Representative
Pacific Crest Trail Association
11380 Kernville Road
Kernville, CA 93238
916-847-4393 main line
www.pcta.org<http://www.pcta.org>

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Pacific Crest Trail Association

April 27, 2020

California High-Speed Rail Authority
770 L Street, Suite 620 MS-1
Sacramento, CA 95814

This letter submitted to: *Bakersfield_Palmdale@hsr.ca.gov*

RE: Response to Draft EIR/EIS for the Bakersfield to Palmdale Project Section

Dear California High-Speed Rail Authority,

I am writing on behalf of the 13,300 member Pacific Crest Trail Association (PCTA). PCTA is the Forest Service's primary private partner in the management and maintenance of the Pacific Crest National Scenic Trail (PCT). The foundation for this private-public partnership in the operation of National Scenic Trails dates back to the 1968 National Trails System Act. Section 11 of the Act, titled "Volunteer Trails Assistance" states in Sec. 11(a), "… the head of any Federal agency administering Federal lands, are authorized to encourage volunteers and volunteer organizations to plan, develop, maintain, and manage, where appropriate, trails throughout the Nation." Sec. 11(b) continues, "Each Secretary or the head of any Federal land managing agency, may assist volunteers and volunteer organizations in planning, developing, maintaining, and managing trails." As such, it is PCTA's role to work with the Forest Service, Bureau of Land Management, and National Park Service to ensure the best possible management of the PCT and the experience it affords trail users, year-round. As you are aware, PCTA, the Forest Service, Bureau of Land Management, and the California High-Speed Rail Authority (HSRA) have been working collaboratively on this project for several years and have established a strong partnership with the management and planning of the PCT.

763-808

Thank you for the opportunity to comment on the Draft EIR/EIS for the Bakersfield to Palmdale Project Section. This project has the potential to affect the experiences of thousands of PCT users, primarily hikers and horseback riders by impacting safety, visual resources, and acquired easements. Users of the PCT, as well as the public at large, will be relying on mitigation measures to ensure this project has the lowest possible impact on the resources and values which make the PCT such an incredible experience and phenomenal public resource, and why it was designated as a National Scenic Trail by Congress in 1968.

Through frequent communications, meetings, and field work, many of the concerns expressed about the PCT have been addressed in this document and the HSRA team should be lauded for their efforts. Our comments in this document first address the small changes and corrections needed for chapter 3 and then more substantive improvements for chapter 4. They conclude with the overall impact to the PCT and proposed mitigation.

763-809

Comments Regarding Volume 1: Report, Section 3.15 Parks, Recreation, and Open Space

The analysis in Chapter 3 was informed by over four years of dialogue and fieldwork between HSRA, PCTA, U.S. Forest Service, and the Bureau of Land Management. While we make suggestions for

11380 Kernville Road
Kernville, CA 93238
916-847-4393
www.pcta.org

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763-809 wording changes in the document to correct errors or clarify statements, we agree with the overall finding that the project's effects to the PCT are significant and unavoidable.
Numerous schematics are used throughout this section which show areas permanently and temporarily impacted in purple and yellow, respectively. In order to effectively comment on these impacted areas in a way that improves the EIS, impacted areas should be labeled more expressly and the specific impact identified. Using figure 3.15-4 as an example, we have recommended a reroute of the PCT to avoid certain impacted areas; however, the current proposed PCT realignment now crosses over an unspecified permanent impact area. Since one of the goals of the realignment process is to avoid said impact areas, it is necessary that we know what specifically is impacting this area overlaying the proposed PCT realignment.

763-810 **3.15.2.1 Federal**
This section summarizes numerous laws and regulations relating to the project, including the National Trails System Act. We recommend including the following regulations and policies to improve direction and context for the HSR project, along with suggested paraphrasing.

- Executive Order 13195 - "Trails for America in the 21st Century"
  Passed by President Bill Clinton in 2001, this Executive Order gives guidance on the "common goal of better establishing and operating America's national system of trails." It directs Federal agencies to cooperate with Tribes, States, local governments, and interested citizen groups to "protect, connect, promote and assist trails of all types throughout the United States." Most relevant to this project, Order 13195 calls for protecting trail corridors associated with National Scenic Trails, such as the PCT, to the degrees necessary to ensure that the values for which each trail was established remain intact, among other direction.

- Bureau of Land Management Manual 6280 – Management of National Scenic and Historic Trails
  This manual identifies requirements for the inventory, planning, management, and monitoring of designated National Scenic Trails. Manual 6280 directs the Bureau of Land Management to manage National Trails "so as to safeguard the nature and purposes of the trail and in a manner that protects the values for which the components of the System were designated, recognizing the nationally significant scenic, historic, cultural, recreation, natural, and other landscape values (hereinafter referred to as resources, qualities, values, and associated settings)". We have adopted the same nomenclature in this planning document when referring to the resources, qualities, values, and associated settings as they pertain to the PCT.

- Optimal Location Review (OLR) Guidance
  Adopted by the lead administrator for the PCT, the U.S. Forest Service's Pacific Southwest Region Regional Forester, OLR guidelines are meant to standardize the process of relocating segments of the PCT to better ensure protection of the trail and trail corridor for an outstanding recreation, scenic, and wild experience. The OLR guidelines are of special value in this instance since the project proposes realigning the PCT and determining land acquisition needs to support said realignment.

- Comprehensive Management Plan for the Pacific Crest National Scenic Trail
  As directed by Section 5(e) of the National Trails System Act, the Comprehensive Plan was prepared by the U.S. Forest Service to outline the development, management, and use of the PCT. The plan details among other things: planning strategies, control of overuse, private lands, trail corridor; and establishes criteria for location design, signing, and user facilities. The Comprehensive Plan is the primary planning document for the Pacific Crest Trail.

763-811 Additionally, in this section, page 3.15-3 incorrectly states that there are no 6(f) properties impacted by the project. The easement for the PCT was purchased in 1982 using Land and Water Conservation Funds and is indisputably impacted by the HSR project. We address this inaccuracy with greater detail in our response to Chapter 4 but note this error here so it can be corrected in Section 3.15.

763-812 **3.15.4.1 Definition of Resource Study Area**
This section defines the Resource Study Area (RSA) as 1000 feet from the edge of the proposed project footprint. Given the scale of the installation and the recreation purposes for which some of the resources analyzed are established, an across-the-board use of this standard is insufficient to protect resource values and mitigate project impacts. The size and character of the installation where it is above ground results in a significant diminution of the PCT experience, as is documented on pages 3.16-85 through 3.16-88. As a National Scenic Trail, aesthetics is one of the primary purposes for the PCT.

We recommend using the Bureau of Land Management's Visual Resource System to delineate this project's RSA. Specifically, Chapter 4 Section E of the BLM Manual 6280 – Management of National Scenic and Historic Trails, states:

> "Designating visual resource management (VRM) classes based on the National Trail visual resource inventory and based on the desired future condition of the National Trail resources, qualities, values, and associated settings and the primary use or uses of the area through which such trails may pass. To retain or improve the integrity of the associated settings and scenic values for which the National Trail was designated, the BLM should consider establishing VRM classes at the most protective level practicable to meet National Trail scenery management objectives."

It continues "VRM Class I or II designation for National Scenic Trails." And "in assigning VRM classification, describe how activities managed to this scenic level support the nature and purposes of the National Trail and how uses are managed to avoid visual conflict." HSRA should adopt the same requirements of VRM Class I or II for this projects interface with the PCT.

763-813 **Table 3.15-5 Construction and Operations Impacts and Table 3.15-7 Summary of CEQA Significance Conclusions**
While we believe that significant effort has been made to minimize impacts on the PCT, this table's use of mitigation to diminish impacts to the point of non-significance is unrealistic. We address the table in detail below.

Impact PK#1 Temporary Impact Areas, Temporary Facility Closures, or Temporary Detours
We agree that all due consideration was given to ways in which this disruption could be minimized and agree that such disruptions are required for limited periods of time, however we disagree that this impact is less than significant, even after mitigation. The CEQA Conclusion states "… construction could temporarily create a barrier for access or prevent the use of the PCT, which would be a *significant impact under CEQA* [emphasis added]". This document asserts that the mitigating measures PCT-MM#1 and PCT-MM#2 would enable the PCT to be open continuously through this project. While this may be true, continuity is only one of many values for which the PCT is managed and a detour is not of the same quality as a permanent section of trail, therefor posing a significant impact under CEQA to the trail experience. If equestrians cannot be accommodated with a detour that meets federal trail standards, this impact is even more significant.

763-814 Impact PK#2 Temporary Access, Air Quality, Noise and Visual Impacts.
National Scenic Trails are based in surroundings that are primarily natural in character. Even though there are significant measures to reduce the impact of the construction phase of the

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763-814 project, it is simply not credible to believe that visual impacts of a major construction project will not significantly impact the experience of people using the PCT. The CEQA conclusion pertaining to PK#2 should be changed to clearly state that there will be unavoidable, significant impacts to the PCT.

763-815 Impact PK#3 Permanent Partial Acquisition of Property

While the project will not acquire portions of the existing easement for the PCT, the impacts of the project render a segment of the easement unusable through the concept of Constructive Use presented in this document's 4f analysis, inserted below from page 4-9:

> "A constructive use of a Section 4(f) resource occurs when a transportation project does not permanently incorporate property from a protected resource, but the proximity of the project results in impacts (e.g., noise, vibration, visual, access, ecological) that are so severe, even after incorporation of mitigation measures, that the protected activities, features, or attributes that qualify the resource for protection under Section 4(f) are substantially impaired. Substantial impairment occurs only if the protected activities, features, or attributes of the resource are substantially diminished."

In effect, the portion of the PCT and its easement that is no longer appropriate to use in its intended manner as a National Scenic Trail is 'taken' regardless of whether the interest in land changes hands or not. This is a significant "Permanent Impact Resulting from Project Construction" and should be documented in this segment of the chart detailing impacts either within PK#3 or through another PK item and determined to be a significant impact on the PCT. This action would result in diminished capacity to use the PCT as it is currently established.

763-816 Impact PK#6 Project Changes to Park or Recreation Facility Use or Character

While we agree with the eventual CEQA Conclusion that "… even with mitigation, these noise and aesthetic impacts would result in diminished capacity to use the PCT and the impact would be significant and unavoidable", there are details of the analysis preceding this that are incorrect or misleading and need to be corrected.

The second paragraph of this section notes that the PCT crosses various transportation facilities through its length and therefore noise impacts occur at those locations, but despite this, the PCT still functions as a "public hiking trail". This rationale should not be used to justify this project's impacts. While every mile of the PCT cannot provide the ideal PCT experience, this should not justify increasing or multiplying the impacts of transportation facilities that contribute to unnecessary and unreasonable cumulative impacts on the overall PCT experience. The PCT is a National Scenic Trail, meant to showcase the most beautiful and wild lands remaining in the far western United States, providing a means for a rapidly industrializing society to continue to sojourn with primeval landscapes. This stems from the PCT's Congressional mandate, essentially a specialized recreation experience delineated through the National Trails System Act and its succeeding regulations and policy. This second paragraph in PK#6 should be removed.

763-817 While most of the individual impacts addressed in this table have been found to be significant and unavoidable; the cumulative impacts of all temporary, permanent, and operational impacts are greater in sum than they are individually, even with the proposed mitigation. BLM Manual 6280 requires projects that substantially interfere with the nature and purposes of a National Scenic Trail to provide mitigation with a net benefit to the trail. Excerpted from page 1-23 of BLM Manual 6280:

> "Regardless of physical location, mitigation of project impacts must benefit the National Trail and should remain within the National Trail Management Corridor. Where onsite mitigation (along the National Trail) cannot adequately compensate for the adverse impact, offsite mitigation may include consideration of monetary compensation for public lands along the

763-817 National Trail, and should be analyzed, incorporated, and carried out in accordance with all applicable laws and policies."

HSR should adopt this strategy to complete mitigation of impacts to the PCT. Although this specific location will unavoidably become less scenic and wild, we recommend HSRA work with PCTA, U.S. Forest Service, and Bureau of Land Management staff to find another location that could be improved, thus providing a net benefit to the PCT as a whole.

763-818 **PCT-MM#1**

The final bullet point on page 3.15-51, referencing accessibility for equestrian users, should be clarified to read that a box culvert of 15-feet by 15-feet should be built to accommodate equestrian users. This was discussed on March 4, 2019, as part of project planning between PCTA, Bureau of Land Management, U.S Forest Service, and HSRA. We suggest the following language: "The area under the viaduct will utilize a box culvert of at least 15 feet by 15 feet to ensure equestrian accessibility during operation of the HSR project."

763-819 It is critical to retain "Use sound-attenuating measures along the guideway to minimize noise during operation of the HSR project." However, this mitigation measure should be revised to stipulate the specific distance to which sounds will be screened. Given the aforementioned experiential qualities of the PCT, we suggest adopting the same strenuous measures used for obstructed urban/suburban areas outlined in table 3.4-4, screening noise to a distance of 300 feet.

763-820 We appreciate how thorough PCT-MM#1 is for construction activities, especially regarding noise limits and revegetation. These mitigation measures should be retained in the final EIS/EIR.

The final bullet point of PCT-MM#1, found at the top of page 3.15-51 is critical to the safety of PCT users, and it should be retained in the final EIS/EIR.

763-821 Given the size of the fill slopes involved in raising the level of Tehachapi Willow Springs Road seen where the relocated PCT approaches the road and HSR line, we think it is important that the character of the fill slopes have the least visual impact possible. Therefore, we propose adding a new mitigating measure which would specify that these slopes be covered with necessary material and be planted to achieve an approximation of vegetation on adjacent hill sides.

763-822 **PCT-MM#2**

Any Trail Facilities Plan should be closely coordinated with PCTA, U.S Forest Service, and Bureau of Land Management, especially regarding planned detours and communication to the public. Aside from requirements in the National Trail Systems Act, PCTA has the best knowledge and resources to communicate to the public and ensure project success.

763-823 Numerous Identification of Impacts rely on ensuring that the PCT will remain open and accessible during project construction, including section 3.15.7.2 and table 3.15-5, to mitigate impacts and keep them less than significant. PCT-MM#2 should require that if the PCT is to be closed, a detour that accommodates hiker and equestrian use must be identified and available in the interim. Although this requirement can be surmised from PCT-MM#2, it should be a clear requirement of any Trail Facilities Plan.

763-824 We are pleased with how thorough PCT-MM#2 addresses impacts to the PCT and trail users; this section is critical to retain in its entirety, as it helps ensure hikers and equestrians can safely cross the construction area while minimizing impacts to the trail experience.

763-930

Comments Regarding Volume 1: Report, Section 3.16 Aesthetics and Visual Quality

Key viewpoints 18a and 18b, on page 3.16-85, and in other places, state that the HSR structure is compatible with the visual landscape as seen from the PCT because the area is dominated by industrial wind farms. BLM Manual 6280 specifically states, on page 4-8, that management of the PCT needs "to retain or improve the integrity of the associated settings and scenic values for which the National Trail was designated." Adding additional impacts does not retain or improve the scenic values for the PCT and its associated settings. We agree with this section's overall determination of significant and unavoidable impacts and believe that the additional key viewpoints would reinforce that determination. This project must mitigate those impacts without justifying impacts through the existence of other preceding developments in the region. This document should be revised to include more, accurate, and better visual simulations that include the additional Key Observation Points:

- From the proposed PCT realignment both north and south of Tehachapi Willow Springs Road, accurately showing the scale of the proposal;
- Additional points displaying how this project compares with existing roads and wind facilities; and
- On the existing PCT, north and south of the proposed crossing of the PCT, where the project will first come into and leave view for both the north and southbound PCT traveler.

763-931

The bottom of page 3.16-87 through the top of page 3.16-88 contains numerous inaccuracies regarding the quantification of visual impacts to the PCT which should be corrected. This paragraph's use of thru-hikers to calculate use statistics on the PCT is inappropriate – the majority of use comes from day users. However, the PCT is also enjoyed by equestrian riders, section hikers, weekenders, etc. Any use of thru-hikers to quantify visual impacts should be removed. This paragraph also notes that the "project would draw viewer focus for 0.5 to 1 mile", then assigns segments of that time based on northbound and southbound hikers, respectively. This implies the authors assume the project will only be viewed when the project is in front of the user, forgetting that users often look behind them as well. Sentences referring to time spent viewing the project should be revised to show the entire time and length that the project is within any view of the PCT. Again, as a National Scenic Trail, scenic integrity is central to the nature and purposes of the PCT.

763-826

3.16.2.1 Federal
This section fails to include a reference to the National Trails System Act. The needed wording is included in Section 3.15.2.1. Our previous comments regarding Section 3.15.2.1 are also directly applicable to this Section.

763-827

Comments Regarding Volume 1: Report, Section 3.19 Cumulative Impacts

The overall HSR project proposes crossing the PCT in two locations: once in the Bakersfield to Palmdale Section and again in the Palmdale to Burbank Section. This is a cumulative impact that should be addressed in sections 3.19.15 and 3.19.16, Parks, Recreation, and Open Space, and Aesthetics and Visual Quality. This meets criteria outlined on page 3.19-11, since this is foreseeable in a future phase of an existing project.

Impacts to the PCT are discussed and addressed throughout the Draft EIS/EIR with separate determinations of the significance of impacts both with and without mitigation. In no place that we can identify is there an overall analysis of the entire project's impacts on the PCT. **Without such an analysis of cumulative impacts, it is difficult to judge the overall impact of the project on the trail experience and thus determine what is required for off-site mitigation to provide a net benefit to the PCT**, especially given the lack of opportunities for permanent on-site mitigation. This document should be

763-827

revised to include a table of cumulative impacts to the PCT. Excerpted from BLM NEPA Handbook H-1790-1:

> "If you do not include the cumulative action with the proposed action as aspects of a broader proposal analyzed in a single NEPA document, you must, at a minimum, demonstrate that you have considered the cumulative action in the NEPA document for the proposed action (40 CFR 1508.25)"

763-828

Comments Regarding Volume 1: Report, Chapter 4 Draft Section 4(f)/6(f) Evaluations

4.1.1 Laws, Regulations and Orders
Again, the National Trails System Act is missing along with regulations and guidance regarding implementation of the law (see comments on sections 3.15.2.1 and 3.16.2.1).

763-829

4.5 Section 4(f) Applicability Analysis
Figure 4-5, found on page 4-23, shows an outdated relocation of the PCT. This figure should be replaced with figure 3.15-4, which is the current realignment for the PCT per a meeting with PCTA and U.S Forest Service staff on September 12, 2019.

763-830

4.5.1.1 Bakersfield to Palmdale Project Section Public Parks and Recreation Resources
Page 4-37 attempts to detail current usage of the PCT. Below is suggested text to improve clarity and accuracy when describing the PCT:

> The Pacific Crest Trail (PCT) is a long-distance path managed for year-round travel on foot or with stock, closely aligned with the highest parts of the Sierra Nevada and Cascades mountain ranges. The trail is one of the original components of the National Trails System, as outlined in the National Trails System Act of 1968. In 2019, PCTA issued 7,888 permits to hike 500 miles or more on the PCT. This number does not include day use or any of the other users who are on the trail for less than 500 miles, which is typically the majority of users. The Pacific Crest Trail Association estimates that the HSR crossing at Tehachapi Willow Springs Road would affect the experiences of approximately 10,000-15,000 people each year. If we assume that use along the trail is steady at its current level –this project would affect the experience of well over 100,000 PCT users over the next ten years.

763-831

4.6.1 Public Park and Recreation Resources
The U.S. Forest Service uses a visible corridor up to one half-mile from the PCT's centerline to define the management corridors for both the PCT and the Appalachian National Scenic Trail; we suggest adopting that standard to sufficiently protect recreation resources. In the second paragraph of this section, the analysis chooses to limit the area considered to 300 feet from a facility. This distance was chosen because the analysis believes it would have the highest impact on localized recreation resources; however, it is unclear how the 300-foot distance was determined and if this distance is tied to existing policy or guidelines. For a resource like a National Scenic Trail where the qualities of the surrounding landscape and scenic visual resources are paramount, 300 feet is vastly insufficient to protect the purposes for which the trail was designated. The National Trails System Act addresses this matter in Section 7(c). Section 1 of Executive Order 13195, "Trails for America in the 21st Century" states:

> "Federal agencies will, to the extent permitted by law and where practicable—and in cooperation with Tribes, States, local governments, and interested citizen groups—protect, connect, promote, and assist trails of all types throughout the United States. This will be accomplished by… (b) *Protecting the trail corridors associated with national scenic trails… to ensure that the values for which each trail was established remain intact* [emphasis added]."

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763-832

4.6.1.1 Pacific Crest Trail Assessment, Impacts to Recreational Resource
Figure 4-10, found on page 4-52, is identical to the aforementioned figure 4-5. Our comments here are the same, this figure should be replaced with figure 3.15-4, as that is the current proposed realignment. Descriptions of this outdated realignment option on the third and fourth paragraphs of page 4-53 should be updated to reflect the newer realignment shown in Figure 3.15-4.

763-833

The statement on page 4-53 that "while noise at the crossing of the PCT would increase compared to existing conditions with operation of HSR trains, the PCT extends along and crosses existing transportation facilities throughout its entire alignment. The existing PCT crossings with roadways and railroads in the western U.S. and Canada also experience noise associated with the operation of those transportation facilities." The implied conclusion is that because the PCT goes through other noise transportation areas, adding one more is fine. This is incorrect as it would lead to a serious and cumulative diminution of the attributes for which the PCT was established, nor does this conclusion account for cumulative impacts.

763-834

Page 4-54 details how temporary impacts to the PCT would meet conditions listed in 23 C.F.R. 774.13(d) for use under Section 4(f). As per the language cited above, we disagree that "the construction of the viaduct would not result in any permanent adverse physical impacts to the PCT and would not interfere with the protected activities, features, or attributes of the PCT on either a temporary or permanent basis". A multitude of substantial and unavoidable impacts to the PCT have been outlined in Section 3.15 and 3.16, showing a considerable infringement of the PCT's protected activities, features, and attributes.

763-835

Page 4-53 states that "The continuity of the trail across the western U.S. represents the primary feature and attribute that qualify the resource for protection under Section 4(f)." The sentences that follow seek to justify impacts to the PCT by comparing them to other places in which the PCT is impacted by transportation projects. This rationale is erroneous as it would lead to a serious and cumulative diminution of the attributes for which the PCT was established. The Pacific Crest Trail is one of the original components designated through the National Trails System Act, making it a Congressionally designated area with a specific intended experience. Numerous policies and guidelines direct the avoidance of transportation developments, we have excerpted two of the most pertinent for reference below:

- From the Comprehensive Management Plan for the PCT:
  "The routes of national scenic trails should be so located as to provide for maximum outdoor-recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural or cultural qualities of the areas through which such trails may pass. They should avoid, insofar as practicable, established highways, motor roads, mining areas, power transmission lines, existing commercial and industrial developments, range fences and improvements, private operations, and any other activities that would be incompatible with protection of the trail in its natural condition and its use for outdoor recreation." (Page 3)

- From BLM Manual 6280, regarding assessment and use of the National Trail Inventory:
  "For National Scenic Trails, each landscape element, or resource, quality, value, and associated setting, identified through the inventory will be assessed to determine how the landscape element supports or detracts from the characteristics of the National Scenic Trail, including… Absence of highways, motor roads, mineral rich areas, energy transmission lines, commercial and industrial developments, range fences and improvements, private operations, and any other foreseeable activities." (Page 3-11)

763-836

Page 4-53's incorrectly states that the PCT's primary feature and attribute that qualifies it for protection under Section 4(f) is its continuity. Section 4(f) clearly calls on the Transportation Secretary to maintain or enhance natural beauty. Further it states:

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"... the Secretary shall not approve any program or project which requires the use of any land from a public park, recreation area, wildlife and waterfowl refuge, or historic site unless (1) there is no feasible and prudent alternative to the use of such land, and (2) such program includes all possible planning to minimize harm to such park, recreation area, wildlife and waterfowl refuge, or historic site resulting from such use."

On March 3, 1971, the Supreme Court ordered a reconsideration of the District Court's decision in the routing of I-40 through Overton Park in Memphis, Tennessee. In the decision, Justice Marshall stated that the existence of the statute "indicates that protection of parkland was to be given paramount importance."

As previously noted, BLM Manual 6280 directs the Bureau of Land Management to manage National Trails "so as to safeguard the nature and purposes of the trail and in a manner that protects the values for which the components of the System were designated, recognizing the nationally significant scenic, historic, cultural, recreation, natural, and other landscape values. Further, Section 7(c) of the National Trails System Act states, "Other uses along the trail, which will not *substantially interfere with the nature and purposes* [emphasis added] of the trail, may be permitted by the Secretary charged with the administration of the trail. Reasonable efforts shall be made to provide sufficient access opportunities to such trails and, to the extent practicable, efforts be made to avoid activities incompatible with the purposes for which such trails were established."

And finally, the San Gabriel National Monument Plan has codified the PCT's nature and purposes as:
"The nature and purpose of the Pacific Crest National Scenic Trail (PCT) are to provide for outstanding journeys on foot or on horseback in the spectacularly wild landscapes of high Pacific mountain ridges. Tranquility and closeness with nature can be found consistently along the trail, evoking a feeling of extended retreat from civilization, even if only venturing out for a day."

Given BLM Manual 6280, Section 7(c) of the National Trails System Act, the codification of the PCT's nature and purpose in the San Gabriel National Monument Plan, and Justice Marshall's direction in the 1971 decision; **it is clear that the primary feature and attribute that qualify the resource for protection under Section 4(f) is that the PCT is a public park and scenic recreation area.** As such, this document's distillation of the PCT's primary protected activities, features, and attributes as solely a continuous public hiking trail is erroneous. Accordingly, we strongly disagree with the Authority's preliminary determination that the project would result in a *de minimis* impact. As requested in a conference call on April 22, 2020, HSRA should reconsider this preliminary determination.

763-837

6(f) Compliance
Under section 6(f) of the Land and Water Conservation Fund Act, properties purchased with Land and Water Conservation Fund (LWCF) dollars may not be converted to a non-recreation use without complying with procedures contained in the Act. Chapter 4 incorrectly asserts that there are no LWCF lands in the project area, however there are two easements owned by the Federal Government purchased with LWCF funds for the PCT. The easements were purchased in June 1982 from California Portland Cement Company; one covering the PCT west of Tehachapi Willow Springs Road and one covering the PCT east of the road. A third easement was acquired for the pipeline east of the road.

763-838

Concluding Comments and Suggested Action
HSRA should provide a net-benefit to the PCT through off-site mitigation by improving the trail in another location, while still taking necessary actions to limit on-site project impacts. This is consistent with BLM policy per Manual 6280, page 1-23, which requires projects that substantially interfere with the nature and purposes of a National Scenic Trail to provide a net benefit to the trail. In summarizing parks,

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763-838

recreation, and open space impacts, page S-34 of Volume 1: Report, Summary, the EIS plainly summarizes the long-term impacts to the PCT as a whole:

> "Operation of all B-P Build Alternatives would place the HSR alignment immediately adjacent to the Pacific Crest Trail. Therefore, trail users would have views of the trains, and noise from passing trains would be perceptible. Mitigation would reduce the contrasting urban appearance of the project with the natural environment; however, *the impact would remain significant and unavoidable due to the substantial change in character of this recreation resource and its value in the long term* [emphasis added]. Impacts would be significant and unavoidable under CEQA."

While we agree with this conclusion, it is hard to aggregate and gauge the complete temporary, permanent, and ongoing impacts to the PCT; along with compliance resulting from corrected 4(f) and 6(f) evaluations. Descriptions and analysis of impacts should be corrected, then tallied in a comprehensive table to plainly evaluate the overall impact to the PCT. At that time, HSRA will be more adequately informed to determine what level of mitigation is needed to provide a net benefit. We believe this will necessitate off-site mitigation and suggest looking at improvements to a similar length section of PCT that could be improved to a like degree.

We appreciate you considering PCTA's comments. It is our intention to work closely with you and our agency partners on this planning effort to ensure that impacts to the Pacific Crest National Scenic Trail are minimized and the overall PCT experience is improved so as to ensure that the trail provides the best experience possible for trail users. Please do not hesitate to contact us with any questions.

We want to recognize the excellent collaborative work with HSRA, US Forest Service, and Bureau of Land Management staff in which PCTA has been involved regarding the entire HSR project over the past four years. We have been pleased with the professional and collaborative way HSRA has approached this work.

Sincerely,

Benjamin Barry
Southern Sierra Regional Representative

Anitra Kass
Southern California Regional Representative

CC:
Beth Boyst, U.S. Forest Service, Pacific Crest Trail Program Administrator
Justin Kooyman, PCTA, Associate Director of Trail Operations

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As stated in Section 3.15 of the EIR/EIS, the Authority would continue to work with USFS, BLM, and stakeholders, such as the Pacific Crest Trail Association, to advance the final design through a collaborative, context-sensitive solutions approach to address these concerns. More detailed responses are provided to the more specific comments below. Mitigation Measure AVQ-MM#3, described in Section 3.16, Aesthetics and Visual Quality, of this Final EIR/EIS, would reduce visual impacts by adding design enhancements, which may include concrete coloring, to the viaducts and columns to reduce the incompatibility of visual character by decreasing color contrast and reflection from the HSR structure, and reducing the magnitude of overall impact. AVQ-MM#3 will be applied to impacts to the PCT. Also, a reference to Mitigation Measure BIO-MM#6, Prepare and Implement a Restoration and Revegetation Plan, has been added to the Final EIR/EIS in response to the comment regarding native vegetation restoration.

763-809

In response to comments in the Draft EIR/EIS, design refinements were completed and incorporated into the project plans. The design refinements of the HSR crossing of PCT has resulted in reduced impacts to PCT by eliminating impacts to the parking lot, moves the alignment further away from PCT users, and provides a grade separated crossing with Tehachapi Willow Springs Road, which would improve safety for trail users. For further discussion of the design modifications, refer to Appendix 3.1-B of this Final EIR/EIS.

As discussed in Chapter 4 of this EIR/EIS, approximately 2,110 linear feet of the trail would be realigned, as proposed mitigation, west of the proposed viaduct to allow the trail to cross under the bridge structure at one location (Figure 4-10).

To provide further information on the permanent impact areas noted in the comment, the Authority provides the following response. Figure 3.15-4 of the Draft EIR/EIS delineates the permanent and temporary impact areas for the project in purple and yellow, respectively. Also depicted is the proposed trail realignment, which crosses into the impact areas for the project. It should be noted that Figure 3.15-4 has been updated in this Final EIR/EIS to reflect the design refinements. As shown on Sheet TT-D1052 of the Volume 3 Alignment Plans, the proposed PCT realignment would cross under the elevated HSR structure within the permanent impact area depicted in Figure 3.15-4. The permanent impact area includes dedicated HSR right-of-way for facilities, including aerial track, at-grade track, tunnels, access roads, stations, traction power distribution infrastructure, radio communication sites, and maintenance of infrastructure facilities. The permanent impact areas also include permanent improvements built in support of the HSR project, such as public roadway improvements, grade separations, and railroad improvements. In the case of the proposed PCT realignment crossing, the permanent impact areas would be required for HSR right-of-way. As shown in Figure 3.15-4 of this Final EIR/EIS, the proposed PCT realignment crossing would be located in permanent impact areas dedicated to HSR right-of-way and a dedicated realignment of the PCT crossing.

Response to Submission 763 (Ben Barry, Pacific Crest Trail Association, April 27, 2020) - Continued

763-810

Not all of the cited documents and text are regulations or policies; however, reference to Executive Order 13195 and Optimal Location Review Guidance has been included in the document under Section 3.15.2 in the Final EIR/EIS.

763-811

The commenter suggests that three PCT easements, purchased with Land and Water Conservation Funds, will be converted to a non-recreational use. The Authority reached out to the commenter for additional information on the properties identified in this comment, but the commenter did not provide any additional information. Based on review of the California Department of Parks and Recreation and National Park Service websites, the Authority has not been able to confirm there are Section 6(f) properties in the resource study area for the B-P Build Alternatives.

763-812

As described in Section 3.16.4.6, Methodology, of this Final EIR/EIS, the FHWA's Guidelines for the Visual Impact Assessment of Highway Projects (FHWA 2015) were used for the visual impact assessment of the project. The FHWA guidelines are appropriate for analysis of this project because it is a linear transportation project. Although 1,000 feet defined the boundaries for the assessment of visual impacts overall, the discussion of Key Viewpoints 18a and 18b in Section 3.16.6.3 of this Final EIR/EIS considers a much larger viewshed for users of the PCT, noting that the HSR viaduct would likely draw viewer focus for 0.5 to 1.0 mile in either direction of the PCT.

FHWA's 2015 Visual Impact Assessment of Highway Projects methodology describes the visual character of a landscape unit based on existing visual resources and visual character. Under FHWA's methodology, the primary visual resources are inventoried to determine the existing visual character. Visual resources are divided into three categories: natural (air, land, water, vegetation, and animal life), cultural (buildings, structures, transportation infrastructure, and other built artifacts), and project (alignment, profile, cross-section, grading, drainage, pavement, signs, signals, plantings, and other elements) environments. It should be noted that the Authority's visual analysis identified the wind turbines in Tehachapi Mountains East Landscape Unit as part of the cultural environment. The wind turbines in the landscape unit dominate the view. As discussed in the Draft EIR/EIS, the Authority considered the existing visual character of the area as part of the assessment and considered "associated settings and the primary use or uses of the area through which such trails may pass." The EIR/EIS acknowledges that "the HSR structure would be somewhat compatible with the existing cultural environment but would nonetheless introduce an urban-style infrastructure into a rural setting." As summarized in Table 3.16-12 of this Final EIR/EIS, the HSR project would result in significant and unavoidable aesthetic and visual quality impacts at KVPs 18a and 18b (Views from the Pacific Crest Trail).

Response to Submission 763 (Ben Barry, Pacific Crest Trail Association, April 27, 2020) - Continued

763-813

The stated CEQA threshold for a significant impact is, “Prevent the use of an established or proposed park or recreation resource” and, “Create a physical barrier (or a perceived barrier) to the access to or established use of any park or recreation resource.” The EIR/EIS acknowledges that the project will temporarily exceed these thresholds, but that impacts will be mitigated to a level of less than significant. By providing appropriate detours for both hikers and equestrian users of the PCT, the project would not create a temporary barrier for access or prevent the use of the trail, and the impact would be less than significant under CEQA once mitigation is applied. As stated in Mitigation Measures PCT-MM#1 and PCT-MM#2 in this Final EIR/EIS, the Authority will develop these detours in consultation with USFS, BLM, and stakeholders, such as the Pacific Crest Trail Association.

It should be noted that in response to comments on the Draft EIR/EIS, Tehachapi Willow Springs Road was shifted to the west of the HSR alignment under Alternatives 1, 2, and 5. This shift in the alignment of Tehachapi Willow Springs Road eliminated a complex crossing of the HSR alignment over Tehachapi Willow Springs Road but resulted in a direct impact to the existing PCT in this area, as well as a minor increase to the previously defined footprint. Mitigation Measure PCT-MM#1, described in Section 3.15 (Parks, Recreation, and Open Space) of the EIR/EIS, provides for replacement of the impacted portion of the PCT on a new alignment. This will eliminate the need for PCT users to cross Tehachapi Willow Springs Road at-grade as they do under existing conditions, thus improving safety for trail users. In addition, with the new design, PCT users would now cross under the HSR viaduct (and the new Tehachapi Willow Springs Road bridge) in an open crossing adjacent to the creek with over 57 feet of vertical clearance, which would improve the experience for the trail users as they cross under the HSR viaduct. The design revisions at this location also eliminated project impacts to a PCT parking area along Oak Creek Road (including removal of an oak tree).

763-814

The temporary visual impacts to the Pacific Crest Trail are acknowledged several times within this Final EIR/EIS, both in Section 3.15, Parks, Recreation, and Open Space, and in Section 3.16, Aesthetics and Visual Quality. Mitigation Measures AVQ-MM#1 and AVQ-MM#2 would mitigate aesthetic impacts by minimizing the visual change of construction areas and reducing lighting impacts on nearby light-sensitive receptors. Mitigation Measures PCT-MM#1 and PCT-MM#2 provide additional measures to reduce visual impacts during construction, including temporarily closing and rerouting the trail during construction activities. With regard to the permanent visual impacts resulting from project construction, as discussed in Section 3.16 of the Draft EIR/EIS and this Final EIR/EIS, the Authority would implement AVQ-MM#3, AVQ-MM#4, and AVQ-MM#5 during construction in the vicinity of the PCT. The EIR/EIS concluded that even with the implementation of these mitigation measures these impacts would be significant and unavoidable under CEQA.

763-815

Impact PK #3 specifically addresses permanent acquisition of property from recreation resources, not the use of the resource itself. Implementing the realignment of the PCT pursuant to Mitigation Measure PCT-MM#1 (see Section 3.15.7.5 in this Final EIR/EIS) will continue to make the PCT usable. The discussion of the potential for proximity impacts of the PCT has been expanded in the discussion of the PCT in Chapter 4, Final Section 4(f)/6(f) Evaluations, in this Final EIR/EIS. As described in Section 4.6.1.1, a constructive use can occur only in the absence of a permanent incorporation of land into a transportation facility. Therefore, once a permanent use is identified, there can be no constructive use. Even if there were no permanent use or *de minimis* impact determination there would still be no constructive use because the activities, features, or attributes that qualify the PCT for protection under Section 4(f) would not be substantially diminished by the proximity impacts.

Response to Submission 763 (Ben Barry, Pacific Crest Trail Association, April 27, 2020) - Continued

763-816

The commenter requests that a paragraph pertaining to the existing noise impacts from transportation facilities in the vicinity of the PCT be removed. The sentence stating, “The existing PCT crossings with roadways and railroads in the western U.S. experience noise associated with the operation of those transportation facilities” is an accurate description of existing conditions along the trail. While this statement is true, it is not the sole basis for determining whether the impact is significant. The conclusion that “the trail would still function as a public hiking trail,” would be true even without the sentence. Nevertheless, Impact PK#6 explains that noise and aesthetic effects would result in a diminished capacity to use the PCT, and the impact would be significant and unavoidable under CEQA.

763-817

The commenter cites the BLM Manual 6280 management standard for Congressionally Designated National Scenic and Historic Trails programmatic policy as well as USFS Manual chapter 2353.31, policy related to the Administration of National Recreation, National Scenic, and National Historic Trails, and indicates that the HSR project represents a significant diminution of the Pacific Crest Trail (PCT) experience. Proximity impacts to the PCT would occur (visual, noise) as a result of the project, as described in Section 4.6.1.1. As noted in Section 4.6.1.1, a constructive use can occur only in the absence of a permanent incorporation of land into a transportation facility. Therefore, once a permanent use is identified, there can be no constructive use. Even if there were no permanent use or *de minimis* impact determination there would still be no constructive use because the activities, features, or attributes that qualify the PCT for protection under Section 4(f) would not be substantially diminished by the proximity impacts. The Authority is committed to working with stakeholders, including the PCTA, USFS, and BLM, to reduce possible impacts resulting from the proposed project. Based on the consultation with these stakeholders that has occurred since the publication of the Draft EIR/EIS, the Authority will enter into an agreement with the USFS to provide offsite compensatory mitigation for impacts to the PCT from the trail realignment, the HSR project crossing the PCT once, and the maintenance easement. In addition, design refinements realign Tehachapi Willow Springs Road to the west of the B-P Build Alternatives, and adds a connection from Tehachapi Willow Springs Road to the existing dirt Oak Creek Road near the creek, and replaces the existing at-grade PCT crossing across Tehachapi Willow Springs Road with a grade-separated crossing. This design refinement eliminates impacts to a PCT parking area, and the parking area would no longer require relocation as previously described in the Draft Section 4(f) evaluation in the Draft EIR/EIS. This design refinement also replaces the existing at-grade crossing of the PCT across Tehachapi Willow Springs Road with a new grade-separated crossing (Tehachapi Willow Springs Road bridge over the PCT). This design refinement would increase safety for PCT users because they would no longer have to cross Tehachapi Willow Springs Road, which has a posted speed limit of 55 miles per hour. For further discussion of this design modification, refer to Appendix 3.1-B of this Final EIR/EIS.

Response to Submission 763 (Ben Barry, Pacific Crest Trail Association, April 27, 2020) - Continued

763-818

The language suggested by the commenter has not been incorporated into this Final EIR/EIS because the alignment in this area has been refined and is now on viaduct with ample open area for equestrian crossing. For further discussion of the design modifications made since the release of the Draft EIR/EIS, refer to Chapter 2 and Appendix 3.1-B of this Final EIR/EIS.

763-819

The text referenced in this comment has been retained in Mitigation Measure PCT-MM#1 in this Final EIR/EIS. The specific distance for noise screening will be determined in consultation with the Pacific Crest Trail Association, USFS, and BLM during the design-build phase, when more specific construction plans are available. Please note that the project has been refined in response to comments on the Draft EIR/EIS to reduce impacts to the PCT. See Chapter 2 of this final EIR/EIS for additional information on the refinements.

763-820

Mitigation Measure PCT-MM#1 has been retained in this Final EIR/EIS, as suggested.

763-821

The commenter requests a new mitigation measure requiring fill slopes for the relocated Tehachapi Willow Springs Road to be covered with necessary material and planted to achieve an approximation of vegetation on adjacent hillsides in the area near the Pacific Crest Trail. In response to this comment, the Final EIR/EIS has been revised to confirm that Mitigation Measure AVQ-MM#6 (Plant Landscape Treatments along the HSR Project Overheads, Embankment, and Retained-Fill Elements) would be required to reduce impacts in the vicinity of the PCT. This mitigation measure requires that the Contractor "plant the surface of the ground below overheads (slope-fill overheads), embankments, and retained fill elements with plant species that are consistent with the surrounding landscape (in terms of vegetative type, color, texture, and form) and based on their mature size and shape, growth rate, and drought tolerance." This measure would ensure that fill slopes along the relocated Tehachapi Willow Springs Road be covered with plant material and planted with approximate vegetation of nearby areas. This revision does not change the findings or conclusions of the EIR/EIS.

In addition, engineering refinements made in response to comments realign Tehachapi Willow Springs Road to the west of the B-P Build Alternatives, adds a connection from Tehachapi Willow Springs Road to the existing dirt Oak Creek Road near the creek, and replaces the existing at-grade PCT crossing across Tehachapi Willow Springs Road with a grade-separated crossing. This engineering refinement also replaces the existing at-grade crossing of the PCT across Tehachapi Willow Springs Road with a new grade-separated crossing (Tehachapi Willow Springs Road bridge over the PCT). For further discussion of the design modifications, refer to Chapter 2 and Appendix 3.1-B of this Final EIR/EIS.

763-822

Per the consultation requirements of Mitigation Measure PCT-MM#2, the Authority is committed to working with the Pacific Crest Trail Association, USFS, and BLM to develop a Trail Facilities Plan for the realigned portion of the PCT.

Response to Submission 763 (Ben Barry, Pacific Crest Trail Association, April 27, 2020) - Continued

763-823

Text in the form of a bullet point has been added to Mitigation Measure PCT-MM#2 indicating that the referenced detour would accommodate hiker and equestrian use must be identified and available during construction of the proposed project.

763-824

Mitigation Measure PCT-MM#2 has been retained in the Final EIR/EIS as suggested.

763-930

The evaluation of aesthetics and visual quality provided in Section 3.16 of this Final EIR/EIS describes the consistency of the proposed HSR project with the existing visual character of the various landscape units and KVPs, and how the project would change (or not change) visual quality. The Authority's methodology, which is based on FHWA's 2015 Visual Impact Assessment of Highway Projects methodology (FHWA 2015, describes the visual character of a landscape unit based on existing visual resources and visual character. To determine the existing visual character, the primary visual resources are inventoried. Visual resources are divided into three categories: natural (air, land, water, vegetation, and animal life), cultural (buildings, structures, transportation infrastructure, and other built artifacts), and project (alignment, profile, cross-section, grading, drainage, pavement, signs, signals, plantings, and other elements) environments. Because the wind turbines are currently present in the landscape unit, they are identified as part of the cultural environment and noted as compromising the natural harmony in this segment, because they dominate the view. However, the EIR/EIS acknowledges that "the HSR structure would be somewhat compatible with the existing cultural environment but would nonetheless introduce an urban-style infrastructure into a rural setting." With the Authority's methodology, the existing visual character of an area is part of the assessment. The other part is the viewer's expectations and sensitivity. This section acknowledges that despite the existing wind turbines, PCT users would have a high level of scenic expectation. With this methodology, it is this viewer sensitivity that leads to the determination of significant and unavoidable aesthetic impacts.

Section 3.16.5.5 of the Final EIR/EIS acknowledges that "the legal protection of scenic resources on the PCT is an indication of high viewer preference for natural scenic resources." In response to this comment, text has been added to Section 3.16.5.5 to further acknowledge that retaining and improving the scenic integrity is a goal of management for National Trails. This supports the conclusions in Section 3.16 that viewer sensitivity for PCT users is high because of a preference for natural harmony and scenic integrity.

The KVPs analyzed in the Draft EIR/EIS were selected as representative of existing conditions and were evaluated with the addition of the HSR project to the view. As described in Section 3.16.4.6 of this Final EIR/EIS, key viewpoints are intended to "be

Response to Submission 763 (Ben Barry, Pacific Crest Trail Association, April 27, 2020) - Continued

763-930

representative of the visual character of either the environment or the project" (FHWA 2015). Two KVPs in the vicinity of the PCT were selected to represent the visual character from the perspective of viewer groups in the area, which include PCT users and motorists on Tehachapi Willow Springs Road. Additional KVPs are not needed to demonstrate the visual quality and character of the area and would not change the conclusions of the analysis that impacts in this vicinity are significant and unavoidable under CEQA.

763-931

In response to this comment, several edits have been made to Section 3.16 of the Final EIR/EIS. The edits clarify that the analysis considers all types of trail users, not just hikers. In addition, the edits clarify that trail users may have views of the HSR alignment in front of or behind them. As stated in the Response to Comment 763-831, contained in this chapter, the HSR viaduct would likely draw viewer focus for 0.5 to 1.0 mile in either direction of the PCT. The conclusions in the Final EIR/EIS that aesthetics and visual quality impacts near the PCT would be significant and unavoidable under CEQA remain the same.

763-826

The commenter states that Section 3.16.2.1 of the Draft EIR/EIS fails to include a reference to the National Trails System Act and suggests the needed wording is in Section 3.15.2.1. The commenter also states previous comments on Section 3.15.2.1 are applicable to Section 3.16. A reference to the National Trails System Act has not been added to Section 3.16.2.1 of the Final EIR/EIS in response to this comment; however, the analysis in Section 3.16 does take into account that the PCT is a scenic trail and therefore there is a preference to preserve scenic integrity. The previous comments on Section 3.15.2.1 identified by the commenter mostly pertain to policies related to parks and recreational resources and do not apply to aesthetics and visual quality. Refer to Response to Comment 763-810, contained in this chapter.

763-827

The commenter states that the HSR system would cross the PCT in two locations, one in the Bakersfield to Palmdale Project Section and the other in the Palmdale to Burbank Project Section, and that the EIR/EIS should evaluate the cumulative impact. The commenter requests that the document be revised to include a table of cumulative impacts to the PCT based on BLM NEPA Handbook H-1790-1. The commenter also states that the determination of off site mitigation is unclear to address the impacts and provision of a net benefit to the PCT.

Refer to Response to Comment 790-358, contained in Chapter 19 of this Final EIR/EIS, for a discussion of the crossing of the PCT by the project with regards to cumulative impacts. Discussion of cumulative impacts specific to the PCT has been added to Section 3.19, Cumulative Impacts, in this Final EIR/EIS. Refer to Response to Comment 763-817, contained in this chapter, for a discussion of the determination of compensatory mitigation for impacts to the PCT from the trail realignment, the HSR project crossing the PCT once, and the maintenance easement.

763-828

Information regarding the National Trails System Act is discussed in Section 3.15.1 of the Draft EIR/EIS and of this Final EIR/EIS. Reference to the National Trails System Act has not been added to Section 4.1.1 of this Final EIR/EIS.

763-829

In response to this comment, Figure 4-5 has been replaced with an updated figure included in Section 3.15 (Figure 3.15-4) of this Final EIR/EIS. The discussion of the realignment in Section 4.5 of this Final EIR/EIS has been modified to be consistent with the text in Section 3.15. In addition, this figure has been revised to include a refined design in the area of PCT.

763-830

In response to this comment, the text in Section 4.5.1.1, Bakersfield to Palmdale Project Section Public Parks and Recreation Resources, of this Final EIR/EIS has been revised to describe the current usage of the PCT in more detail.

Response to Submission 763 (Ben Barry, Pacific Crest Trail Association, April 27, 2020) - Continued

763-831

The text in Section 4.6.1.1, Pacific Crest Trail Assessment, of this Final EIR/EIS has been clarified to state that the 300-foot buffer was applicable to noise impacts; the overall resource study evaluated for Section 4(f) resources was 1,000 feet from the project centerline. With regard to the request in this comment to use a visible corridor of up to 0.5 mile from the PCT's centerline, as described in Section 3.16.4.6, Methodology, of this Final EIR/EIS, FHWA's Guidelines for the Visual Impact Assessment of Highway Projects (FHWA 2015) were used for the visual impact assessment of the project. The FHWA guidelines are appropriate for analysis of the project because it is a linear transportation project. Although 1,000 feet defined the boundaries for the assessment of visual impacts overall, the discussion of Key Viewpoints 18a and 18b in Section 3.16.6.3 of this Final EIR/EIS considers a much larger viewshed for users of the PCT, noting that the HSR viaduct would likely draw viewer focus for 0.5 to 1.0 mile in either direction of the PCT. The discussion of potential use of the PCT under Section 4(f) in Section 4.6.1.1 of this Final EIR/EIS has been revised to add discussion of the expanded viewshed used in the visual impact analysis. As described in Section 4.6.1.1, a constructive use can occur only in the absence of a permanent incorporation of land into a transportation facility. Therefore, once a permanent use is identified, there can be no constructive use. Even if there were no permanent use or *de minimis* impact determination there would still be no constructive use because the activities, features, or attributes that qualify the PCT for protection under Section 4(f) would not be substantially diminished by the proximity impacts.

763-832

In this Final EIR/EIS, Figure 4-10 has been replaced with the figure included in Section 3.15 (Figure 3.15-4), the same as Figure 4-5, and the text describing the figure was updated to reflect the current realignment.

763-833

The text in Section 4.6.1.1 has been revised in this Final EIR/EIS to clarify that the noise impacts at this location do not result in proximity impacts that would substantially impair the property's activities, features, or attributes that qualify the PCT for protection under Section 4(f). Additional text has been added to incorporate project-related noise data supporting this finding. As described in Section 4.6.1.1, a constructive use can occur only in the absence of a permanent incorporation of land into a transportation facility. Therefore, once a permanent use is identified, there can be no constructive use. Even if there were no permanent use or *de minimis* impact determination there would still be no constructive use because the activities, features, or attributes that qualify the PCT for protection under Section 4(f) would not be substantially diminished by the proximity impacts. Cumulative impacts are analyzed in Section 3.19, Cumulative Impacts, of this Final EIR/EIS and that section has been updated to add discussion of the PCT. Cumulative impacts are not analyzed in determining use (including constructive use) under Section 4(f). See Section 3.2, Assessing Use of Section 4(f) Properties, in the Section 4(f) Policy Paper (FHWA 2012).

Response to Submission 763 (Ben Barry, Pacific Crest Trail Association, April 27, 2020) - Continued

763-834

The text on page 4-54 in the Draft EIR/EIS is referring to a determination of temporary occupancy, which results when Section 4(f) property, in whole or in part, is required for project construction-related activities. 23 C.F.R. 774.13(d) provides the conditions under which "temporary occupancies of land…are so minimal as to not constitute a use within the meaning of Section 4(f)." Consistent with the definition of temporary occupancy under Section 4(f), the project would maintain user access to the trail and would return the trail to a condition which is at least as good as that which existed prior to the project. The temporary occupancy determination is only applicable to Build Alternative 3.

The Section 4(f) analysis in Chapter 4 of this Final EIR/EIS follows the requirements of 23 U.S.C. §138, 49 U.S.C. §303, and 23 C.F.R. Part 774, which require federal transportation projects to avoid or, where avoidance is not feasible and prudent, minimize harm to public parks, recreation areas, wildlife and waterfowl refuges, and historic sites. The impacts to the PCT identified in Sections 3.15 and 3.16 are not factors that are considered when determining a Section 4(f) use under 23 U.S.C. §138, 49 U.S.C. §303, and 23 C.F.R. Part 774.

763-835

The Section 4(f) analysis in Chapter 4 of this Final EIR/EIS follows the requirements of 23 U.S.C. §138, 49 U.S.C. §303, and 23 C.F.R. Part 774, which require federal transportation projects to avoid or, where avoidance is not feasible and prudent, minimize harm to public parks, recreation areas, wildlife and waterfowl refuges, and historic sites.

763-836

In response to this comment, the text in Section 4.6.1.1, Pacific Crest Trail Assessment, of this Final EIR/EIS has been revised to state that the PCT, being a publicly accessible recreational resource (hiking trail), is the feature or attribute that qualifies the resource for protection under Section 4(f).The discussion of use and the basis for the Authority's *de minimis* determination have been substantially expanded in Section 4.6.1.1. As described in Section 4.6.1.1, a constructive use can occur only in the absence of a permanent incorporation of land into a transportation facility. Therefore, once a permanent use is identified, there can be no constructive use. Even if there were no permanent use or *de minimis* impact determination there would still be no constructive use because the activities, features, or attributes that qualify the PCT for protection under Section 4(f) would not be substantially diminished by the proximity impacts.

The Authority respectfully declines to incorporate the BLM Manual 6280 or the San Gabriel National Monument Plan because they are not applicable to the Section 4(f) policy or method of analysis.

The Section 4(f) analysis in Chapter 4 of this Final EIR/EIS follows the requirements of 23 U.S.C. §138, 49 U.S.C. §303, and 23 C.F.R. Part 774 for making a *de minimis* determination for the PCT.

763-837

The commenter suggests that three PCT easements, purchased with Land and Water Conservation Funds, will be converted to a non-recreational use. The Authority reached out to the commenter for additional information on the properties identified in this comment, but the commenter did not provide any additional information. Based on review of the California Department of Parks and Recreation and National Park Service websites, the Authority has not been able to confirm there are Section 6(f) properties in the resource study area for the B-P Build Alternatives.

Response to Submission 763 (Ben Barry, Pacific Crest Trail Association, April 27, 2020) - Continued

763-838

The Authority is committed to working with the Pacific Crest Trail Association, U.S. Forest Service, and Bureau of Land Management to continue to implement the mitigation measures described in this Final EIR/EIS. The analysis presented in Chapter 4 evaluates whether the Bakersfield to Palmdale Project Section uses a Section 4(f) resource like the PCT by permanently incorporating land from a Section 4(f) property, via temporary occupancy, or due to proximity impacts to the PCT that substantially impair the activities, features, or attributes that qualify the PCT for protection under Section 4(f). "Net Benefits to a Section 4(f) Property" is one of five programmatic Section 4(f) evaluations that can be used in place of individual Section 4(f) evaluations. The Authority is conducting an individual Section 4(f) evaluation for the Bakersfield to Palmdale project.

It should be noted that in response to comments received on the Draft EIR/EIS, the Authority has refined the project design in certain locations, including the realignment of Tehachapi Willow Springs Road to the west and its new connection to Oak Creek Road. With this design modification (discussed further in Appendix 3.1-B of this Final EIR/EIS), the existing at-grade PCT crossing across Tehachapi Willow Springs Road was replaced with a grade-separated crossing, improving safety for trail users. The design revisions at this location also eliminated project impacts to a PCT parking area along Oak Creek Road and eliminated the need to route PCT trail users through an 80-foot-long culvert underneath the HSR viaduct.

Submission 780 (Kristeen Penrod, SC Wildlands, April 28, 2020)

Bakersfield - Palmdale - RECORD #780 DETAIL

Status :	Action Pending
Record Date :	4/30/2020
Affiliation Type :	Business and/or Organization
Submission Date :	4/28/2020
Interest As :	Business and/or Organization
Submission Method :	Project Email
First Name :	Kristeen
Last Name :	Penrod
Professional Title :	Director
Business/Organization :	SC Wildlands
Address :	PO Box 1052
Apt./Suite No. :	
City :	Fair Oaks
State :	CA
Zip Code :	95628
Telephone :	626-497-6492
Email :	kristeen@scwildlands.org
Cell Phone :	
Email Subscription :	
Add to Mailing List :	
EIR/EIS Comment :	Yes
Attachments :	BtoP_EISEIR_SCWildlands.pdf (621 kb)

Stakeholder Comments/Issues :

From: "kristeen@scwildlands.org" <kristeen@scwildlands.org>
Sent: 4/28/20 5:42 PM
To: <Mark.Mcloughlin@hsr.ca.gov>
Subject: Comments on Bakersfield to Palmdale HSR DEIR/EIS
Please accept our attached comments on the DEIR/EIS.

Kristeen Penrod, Director
SC Wildlands
www.scwildlands.org
Direct 626-497-6492

780-512

SC Wildlands
Science & Collaboration for Connected Wildlands
P.O. Box 1052, Fair Oaks, CA 95628
(877) Wildland www.scwildlands.org

Mark A. McLoughlin, Director of Environmental Services
California High-Speed Rail Authority
770 L Street, Suite 620, MS-2
Sacramento, CA 95814
Via email to Mark.Mcloughlin@hsr.ca.gov

April 28, 2020

RE: Comments on Bakersfield to Palmdale DEIS/EIR

SC Wildlands mission is to protect and restore systems of connected wildlands and the ecosystems upon which they depend. The Bakersfield to Palmdale segment of the proposed High-Speed Rail would bisect what is arguably the most important landscape linkage in the entire state of California, the Tehachapi Connection (Penrod et al. 2003), an evolutionary hotspot where four of California's eight ecoregions converge. As described on 3.7-26 of the DEIS/EIR, the Tehachapi Mountains and foothills are "the only forest and woodland connection between the 2,000-mile-long Sierra Cascade mountain system and the 800- mile-long mountain system of the Southern California Coastal Ranges, Transverse Ranges, and Peninsular Ranges. The Tehachapi Mountains provide a critical habitat connection for east-west and north-south wildlife gene flow within California and beyond. Previous conservation planning efforts, the *South Coast Missing Linkages: A Linkage Design for the Tehachapi Connection* (Penrod et al. 2003) and the *California Essential Habitat Connectivity Project* (Spencer et al. 2010) have identified the Tehachapi Mountains and foothills as a particularly important habitat linkage".

California has recognized the importance of identifying, maintaining, and restoring essential connectivity areas (Spencer et al. 2010, CDFW 2019) to accommodate species movements, and to support range shifts and continued ecological functions during climate change, with statutory authority and legislative intent found in Fish and Game Code Sections 1345, 1346, 1347, 1850, 1851, 1930, 1930.5, 1932, 1932,5, 2787; Public Resources Code Sections 37015, 71154, 80076, 80130, 80132; Street and Highways Code Section 2704.09; and the following Assembly Bills and Senate Bills introduced in 2019-2020 AB 65, 74, 85, 190, 352, 1298, 2441, 2642, 2839; and SB 45, 73, 85, 474, 1372, an 62. All of California's climate adaptation strategies and State Wildlife Action Plans identify maintaining connectivity as one of the most important adaptation strategies to conserve biodiversity and support ecological functions during climate change.

It is ironic that the first two times that the word fragmentation is used in the DEIR/EIS, it's in relation to the No Project Alternative (3.7 Summary and 3.7.6.1)! Habitat loss and fragmentation are the leading threats to biodiversity, and are cited in recovery plans as the primary reasons for the decline of countless listed and sensitive species, including those species identified within the project footprint and those having the potential to occur. The Bakersfield to Palmdale segment of the High-Speed Rail, IF EVER BUILT, will be a monumental barrier to wildlife movement which

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cannot be mitigated to a less than significant level by simple incorporating crossing structures. While, "Well-designed wildlife crossings that are properly located in the landscape and sized appropriately ~~will~~ **can** facilitate effective wildlife movement," this DEIR/EIS and its associated technical reports do not adequately analyze the probability that the proposed crossings will actually facilitate safe passage, particularly for smaller bodied, less mobile species, such as blunt-nosed leopard lizard, or even highly mobile large-bodied mammals that are diurnally active, such as deer and elk. For all species analyzed, both listed species and those assessed in the Wildlife Corridor Assessment (WCA), it should be analyzed and disclosed whether the alignment will fragment core habitat areas into smaller patches for each species, and whether the patches of suitable habitat and the proposed wildlife crossings are within the dispersal distance or movement capability of these species, particularly small-bodied less mobile species. Surely, fragmenting core habitat areas should be worth far more than the proposed compensatory mitigation ratio of 1:1.

780-513

It is ridiculous that the summary of the Biological and Aquatic Resources section of the DEIR/EIS says in the same paragraph that "Implementation of the proposed B-P Build Alternatives (including the César E. Chávez National Monument Design Option [CCNM Design Option] and the Refined César E. Chávez National Monument Design Option [Refined CCNM Design Option]) would result in permanent impacts affecting 11,006.2 acres of suitable habitat for special-status species." The paragraph goes on to say that "some of the direct impact area would occur at at-grade and cut locations where these areas have already been heavily modified by human activity, such as railroad rights-of-way and industrial, commercial, and residential areas. Security fencing and retaining walls in these disturbed locations would not be likely to affect any important areas for wildlife movement." A total of 74% of the alignment will be at grade, the great majority of which will pass through relatively undisturbed native habitats, including a significant amount of the 11,000 acres of suitable habitat for listed species, much of which has been delineated as critical linkages. How can this possibly, "not be likely to affect any important areas for wildlife movement"?

As stated in section 3.7.4.4 of the DEIR/EIS, "The primary effect of the project on wildlife connectivity would be that the fenced at-grade segments would prevent wildlife from crossing at those locations". A total of 74% of the alignment will be at grade. All 57+ miles at-grade would be completely fenced with over 10-foot-high fencing.

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780-515

Least-cost corridor analysis "was applied to the project vicinity to estimate local project-specific impacts on permeability", which is a completely inappropriate use of this model. Furthermore, none of the analyses in the WCA factored in the Project Footprint, permanent impacts, or temporary impacts. Regulatory agencies must ask, "What is the degree of confidence in this model?" Has this use of the least-cost corridor analysis been evaluated in the scientific literature?

> The local permeability analysis was developed to measure project-specific impacts on the relative cost for target focal species to move across a 6-kilometer-wide area (i.e., a 3-kilometer buffer on either side of the HSR alignment) between potential habitat cores and patches beyond the perimeter of the 6-kilometer-wide extent. The local permeability analysis modeled relative cost between source habitat patches for each focal species for Alternative 2 under three scenarios:
>
> Existing conditions
> Project with no wildlife crossings for the at-grade or surface segments
> Project "improved" with wildlife crossings integrated into the at-grade segments

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> In the model scenarios with the project, the at-grade segments of the HSR project, which would be fenced, were coded as complete barriers to wildlife movement so that modeled corridors would have to move around these features to cross at viaducts or tunneled sections (in the project with no wildlife crossings for the at-grade or surface segments), or at viaducts, tunnels, or wildlife crossing structures (in the "Improved" Project scenario). Permanent open water and at-grade portions of the California Aqueduct were also treated as barriers.

There are serious issues and limitations with the "local permeability analysis" that drastically reduce its utility of generating useful information to evaluate impacts on wildlife movement. The "local permeability analyses" considered only the linear feature of the HSR centerline as a movement barrier. It did not factor in the Actual Project Footprint, Permanent Impacts, or Temporary Impacts. See **Figure 4-9 Example of Local Permeability Analysis for Project Permeability with "Null" Data for At-Grade Segments.** As can be seen in Figure 4-9, the at-grade segments were represented by "Null" data that was one pixel wide, or 30 meters (98 feet) squared. In addition, the "moving average window calculated the average value for all pixels within a 90-meter (295-foot) radius. This 90-meter radius pixel value was collected every 50 meters (164 feet) along the HSR alignment. The moving window average was calculated for existing conditions, project, and project with wildlife crossings scenarios for each focal species." The values of the 90-meter radius pixel values would have been drastically different had the actual project footprint/permanent impacts been used in the analyses, instead of the linear HSR centerline. If the Actual Project Footprint and Permanent Impacts had been factored into the model the results of the analyses summarized in Table 6-7 of the WCA would have been significantly different. Basically, all of their calculations about "improvements" with the wildlife crossings don't accurately reflect the real world. Wildlife and regulatory agencies should have very low confidence in the results of the "local permeability analyses", and therefore on the NEPA and CEQA determinations with respect to wildlife movement, as the determinations are almost entirely based on the "local permeability analyses".

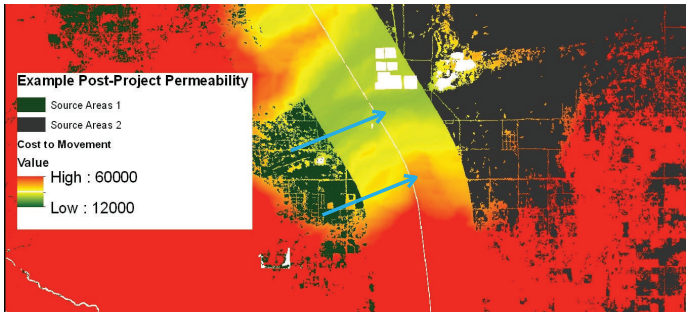

Figure 4-9 Example of Local Permeability Analysis for Project Permeability with "Null" Data for At-Grade Segments

Submission 780 (Kristeen Penrod, SC Wildlands, April 28, 2020) - Continued

780-516 One drastic example of the inadequacy of the "local permeability analyses" to assess impacts because the Actual Project Footprint and Permanent Impacts weren't factored into the model is the stockpile area northwest of State Route 58 and Bealville Road that is described on Page 20 of the Summary Report. The stockpile area is proposed to have between 2-14 million cubic feet of material from the proposed tunneling at this location, which covers roughly 600 acres and is entirely within the Tehachapi Linkage Design (Penrod et al. 2003) and a California Essential Habitat Connectivity Area (Spencer et al. 2010). As can be seen in the Map Book, posted on March 23, 2020 under Education Materials (?) on the DEIR/EIS website, this area is currently blue oak woodland and savanna, which is incredibly important live-in and move-through habitat for countless species. Furthermore, this area of the Tehachapi Linkage Design (Penrod et al. 2003) is the only area where blue oak woodland has been protected on both sides of State Route 58, which is a significant conservation investment by the State of California to provide a continuous connection for wildlife movement.

780-517 Spatially explicit models can help us understand useful information about the real world but the results are absolutely dependent on the inputs to the analysis. The *Proposed Tehachapi Pass High-Speed Rail Corridor Vegetation Map available on California Department of Fish and Wildlife's website* https://wildlife.ca.gov/Data/GIS/Vegetation-Data was created by the Geographical Information Center, California State University (2014). The Vegetation Classification and Mapping Program (VegCAMP) completed an accuracy assessment, which showed it met their 80% accuracy standards. This vegetation data set was completed in 2014 yet it wasn't used in the WCA, or other technical reports of the EIS/EIR. While the VegCAMP data doesn't cover the entire segment of the alignment (i.e., Antelope Valley), it absolutely should have been used for the "local permeability analyses" for all species whose ranges fall within the extent of that data because it covers the "6-kilometer-wide area (i.e., a 3-kilometer buffer on either side of the HSR alignment) between potential habitat cores and patches beyond the perimeter of the 6-kilometer-wide extent". This would have included all but desert tortoise, desert kit fox, and badger. Again, the results of the analyses would have been much different had this more accurate vegetation data been used. This is particularly important for the "impact acreages" calculated for listed species and communities. For example, **Table 5-1 Summary of Vegetation Communities That Intersect the High-Speed Rail Centerline (linear miles) of the WCA shows 0.38 linear miles that bisect blue oak woodland, while calculations using the VegCAMP data show 8.9 miles of the High-Speed Rail alignment that severs blue oak woodlands~!**

780-518 Interestingly, the WCA states that, "The WCA has specific limitations that may affect the results of the analysis. The lack of access to HSR alignment parcels and limited time prevented the establishment of field-verified baseline conditions **other than detailed vegetation mapping**, roadkill data, and potential crossing structure evaluations on SR 58 and SR 14." This statement is contradicted by "Detailed vegetation mapping can be found in the BARTR (Authority 2017), which includes the area within the Special-Status Plant Study Area. **However, the scale of that mapping was too narrow and refined for the purposes of the WCA**. Vegetation data from the California Department of Forestry and Fire Protection's (CAL FIRE) Fire and Resource Assessment Program (FRAP) (CAL FIRE 2016) were used to model for wildlife movement."

780-519 Furthermore, as stated in section 4.10 Limitation of the Wildlife Corridor Assessment, the "local permeability analyses" has specific limitations that may affect the results of the analysis." The scale of the movement cost raster models is at 30-meter pixels, which exceeds the actual size of

780-519 the small, 6-foot wildlife crossings. However, a pixel was removed as part of the modeling for each wildlife crossing to simulate a point of connectivity in the "project with crossings" scenario in the LPA model." That's strange, elsewhere the WCA states that the local permeability analyses scenario "Project with no wildlife crossings for the at-grade or surface segments" were represented by "Null" data that was one pixel wide, or 30 meters (98 feet) squared. Why would they then remove a pixel to "simulate a point of connectivity in the "project with crossings" scenario? On page 4-19, the WCA states, "The dimensions of these 39 crossing locations were used in the third "Improved" Project model scenario" of the "local permeability analyses". That statement is simply not possible and is contradictory to the first bullet point in the WCA Limitations described above. The WCA used a 30-meter pixel to represent each "dedicated wildlife crossing" in the "improved project with crossings" -- that's about 2,940 feet (30 m ~ 98 feet x 30 crossings) of "local permeability" that was factored into the model that won't exist in reality. **All of the "dedicated wildlife crossings" together would only provide about 192 feet of "passageways" (i.e., 27 x 6' culverts = 162 feet; 3 x 10' = 30 feet) across the entire 57+ miles of the at-grade sections of the alignment. To reiterate, essentially all of the calculations about "improvements" with the wildlife crossings in the 'local permeability analyses" don't accurately or even approximately reflect the real world**. This is an incredibly important reason why the results of the "local permeability analyses" are completely nebulous and the proposed NEPA and CEQA determinations should not be accepted by the regulatory agencies.

780-520 The NEPA and CEQA determinations with respect to wildlife movement are entirely based on the results of the "local permeability analyses". Although the WCA also evaluated impacts on connectivity at the regional scale, and how the HSR centerline intersected cores and patches of modeled habitat for the species assessed in the WCA. Section 6.3 and Table 6-5 of the WCA describes impacts on connectivity at the regional scale due to at-grade sections of the HSR by calculating the length of at-grade rail segments that would intersect each of the species least cost corridors. The impacts to Regional Connectivity also only considered HSR centerline length that bisected each species least cost corridor and the total linkage design, rather than the Project Footprint and Permanent and Temporary Impact. The WCA states, "Roughly 63 percent of the Linkage Design (Penrod et al. 2003) would be affected by fenced at-grade segments, which is quite substantial. Notably, the entire length of the HSR segment that bisects the badger least-cost corridor would be at grade, while 79 percent or more of the least-cost corridors for San Joaquin kit fox and blunt-nosed leopard lizard would be affected by the fenced at-grade sections."

Summarized from Table 6-5 of the WCA % of Least Cost Corridors and Linkage Design At-Grade

Focal Species/Linkage Design	% At-Grade
Mountain Lion	29%
Mule Deer	44%
Badger	100%
San Joaquin kit fox	80%
Western gray squirrel	63%
Blunt-nosed leopard lizard	79%
Tehachapi pocket mouse	**31%**
Tehachapi Linkage Design	**63%**

780-520

It is appalling that 63% of the Tehachapi Linkage Design will be at-grade yet only 6 of the 30 "dedicated wildlife crossings" are proposed for the Tehachapi Connection. Plus 1 Dual use road crossing and 1 dual use drainage crossing. THAT'S ROUGHLY EQUAL TO 44 FEET of POTENTIAL PASSAGEWAYS for the most important landscape linkage in the state of California!

The WCA also calculated the length of core and patch habitat for each species intersected by the HSR alignment as well of the portion that would be at-grade (Table 6-6 from WCA).

Table 6-6 Length of Suitable Core and Patch Habitat Within the High-Speed Rail Centerline

Species	Alternative 2				
	Elevated	Surface	Underground	Total	% at grade
Mountain Lion	0.83	6.67	1.89	**9.39**	**70%**
Mule Deer	2.00	7.55	3.56	**13.11**	**57%**
American Badger	5.36	40.50	8.21	**54.07**	**75%**
Blunt-nosed Leopard Lizard	1.39	5.33	0.97	**7.69**	**68%**
Desert Kit Fox	2.11	24.92	0.18	**27.21**	**92%**
Desert Tortoise	1.48	15.78	2.44	**19.70**	**80%**
San Joaquin Kit Fox	0.73	3.32	0.67	**4.72**	**78%**
Tipton Kangaroo Rat	1.28	3.85	0.67	**5.80**	**65%**
Western Gray Squirrel	0.84	6.67	1.89	**9.40**	**70%**

780-521

The Environmental Consequences on construction and operation impacts on wildlife movement, both temporary and permanent are substantial:

> noise, vibrations, light, dust, or human disturbance within construction areas may dissuade wildlife from using those areas for daily or seasonal movement or foraging. These direct impacts could **permanently** alter historical migration corridors, territories, or foraging habitats. The activities listed above may also result in indirect impacts on wildlife movement, including habitat shifts, increased foraging competition, or genetic isolation of populations."
>
> Indirect impacts from installation of track, fencing, and building structures may include the alteration of long-term movement, foraging ranges, and genetic distribution of a species. Specifically, linear obstacles, such as track and fencing, may prevent wildlife from moving throughout their ranges during daily foraging, migration, or the breeding season. This could result in habitat fragmentation, habitat shifts, increased foraging competition, or limitations on genetic exchange.

The proposed mitigation measures for wildlife movement are woefully inadequate! Two are focused on construction monitoring, three are focused on crossings, fencing and a wildlife jump

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out! The mitigation measures and design features do not reduce the level of impacts on wildlife movement to less than significant and the NEPA and CEQA determinations should reflect this.

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SC Wildlands has been working to conserve connectivity for over two decades in California and beyond. SC Wildlands worked with HSR consultants on the WCA because we thought that is would result in better outcomes for conserving connectivity. We do not continue to hold this view. We had requested that the Bakersfield to Palmdale Wildlife Corridor Assessment include a disclaimer, such as, "The opinions, findings, conclusions, and recommendations expressed in this material do not reflect the views of SC Wildlands" but that request was not granted. SC Wildlands was not even mentioned in the WCA yet our name and my personal name, as well as, Paul Beier's was used throughout the BARTR and section 3.7 of the DEIR/EIS. As a very small but extremely successful environmental non-profit organization, our reputation is our most important asset. Thus, I was absolutely shocked to read the following statement on page 3.7-90 of the DEIR/EIS under CEQA Conclusions, **Impact BIO #13: Potential Conflicts with Conservation Plans and Easements**

> ***Upland Species San Joaquin Recovery Program***
>
> The project does cross the Tehachapi linkage identified by Penrod et al. (2003) that serves as a linkage between portions of the Bakersfield Urban Satellite population of San Joaquin kit fox and a core population to the west as identified in the recovery plan. However, **the Wildlife Corridor Assessment prepared for the HSR project, using assessment methodology developed by Penrod, found that the increase in "movement cost" across the most functional portion of the linkage would be approximately 2 percent for San Joaquin kit fox and 3 percent for blunt-nosed leopard lizard, compared to existing conditions.** Additionally, through compliance with CESA and FESA, the HSR project is not anticipated to conflict with this program due to the design of crossings to facilitate wildlife movement and the preservation of selected lands that would enhance the preservation and recovery of the species in the region.
>
> Therefore, it is not anticipated that the B-P Build Alternatives would cause any impacts due to conflicts with conservation plans and/or easements.

I, Kristeen Penrod, do so solemnly swear that I had absolutely nothing to do with the development of the "local permeability" model. To attribute the development of this inferior model that is attempting to show impacts on wildlife movement are less than significant is a defamation of my character.

Respectfully Submitted,

Kristeen Penrod

Response to Submission 780 (Kristeen Penrod, SC Wildlands, April 28, 2020)

780-512

a) The commenter states that the project will be a monumental barrier to wildlife movement and cannot be mitigated by incorporating crossing structures.

The Supplemental Habitat Study Area, which extends up to 10 miles outward from the widest point of the project footprint, was determined based on guidance from appropriate regulatory agencies and best professional judgment. The use of 10 miles out is relevant for occurrence data and assures that special-status species would not be in the resource study area. Species-specific habitats within the Supplemental Habitat Study Area were identified based on aerial photograph interpretation, documented occurrences of a species (e.g., CNDDB database records), and field observations of special-status species, their habitats and movements.

Additionally, specific wildlife movement features developed to address impacts on wildlife movement are outlined as WM-IAMF #1 through WM-IAMF #6 in the WCA (Appendix I of the BARTR). These measures have been incorporated into the BIO-IAMFs, and the BIO-MMs outlined in Sections 3.7.4.2 and 3.7.7.2 of the Final EIR/EIS. These wildlife movement IAMFs and mitigation measures are discussed under Impact BIO#5 of the Final EIR/EIS and include avoidance of impediments to movement, measures to reduce impacts from night lighting and construction noise, wildlife exclusion fencing, measures for impacts from vehicle traffic, and restoration and revegetation plans for impacts on special-status species and wildlife movement corridors.

BIO-IAMF#1 through BIO-IAMF#3 and BIO-IAMF#5through BIO-IAMF#11 also include measures to minimize impacts on biological resources and wildlife connectivity from project construction and operation, as applicable and discussed in Section 3.7.4.2. The Authority would incorporate these IAMFs to reduce and minimize impacts by designating a Project Biologist and species-specific and general biological monitors during construction.

b) The commenter suggests the technical report does not adequately analyze the probability that the proposed crossings will facilitate safe passage, particularly for smaller-bodied, less mobile species such as blunt-nose leopard lizard, or even highly mobile large-bodied mammals that are diurnally active, such as deer or elk. The project is not within the species range of elk as shown in the California Wildlife Habitat

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Relationship data set.

c) The commenter suggests that all species analyzed in the WCA should be analyzed and disclosed in the Draft EIR/EIS as to whether the alignment will fragment core habitat areas into smaller patches for each species, and whether the patches of suitable habitat and proposed wildlife crossings are within the dispersal distance or movement capability of these species, particularly small-bodied, less mobile species.

Habitat fragmentation was analyzed in the WCA and summarized in Impact BIO#5 in Section 3.7.6.4 of this Final EIR/EIS. Section 6.3.2 of the WCA analyzes impacts to core and patch habitat and Table 6-6 of the WCA lists the lengths of suitable core and patch habitat within the HSR centerline. Figures 6-1 through 6-9 show underground tunnel sections and elevated viaduct sections in relation to core and patch habitat for each of the 9 focal species (mountain lion, mule deer, American badger, blunt-nosed leopard lizard, desert kit fox, desert tortoise, San Joaquin kit fox, Tipton kangaroo rat, and western gray squirrel) to cross the HSR alignment between core and patch habitat. As discussed in Impact BIO#5 in Section 3.7.6.4 of this Final EIR/EIS, construction of the HSR project could result in habitat fragmentation, habitat shifts, increased foraging competition, or limitations on genetic exchange. However, the construction of tunnels and viaducts, particularly in the mountainous areas, would allow for continued wildlife movement over and under the HSR alignment. Additionally, wildlife undercrossings and overcrossings would be installed along the length of the alignment. The 39 wildlife crossings would be designed to provide additional crossing opportunities where at-grade sections are longer in length. As concluded in Impact BIO#5, the design characteristics of the project include effective IAMFs to identify wildlife crossings and delineate Environmentally Sensitive Areas or environmentally restricted areas on final construction plans and in the field (BIO-IAMF#8 and BIO-IAMF#5). In addition to the IAMFs, mitigation measures were identified to reduce impacts on wildlife crossings and habitat linkages to a less than significant level by avoidance, protection, or restoration methods. These measures include: BIO-MM#42, BIO-MM#37, BIO-MM#56, BIO-MM#64, BIO-MM#77, and BIO-MM#78, which would allow for the protection of habitat linkages. These measures would work together with design features to minimize or avoid impacts on wildlife crossings during construction activities so as not to interfere substantially with the movement of native wildlife species.

Response to Submission 780 (Kristeen Penrod, SC Wildlands, April 28, 2020) - Continued

780-512

780-513

The commenter asserts that because 74 percent of the alignment will be at-grade through relatively undisturbed native habitat, including a significant amount of habitat for listed species, much of which has been delineated as critical linkage, it will likely affect important areas for wildlife movement. In addition, the commenter disagrees with the conclusion that the project will "not be likely to affect any important areas for wildlife movement."

Refer to Response to Comment 777-315(b), contained in this chapter, regarding the number of wildlife crossings and connectivity and the rationale for the less than significant conclusion on wildlife crossings.

780-514

The commenter suggests that the use of a least-cost corridor analysis was an inappropriate model to analyze impacts on permeability.

The WCA, which is Appendix I to the BARTR (Authority 2018b), discusses the LPA model, which was developed to quantify relative effects on wildlife movement across a linear project where portions of the project would limit wildlife movement with a fenced barrier. The project centerline was used to represent portions of the project that would be a barrier to wildlife movement or provide passage across, such as over underground tunnel sections or under elevated viaducts. Wildlife crossings that created additional crossing opportunities across at-grade surface segments were also modeled.

As described in the WCA (Authority 2018a), the LPA used the focal species movement cost criteria and data developed by South Coast Wildlands for the South Coast Missing Linkages Project: A Linkage Design for the Tehachapi Connection (South Coast Wildlands no date) and adapted the least-cost corridor function across a smooth-edge project buffer that calculated movement cost across core and patch habitat for each of the nine focal species. Models are calculated representations of what is thought to be occurring in the real world. It is acknowledged that models cannot capture all real-world variables. The model has not been validated by tracking individual wildlife movement in the area. However, the manner in which the least-cost corridor was used is appropriate for analyzing project effects. It is assumed that wildlife will cross through the 62 ungraded openings in the alignment. In addition, wildlife have also been known to use 6-foot and 10-foot wildlife crossings under transportation projects and are likely to benefit from the 39 wildlife crossings added in the at-grade surface segments. The LPA attempts to quantify the change in movement cost. It is acknowledged that one of the limitations of the LPA model is the resolution of the 30x30-meter pixel size. A single pixel is the smallest unit that could be represented as a wildlife crossing regardless of actual size. The change in pixel size representing the wildlife crossing would not have an appreciable effect on the model results.

Response to Submission 780 (Kristeen Penrod, SC Wildlands, April 28, 2020) - Continued

780-515

The commenter states the least-cost corridor analysis used for the analysis was an inappropriate use of the model, and that the limitations of the local permeability analysis drastically reduced its utility for generating useful information to evaluate impacts on wildlife movement. The commenter also was concerned that the size of the wildlife crossings in the model did not accurately reflect real-world conditions.

The extent of the project footprint was not incorporated into the LPA model. The LPA model was designed to measure the relative change in movement cost at the 15 percent design stage utilizing the openings or gaps between impervious fenced at-grade segments using the same criteria as the South Coast Wildlands Missing Linkages least-cost corridor models. At the scale of the project a linear representation of the project is sufficient to represent the gaps and model relative to wildlife movement cost across the habitat. The commenter is correct that the LPA model only analyzes wildlife movement across the finished project. Temporary impacts are addressed qualitatively in Section 6 of the WCA, which is Appendix I to the BARTR (Authority 2018b). The LPA used the same data sets as South Coast Wildlands Missing Linkages least-cost corridor models. The LPA models relative change and highlights those areas where a wildlife crossing would have the greatest benefit based on each of the same focal species used by South Coast Wildlands Missing Linkages least-cost corridor models.

Impacts on habitat areas utilizing the footprint were analyzed in the BARTR and impacts are discussed under Section 3.7 of this Final EIR/EIS. Additionally, Section 3.7.4.2 outlines the IAMFs that will be implemented during design, construction, and operations of the project. Section 3.7.6 discusses the environmental consequences of the project alternatives, outlining potential biological and aquatic resource impacts on various species and their habitats. Sections 3.7.7 of this Final EIR/EIS outlines detailed mitigation measures designed to reduce identified impacts to less-than-significant levels.

780-516

The commenter expresses concern that the actual footprint and permanent impacts were not factored into the model used to assess biological resources impacts at the stockpile area northwest of SR 58 and Bealville Road.

One of the primary issues addressed in the analysis is how wildlife would move across the linear project. At the time of the evaluation, the extent of the project footprint was still being developed, but the openings across the project were known to be associated with the underground tunnel and elevated viaducts where wildlife could move across the project unimpeded. The LPA model was developed based on modeling wildlife movement across those openings.

Although the soil stockpile was not modeled as part of the WCA, which is Appendix I of the BARTR (Authority 2018b), the area will be contoured and revegetated with blue oak woodland to help facilitate wildlife movement at those wildlife crossing locations, as described in Mitigation Measure BIO-MM#6 of this Final EIR/EIS.

In addition, specific wildlife movement features developed to address impacts on wildlife movement are outlined as WM-IAMF #1 through WM-IAMF #6 in the WCA. These measures have been incorporated into the BIO-IAMFs, and the BIO-MMs outlined in Sections 3.7.4.2 and 3.7.7.2 of this Final EIR/EIS. These wildlife movement IAMFs and mitigation measures are discussed under Impact BIO#5 of the Final EIR/EIS and include avoidance of impediments to movement, measures to reduce impacts from night lighting and construction noise, wildlife exclusion fencing, measures for impacts from vehicle traffic, and restoration and revegetation plans for impacts on special-status species and wildlife movement corridors.BIO-IAMF#1 through BIO-IAMF#3 and BIO-IAMF#5 through BIO-IAMF#11 include measures to minimize impacts on biological resources and wildlife connectivity from project construction and operations, as applicable and discussed in Section 3.7.4.2 of this Final EIR/EIS.

Response to Submission 780 (Kristeen Penrod, SC Wildlands, April 28, 2020) - Continued

780-517

The commenter suggests that although the Vegetation Classification and Mapping Program (VegCAMP) does not cover the Antelope Valley portion of the alignment, it is more accurate and should have been used for the local permeability assessment model for all species whose ranges fall within the extent of that data.

The WCA, which is Appendix I to the BARTR (Authority 2018b), used the vegetation data from the CAL FIRE Fire and Resource Assessment Program (CAL FIRE 2016) to model wildlife movement so that it would be consistent with the least-cost corridor models for the focal species developed for the South Coast Wildlands Missing Linkages project (South Coast Wildlands no date) and the DRECP. The VegCAMP data set does not cover the entire extent of the project. Because of the larger geographic extent of the LPA, it was decided to use the data set that spans the entire project geography. The area mapped for vegetation by the BARTR was considered too narrow of a corridor for the wildlife movement analysis (only 1,000 feet from the projected footprint), while the LPA required a much more expansive 3-kilometer (1.86-mile) buffer from the centerline. Therefore, the CAL FIRE mapping was used because it covered the larger area and was consistent with the previously prepared South Coast Wildlands Missing Linkages' least-cost corridor model, which was also used in the WCA analysis. In addition, the Tehachapi Pass High-Speed Rail Corridor Vegetation Map) created by the Geographical Information Center, California State University, Chico (VegCAMP) data set does not cover the entire project area which would be a challenge for consistency for modeling all species throughout the project area. Using merged data sets at developed at different scales and different methodologies would be problematic for the integrity of the model.

780-518

The commenter expresses concern with the lack of access to HSR alignment parcels and limited time, which prevented the establishment of field-verified baseline conditions, which contradicts statements about detailed vegetation mapping in the BARTR.

To address information needs for areas where access was not granted, the Authority utilized habitat suitability models based on several databases, including the California Wildlife Habitat Relationship System, which assists in mapping habitat and land uses that are crossed with the species' known geographic range to determine suitable habitats for special-status wildlife species. This system is a widely used tool, and its approach assumes the presence of special-status wildlife species in areas where suitable habitat occurs (as identified in the California Wildlife Habitat Relationship System or other published agency literature). The California Wildlife Habitat Relationship approach is widely used in California on large infrastructure projects and other projects where permission to enter is limited; it provides a reasonable and consistent approach to the assessment of potential for wildlife presence. It also provides a reasonable and conservative basis for estimating potential impacts. The net result is a conservative approach that overestimates impacts on suitable habitat.

The area mapped for vegetation by the BARTR was considered too narrow a corridor for the wildlife movement analysis (only 1,000 feet from the projected footprint), while the LPA required a much more expansive 3-kilometer (1.86-mile) buffer from the centerline. Therefore, the CAL FIRE mapping was used because it covered the larger area and was consistent with the previously prepared South Coast Wildlands Missing Linkages' least-cost corridor model that is also used in the analysis in the WCA, which is Appendix I to the BARTR. In addition, the scales of the two vegetation mapping methods would make running the model on a merged data set challenging.

Section 3.7.4.5 of this Final EIR/EIS describes the field methods and access to HSR alignment parcels. For all areas where field access was limited, data could not always be collected on the ground. Therefore, estimates and assumptions regarding the presence of aquatic resources, special-status species, and plant communities are based on assessments from adjacent accessible areas, aerial photographic interpretation, or post-survey GIS analysis. The conservative estimations and assumptions resulted in a complete assessment for those areas where field access was limited.

Response to Submission 780 (Kristeen Penrod, SC Wildlands, April 28, 2020) - Continued

780-518

The BARTR (Authority 2018b) provides detailed descriptions of the various methods employed during the field surveys for biological resources.

Refer to Response to Comment 781-591, contained in Chapter 20 of this Final EIR/EIS.

780-519

The commenter expresses concern that 30x30-meter pixels were used to represent a dedicated wildlife crossing.

The LPA model used South Coast Wildlands data for Linkage Design for the Tehachapi Connection and Linkage Design for the California Desert base data, which was limited by the resolution of the 30x30-meter pixel size. The LPA model was designed to measure the relative change in movement cost at the 15 percent design stage using the openings or gaps between impervious fenced at-grade segments utilizing the same criteria as the South Coast Wildlands Missing Linkages least-cost corridor models. A single pixel is the smallest unit that could be represented as a wildlife crossing regardless of actual size. The model uses the smallest pixel size as an appropriate representation of a wildlife crossing to show relative change in movement cost and to identify those locations where adding a wildlife crossing would have the greatest benefit. The size of the wildlife under crossings is based on the size of wildlife that would utilize the crossings and will be designed consistent with the U.S. Department of Transportation's Wildlife Crossing Structure Handbook, Design and Evaluation in North America (Clevenger and Huijser 2011) and the Caltrans Wildlife Crossings Guidance Manual (Meese et al. 2009). In areas where larger species such as mountain lion and mule deer occur, 10-foot-tall arch culverts will be used for the larger overhead clearance; all other locations would include a 6-foot-tall arch culvert to accommodate smaller species.

The change in pixel size representing the wildlife crossing would not have an appreciable effect on the model results.

780-520

The commenter expresses concern that 63 percent of the Tehachapi Linkage Design will be at-grade, yet only 6 of the 30 dedicated wildlife crossings are proposed for the Tehachapi Connection.

The commenter is incorrect; there are 9 dedicated wildlife crossings planned for the Tehachapi Linkage Design and 39 dedicated wildlife crossings throughout the Bakersfield to Palmdale Project Section. The suggestion that there are only 44 feet of potential passageways across the Tehachapi Linkage Design is also inaccurate given the length of underground tunnel sections and elevated viaduct sections that cross the Tehachapi Connection Linkage Design, Table 6-5 of the WCA, which is Appendix I to the BARTR (Authority 2018b). It is important to understand the length and distribution of those openings in that 63 percent of at-grade segments within the Linkage Design to understand the full picture of crossing opportunities. Figure 4-4 in the WCA shows the extent of the underground tunnel sections and elevated viaduct sections that cross the Tehachapi Connection Linkage Design. There are 6 underground tunnel sections within the Tehachapi Linkage Design, including 0.28 mile (1,500 feet), 0.75 mile (3,939 feet), 0.33 mile (1,749 feet), 0.74 mile (3,908 feet), 2.37 miles (12,496 feet), and 0.28 mile (1,476 feet). There are also 5 elevated viaduct sections within the Tehachapi Linkage Design, including 0.41 mile (2,141 feet), 0.12 mile (616 feet), 0.21 mile (1,129 feet), 0.07 mile (394 feet), and 0.29 mile (1,516 feet). Table 6-7 in the WCA shows all of the at-grade segments that intersect the Linkage Design, how long each one is, and how they will be divided up to improve enhance wildlife connectivity through those segments.

Response to Submission 780 (Kristeen Penrod, SC Wildlands, April 28, 2020) - Continued

780-521

The commenter indicates the mitigation measures for impacts on wildlife are inadequate and feels the mitigation measures and design features do not reduce the level of impacts on wildlife movement to less than significant and that the NEPA and CEQA determination should reflect that.

Based on the CEQA thresholds identified in Section 3.7.4.7 of this Final EIR/EIS, the impact under CEQA to wildlife crossings and habitat linkages would be potentially significant. This determination is because disturbance of wildlife crossings and habitat for construction access and activities could interfere substantially with the movement of native wildlife species. The design characteristics of the project include effective IAMFs to identify wildlife crossings and delineate Environmentally Sensitive Areas or environmentally restricted areas on final construction plans and in the field (BIO-IAMF#8 and BIO-IAMF#5). Additionally, specific wildlife movement features developed to address impacts on wildlife movement are outlined as WM-IAMF #1 through WM-IAMF #6 in the WCA. These measures have been incorporated into the biological BIO-IAMFs, and the BIO-MMs outlined in Sections 3.7.4.2 and 3.7.7.2 of the Final EIR/EIS. These wildlife movement IAMFs and MMs are discussed under Impact BIO#5 of the Final EIR/EIS and include avoidance of impediments to movement, measures to reduce impacts from night lighting and construction noise, wildlife exclusion fencing, measures for impacts from vehicle traffic, and restoration and revegetation plans for impacts on special-status species and wildlife movement corridors.BIO-IAMF#1 through BIO-IAMF#3 and BIO-IAMF#5 through BIO-IAMF#11 include measures to minimize impacts on biological resources and wildlife connectivity from project construction and operation, as applicable and discussed in Section 3.7.4.2 of this Final EIR/EIS.

Therefore, effective mitigation measures have been identified in Section 3.7.7 of this Final EIR/EIS to reduce impacts on wildlife crossings and habitat linkages to a less-than-significant level through avoidance of specific linkages when possible, protection of the linkage system during construction, or restoration of wildlife crossings after construction is completed. These measures include: BIO-MM#42, BIO-MM#37, BIO-MM#56, BIO-MM#64, BIO-MM#77, and BIO-MM#78.

These measures would work together with design features to minimize or avoid impacts on wildlife crossings during construction activities so as not to interfere substantially with

780-521

the movement of native wildlife species. Therefore, impacts would be considered less than significant under CEQA after implementation.

780-522

The commenter states that they are wrongly referenced in the BARTR and Section 3.7 of the Draft EIR/EIS, and that they were not involved in the development of the “local permeability” model.

Although, South Coast Wildlands was not involved in the development of the modeling results and therefore the conclusions drawn from the modeling, South Coast Wildlands worked with the Authority towards the development of the WCA, including the creation of the LPA modeling, using South Coast Wildlands’ data. South Coast Wildlands was contracted to provide subject matter peer review of the WCA, provided support for the development of the LPA, participated in two regional mitigation stakeholder meetings, and provided a focused review of the Administrative Draft EIR/EIS of the Biological Resources section specific to wildlife corridors and movement.

With regard to modeling conclusions, reference to South Coast Wildlands or its staff members have been removed from the BARTR and Section 3.7, Biological and Aquatic Resources, of this Final EIR/EIS.

Submission 690 (Joe Linton, Streetsblog Los Angeles, March 2, 2020)

Bakersfield - Palmdale - RECORD #690 DETAIL

Status :	Completed
Record Date :	3/2/2020
Response Requested :	
Affiliation Type :	Business and/or Organization
Submission Date :	3/2/2020
Interest As :	Business and/or Organization
Submission Method :	Project Email
First Name :	Joe
Last Name :	Linton
Professional Title :	Editor
Business/Organization :	Streetsblog Los Angeles
Address :	
Apt./Suite No. :	
City :	
State :	
Zip Code :	0000
Telephone :	
Email :	joe@streetsblog.org
Cell Phone :	213.220.1608
Email Subscription :	
Add to Mailing List :	
Stakeholder Comments/Issues :	

CAHSR folks -

690-242 I am a reporter for Streetsblog Los Angeles. I am interested in reporting on the plans released today for CAHSR from Bakersfield to Palmdale. I thought the EIR/EIS would be available on the CAHSRA website, but, at least so far it is not there yet. The website states that Draft EIR/EIS are viewable at https://www.hsr.ca.gov/programs/environmental/eis_eir/draft_bakersfield_palmdale.aspx but the documents are not at the webpage linked.

Could you please advise on how I can go about viewing the Bakersfield-Palmdale draft EIR/EIS?

--
Joe Linton
Editor, Streetsblog Los Angeles
la.streetsblog.org
cell/text 213.220.1608

EIR/EIS Comment :	Yes

Response to Submission 690 (Joe Linton, Streetsblog Los Angeles, March 2, 2020)

690-242

Refer to Standard Response BP-Response-GENERAL-02: Public Outreach on the Draft EIR/EIS.

The commenter states that as of the date of his comment (March 2, 2020), the Draft EIR/EIS document was not on the Authority's website as linked documents (https://www.hsr.ca.gov/programs/environmental/eis_eir/draft_bakersfield_palmdale.aspx).

The documents are uploaded at the Authority's website at the link mentioned in his comment. The document was uploaded and went live the night of February 27, 2020. The commenter was contacted on March 3, 2020 and he confirmed that he was able to access the Draft EIR/EIS on the Authority's website.

Submission 698 (Frank Lloyd, Tanxh, March 11, 2020)

Bakersfield - Palmdale - RECORD #698 DETAIL

Status :	Action Pending
Record Date :	3/11/2020
Response Requested :	
Affiliation Type :	Business and/or Organization
Submission Date :	3/11/2020
Interest As :	Business and/or Organization
Submission Method :	Website
First Name :	Frank
Last Name :	Lloyd
Professional Title :	Mr Frank Lloyd
Business/Organization :	Tanxh
Address :	
Apt./Suite No. :	
City :	Lancaster
State :	CA
Zip Code :	93536
Telephone :	8187308353
Email :	aranch45@gmail.com
Cell Phone :	
Email Subscription :	
Add to Mailing List :	No
Stakeholder Comments/Issues :	

Dear Sir or Madam,

698-252 This is insane! No one wants it. No one will use it! Use the Amtrak as an example. No one used it for the first ten years! Which politicians are making money off the pre bought real estate it is going to be put on? You have people sleeping, defecating in the streets and you ban straws... we are now watching you, please be frugal with our hard earned taxes.

Thanks, Frank

EIR/EIS Comment : Yes

Response to Submission 698 (Frank Lloyd, Tanxh, March 11, 2020)

698-252

The commenter's opposition to the HSR project is acknowledged. This comment does not address the sufficiency of the Draft EIR/EIS nor does it suggest edits to the document. No change has been made to the document in response to this comment.

Submission 706 (Hugh McMahon, Tejon Ranch Company, March 24, 2020)

[TRC_1754c]

Bakersfield - Palmdale - RECORD #706 DETAIL

Status :	Action Pending
Record Date :	3/26/2020
Affiliation Type :	Business and/or Organization
Submission Date :	3/24/2020
Interest As :	Business and/or Organization
Submission Method :	Project Email
First Name :	Hugh
Last Name :	McMahon
Professional Title :	Executive Vice President Real Estate
Business/Organization :	Tejon Ranch Company
Address :	P.O. Box 1000 | 4436 Lebec Road
Apt./Suite No. :	
City :	Tejon Ranch
State :	CA
Zip Code :	93243
Telephone :	(661) 663-4229
Email :	hmcmahon@tejonranch.com
Cell Phone :	
Email Subscription :	
Add to Mailing List :	Yes
EIR/EIS Comment :	Yes
Attachments :	TejonRanch_Letter.pdf (2 mb)

Stakeholder Comments/Issues :

Please find attached our organization's comment letter regarding the Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) for the Bakersfield to Palmdale Section of the California High-Speed Rail Project.

Please confirm receipt of this email and the attached letter.

Thank you very much.

Hugh F. McMahon, IV
Executive Vice President, Real Estate

[cid:image001.png@01D601EF.97E38450]

P.O. Box 1000 | 4436 Lebec Road
Tejon Ranch, CA 93243
(661) 663-4229 Direct
www.TejonRanch.com<http://www.tejonranch.com/>
www.TejonMountainVillage.com<http://www.tejonmountainvillage.com/>
www.GrapevineatTejonRanch.com<http://www.GrapevineatTejonRanch.com>

Submission 706 (Hugh McMahon, Tejon Ranch Company, March 24, 2020) - Continued

TEJON RANCH
COMPANY

March 24, 2020

Attn: Draft EIR/EIS for the Bakersfield to Palmdale Project Section
California High-Speed Rail Authority
770 L Street, Suite 620 MS-1
Sacramento, CA 95814
Bakersfield_Palmdale@hsr.ca.gov

Re: Bakersfield to Palmdale Draft EIR/EIS Comments

Dear Sir/Madam,

Tejon Ranch Company owns the 270,000 acre Tejon Ranch, the largest contiguous piece of privately held property in California. The High Speed Rail alignment for the Bakersfield to Palmdale segment proposes to traverse the north end of Tejon Ranch for a distance of approximately 7 miles. We have reviewed the Bakersfield to Palmdale Draft EIR/EIS as available online. The EIR analyzes an approximately 400' ROW corridor through various sections of the alignment on the Ranch, resulting in a potential footprint on Tejon Ranch of approximately 400 acres of disturbance.

706-276 Tejon Ranch Company was surprised by the release of the Bakersfield to Palmdale Draft EIR/EIS document. Despite our ownership of land through which High Speed Rail must travel for 7 miles, Tejon Ranch and the High Speed Rail Authority have regularly had conflicts arise caused by a lack of communication from High Speed Rail. To address this, High Speed Rail under previous regional leadership had made significant efforts to regularly communicate with Tejon Ranch Company. Those regular outreaches from High Speed Rail however stopped in early 2019 and Tejon Ranch Company was not notified of the impending release of the document. We stand ready to meet on the matter with representatives of High Speed Rail at any time and as often as necessary to ensure regular and open communication between our organizations going forward.

706-277 As a general comment, the level of analysis of resources and impacts presented in the document is general in a manner that precludes detailed review. Additionally, the failure to make technical
706-278 studies accessible for download, when download links could have been simply included on the public website similar to those provided for the EIR/EIS document (as is typical practice for posting of EIR documents across various agencies in the state) is inappropriate and does not support efficient public review.

706-279 Tejon Ranch Company notes that the EIR/EIS proposes that mitigation be provided for biological impacts at a 1:1 ratio. The 1:1 mitigation ratio proposed is significantly lower than any project is required to provide in this region, and is certainly less that any project of similar scale statewide. In fact, projects of significant scale like this are being held to higher mitigation ratios on a regular basis by the same regulatory agencies which are reviewing and will issue permits to this project. It would be inappropriate for a public project to be required to mitigate at a lower ratio than private projects. In particular, given this project's substantial impacts to agriculturally productive lands on and off the Tejon Ranch, a 1:1 mitigation ratio is unreasonable at a time that other state agencies are placing a premium on the preservation of agricultural lands in California by acquiring them with other cap-and-trade funds.[1]

706-280 The EIR/EIS also does not specifically identify the mitigation areas or analyze whether they provide adequate mitigation. Tejon Ranch lands include significant biological resources in and near the alignment of High Speed Rail. High Speed Rail must adequately mitigate for impacts, and should be required to acquire land of comparable condition most proximate to its proposed right of way to provide like-for-like or high quality mitigation land. High Speed Rail should work with adjacent landowners such as Tejon Ranch Company to identify potentially suitable mitigation lands. The document's lack of detail on mitigation areas identified makes it difficult to assess whether suitable proximate land is being identified for mitigation.

706-281 Tejon Ranch Company has identified significant concerns with the impact of the construction and operation of High Speed Rail in the proposed alignment through Tejon Ranch. The Ranch and its partners run cattle, hunting, and security activities on the portion of Tejon Ranch affected by High Speed Rail and the High Speed Rail alignment slices entirely through the north end of the Ranch, potentially stranding and separating a 10,000-acre portion of the Ranch from the rest of our property. We've previously discussed these operational concerns with High Speed Rail staff and identified the need for culverts or crossings to allow for roads, utilities or animal transport across the alignment. These concerns remain as they and/or mitigating improvements to address them are not fully addressed by the latest alignment proposal and the project analyzed in the Draft EIR/EIS. High Speed Rail will need to address the impact on Tejon Ranch's effective use of the land prior to the rail line's development.

For these reasons, we remain concerned about the proposed High Speed Rail Bakersfield to Palmdale Draft EIR/EIS and project and we ask that High Speed Rail make efforts to address our concerns.

Sincerely,

Hugh F. McMahon IV
Executive Vice President Real Estate
Tejon Ranch Company

P.O. Box 1000 | 4436 Lebec Road
Tejon Ranch, CA 93243
661 248 3000 O | 661 248 3100 F
www.tejonranch.com

[1] Source: https://www.conservation.ca.gov/index/Pages/News/SALC-2020-Funding-Available-for-Ag-Land-Conservation.aspx

Response to Submission 706 (Hugh McMahon, Tejon Ranch Company, March 24, 2020)

706-276

The commenter notes they own approximately 7 miles of land in the project footprint and expresses concern over the lack of communication from the Authority. The commenter states that outreach efforts with them ended in early 2019 and they were not aware the Draft EIR/EIS was being released in February 2020. The commenter expresses a desire for meetings with the Authority and more communication.

The Authority will continue to coordinate with the public and private sectors during the environmental process and subsequent phases of the project (right-of-way acquisition, regulatory permitting, final design, etc.) in order to address concerns and resolve issues.

706-277

The commenter states that the analysis in the Draft EIR/EIS is too general and precludes detailed review.

The analysis in the EIR/EIS meets the standards required by CEQA and NEPA. According to CEQA Guidelines Section 15151, an EIR "should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible." Moreover, as courts have recognized, an EIR must achieve a balance between technical accuracy and public understanding. (*See Dry Creek Citizens Coalition v. County of Tulare* (1999) 70 Cal.App.4th 20, 28.) The analysis required under NEPA is governed by the "rule of reason" and that standard is satisfied if the EIS provides "a reasonably thorough discussion of the significant aspects of the probable environmental consequences." (See *City of Sausalito v. O'Neill,* 386 F.3d 1186, 1206-07 (9th Cir. 2004); *Laguna Greenbelt, Inc. v. DOT*, 42 F.3d 517, 523 (9th Cir. 1994).) Additional technical details are provided in the appendices to the EIR/EIS.

706-278

The commenter asked why technical reports were not made available for review through download links on the Authority's website.

The Authority provided public access to the technical reports at public libraries in the project vicinity and at the Authority’s offices. Electronic media containing these documents were also made available, free of charge, to anyone who requested them in writing or via the project hotline. The size of the technical report files make uploading of the technical reports for online document accessibility impractical.

Response to Submission 706 (Hugh McMahon, Tejon Ranch Company, March 24, 2020) - Continued

706-279

a) The commenter states that the EIR/EIS proposes, “mitigation be provided for biological impacts at a 1:1 ratio,” and then expresses concern that this is not commensurate with required mitigation ratios for other projects in the region.

There are a number of different biological impacts discussed in Section 3.7.4 of this Final EIR/EIS, many of which have compensatory mitigation proposed. Not all of the compensatory mitigation proposed would use a 1:1 ratio. For example, in Section 3.7.7.2, BIO-MM#43 specifies a minimum 3:1 replacement ratio for affected Swainson’s hawk nest trees, and BIO-MM#46 specifies a 2:1 ratio for affected riparian habitat.

b) The commenter states that a 1:1 mitigation ratio is “unreasonable” for agricultural lands.

It is unclear whether the commenter is questioning the mitigation ratio for biological impacts due to the impacts on agricultural lands or the proposed mitigation for impacts on agricultural lands themselves. While agricultural lands may provide some habitat value for certain special-status species, such as San Joaquin kit fox, for many species these lands provide unsuitable or marginal habitat as a result of the type and intensity of agricultural use. Compensatory mitigation ratios associated with impacts on agricultural lands will vary based on the suitability or quality of habitat provided for each species.

Section 3.14 of the EIR/EIS addresses impacts on agricultural lands. Per Mitigation Measure AG-MM#1 in this Final EIR/EIS, the replacement ratio for Important Farmland is proposed at “not less than 1:1” for permanent conversions to non-agricultural use by the project and “not less than 0.5:1” for Important Farmland within a 25-foot-wide area adjacent to the permanently fenced infrastructure of the HSR system. The Authority has entered into an agreement with the Department of Conservation California Farmland Conservancy Program to implement this agricultural land mitigation.

706-280

Refer to Standard Response BP-Response-Section 3.7 BIO-01: Mitigation Measures (Resources, Details and Phasing, Responsibilities and Future Planning).

The commenter expresses concern that “mitigation areas,” or any land acquired as part of compensatory mitigation measures, be of comparable condition, most proximate to the proposed HSR right-of-way, in order to “provide like-for-like or high quality mitigation land.”

Section 3.7.7.2 of this Final EIR/EIS identifies BIO-MM#47 and BIO-MM#53, which require the preparation of a CMP for impacts on aquatic resources and special-status species and their habitat, respectively. As stated in Mitigation Measure BIO-MM#47 and Standard Response BP-Response-Section 3.7 BIO-01: Mitigation Measures (Resources, Details and Phasing, Responsibilities and Future Planning), a watershed-based approach will be utilized for impacts on aquatic resources. The watershed approach is a process for making compensatory mitigation decisions that support the sustainability or improvement of aquatic resources in a watershed. Typically, a project’s impacts (within a given watershed) are mitigated at other locations within the same watershed. For credits purchased from a mitigation bank or in-lieu fee program, the “service area” is the geographic area within which aquatic resources impacts may be mitigated. Similarly, for credits purchased from a mitigation bank to address impacts on special-status species, the project must be within the service area of an agency-approved mitigation bank to ensure that suitable habitat is preserved in perpetuity within the same geographical area. Further, for any property acquisition and long-term management of habitat, the CMP(s) will specify success criteria to gauge the effectiveness of management activities, restoration, and function of mitigation lands. The CMP(s) will be subject to regulatory agency review and approval.

Response to Submission 706 (Hugh McMahon, Tejon Ranch Company, March 24, 2020) - Continued

706-281

The commenter expresses concerns about the access severance of a 10,000-acre portion of their property and requests the construction of culverts or crossings to allow for roads, utilities, or animal transport across the alignment. The commenter states that they have previously discussed operational concerns with HSR staff. HSR's Outreach team has contacted stakeholder to request meetings (most recently May 2019 and June 2020). Stakeholder has declined to meet.

SO-MM#4: Provide Access Modifications to Affected Farmlands provides that:

Prior to Construction in cases where partial-property acquisitions result in division of agricultural parcels by the HSR alignment or facilities, the Authority will evaluate, with the property owner's input, modified access, including the effectiveness of providing overcrossings or undercrossings of the HSR track to allow continued use of agricultural lands and facilities. This could include the design of overcrossings or undercrossings to allow farm equipment passage. The Contractor shall prepare a technical memorandum for Authority review and approval detailing outreach to affected property owners, evaluation results, and what measures were implemented to address bifurcated agricultural properties.

Additionally, the Authority is committed to implementing AG-IAMF#3, a Farmland Consolidation Program, as part of construction of the Bakersfield to Palmdale Project Section. The Farmland Consolidation Program involves working with landowners to transfer noneconomic remnant parcels of Important Farmland to neighboring landowners and/or consolidate with adjacent parcels that are in agricultural use wherever possible. However, if efforts to transfer and consolidate agricultural land designated as Important Farmland are not feasible, the Authority has committed to purchasing the noneconomic remnant parcels.

The Authority is also committed to implementing AG-IAMF#6, which requires coordination with agricultural property owners during final design. The Authority will coordinate with the property owners to finalize the realignments of any affected access roads to provide equipment crossings to minimize impediments to routine agricultural operations and normal business activities that may result from long-term project operation.

706-281

Submission 789 (Cara Lacey, The Nature Conservancy San Diego, April 28, 2020)

Bakersfield - Palmdale - RECORD #789 DETAIL

Status :	Action Pending
Record Date :	4/30/2020
Affiliation Type :	Business and/or Organization
Submission Date :	4/28/2020
Interest As :	Business and/or Organization
Submission Method :	Project Email
First Name :	Cara
Last Name :	Lacey
Professional Title :	Associate Director, Cities Program
Business/Organization :	The Nature Conservancy San Diego
Address :	One Columbia Building - 401 West A Street
Apt./Suite No. :	Suite 1650
City :	San Diego
State :	CA
Zip Code :	92101
Telephone :	619) 684-7029
Email :	cara.lacey@TNC.ORG
Cell Phone :	
Email Subscription :	
Add to Mailing List :	
EIR/EIS Comment :	Yes
Attachments :	Bakersfield-Palmdale HSR TNC comments 04282020.pdf (231 kb)

Stakeholder Comments/Issues :

Good Afternoon.

Attached you will find The Nature Conservancy's comments on the Draft EIR for the Bakersfield to Palmdale Section.

Please let us know that you have received our comments.

Thank you for your time.

Cara Lacey, AICP

Please consider the environment before printing this email.

?
?Cara Lacey, AICP, LEED AP
Director, Connected Lands
Cities Program
cara.lacey@tnc.org<mailto:cara.lacey@tnc.org>
(619) 684-7029 (Phone)

nature.org<http://nature.org/>

?

The Nature Conservancy
San Diego
One Columbia Building
401 West A Street, Suite 1650
San Diego, CA 92101

? [TNC Logo]

Submission 789 (Cara Lacey, The Nature Conservancy San Diego, April 28, 2020) - Continued

The Nature Conservancy
Protecting nature. Preserving life.™

California Regional Office
201 Mission Street, Fourth Floor
San Francisco, CA 94105

tel [415] 777-0487
fax [415] 777-0244

nature.org
nature.org/california

To: Mark A. McLoughlin, Director of Environmental Services
California High-Speed Rail Authority
770 L Street, Suite 620, MS-2
Sacramento, CA 95814
Via email to Mark.Mcloughlin@hsr.ca.gov
Date: April 28, 2020
Re: Comments on Draft Environmental Impact Review for Bakersfield to Palmdale Segment

Dear Mr. McLoughlin,

The Nature Conservancy (TNC) is a science-based organization that works throughout the world to identify conservation solutions that protect both people and nature. In California we have worked together with multiple agencies and partners to protect over 1.5 million acres of land and 3.8 million acres of sea floor. In the Tehachapi region, which is the focus of this environmental review document and our comments, TNC has worked with partners including the Wildlife Conservation Board, California Department of Fish and Wildlife and other State and Federal Agencies to protect over 32,000 acres of vital habitat and we continue to focus in this location to protect multiple plant and animal species as well as their movement pathways, in perpetuity. Additional significant conservation investments have been made on Tejon Ranch, including the purchase of conservation easements funded by the State of California. High Speed Rail implementation in this location has the potential to impact the valued biodiversity of this region. If not designed and constructed in the least impactful way and using the latest science to evaluate and mitigate for the impacts, the long-term effects of the High-Speed Rail will significantly impact the biological resources of the Tehachapi region as an ecological stronghold today and in the future, especially as the climate changes.

789-337

TNC thanks the High-Speed Rail Authority for providing a platform for us to comment on the Draft Environmental Impact Review (DEIR). However, the document was quite substantial, complex and difficult to review and it would have been helpful to have had additional time. The DEIR was sent out for review during COVID-19 - a pandemic that has changed the structure of how we live, communicate and work. Due to this, a further extended timeline, beyond the additional 15 days provided, would have been helpful to our evaluation and for commenting on the document. Additionally, many of the technical reports were not available for download and copies had to be requested. This resulted in even less time to review critical components of the DEIR. As a result, we have been rushed to review and evaluate an over 15,000-page or so document within 60 days during a pandemic.

789-338

Additionally, for the Bakersfield to Palmdale Project Section, HSRA could have communicated better with the public and previously engaged stakeholders, such as TNC, prior to the DEIR release, to provide a better understanding of the project. Giving a public presentation at which multiple stakeholders and the public could have been included to better understand the rationale and thought processes behind the HSR alternatives and the preferred alternative, would have been very helpful to facilitate a more thoughtful review. A presentation could have enabled multiple stakeholders to have

789-339

asked questions, and to feel part of the process and make the process more transparent. A similar approach was used productively with stakeholders including TNC for the San Jose-Merced segment, which resulted in sharing of scientific studies and data between the environmental organizations and HSRA that resulted in changes to the design of the preferred alternative to avoid some impacts to key landscapes and species.

Going forward, TNC encourages HSRA to hold both a public presentation and a focused presentation to TNC and other environmental groups to allow stakeholders to ask questions, feel more informed and provide relevant information. We would also like to note that HSRA and its consultants stopped meeting with TNC and other NGOs in 2015. Therefore, vital opportunities were missed to provide input and additional science to inform HSRA during the decision-making process and would have helped TNC contribute to the process as was the case for the San Jose-Merced segment. Continued engagement between 2015 and release of the DEIR could have resulted in changes to rail structure and crossing design, alignment location, or proposed mitigation measures prior to the release of the DEIR.

Nevertheless, we value this opportunity to provide feedback on key sections of the DEIR. Please find below an overview on the significance of the Tehachapi region and its importance to multiple species, our comments on the Draft EIR as well as our recommendations for changes to the project design and suggestions on additional information to consider in the analysis of impacts and design of mitigation measures.

Overview of Tehachapi Region Significance:

The Tehachapi region has been identified as a critically important conservation landscape based on a multitude of factors. These include the region's high levels of biodiversity and habitat integrity, its location at the convergence of four ecoregions, its intact connection between two major mountain systems, its potential to support rapid climate change adaptation, and its biological function as a "crucible of evolution". Many of these factors are interrelated, making the protection of a large system of interconnected lands in the region vital to the continuation of the conditions and processes that support them.

The Tehachapi region's high level of biodiversity is due to its location and geology. The region is situated at the crossroads of four ecoregions (Sierra Nevada, Great Central Valley, South Coast, and Mojave Desert) (White et al. 2003). This convergence results not only in a large number of communities present in a small geographic area, but also in distinct plant and animal communities formed from the co-occurrence of species from the various regions. This topographically diverse landscape has the conditions necessary to allow evolutionary divergence and speciation for many taxa. As a result, the Tehachapi region supports a high number of endemic species (White et al. 2003).

The Tehachapi region not only supports high levels of biodiversity, but also possesses the characteristics necessary to allow species to respond to and evolve in response to climate change. The high level of habitat intactness allows the processes necessary for species to adapt to climate change to remain functional. Fragmentation by roads and development is currently concentrated in a few small areas allowing for relatively unimpeded species movement. The diverse and often steep topography supports many large elevational gradients over short distances, allowing species to quickly respond to

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changing temperatures. The diverse topography also supports an abundance of steep canyons which create local climate refugia as a result of cool and mesic microsite conditions.

The intact lands that make up the Tehachapi linkage allows species to move between two major mountain ranges, the Sierra Nevada and Sierra Madre. The importance and influence of the Tehachapi linkage extends far beyond the connectivity between these ranges as it provides the only remaining connection between the California coast ranges and inland mountains. As a result, the Tehachapi linkage has been identified as perhaps the most important wildlife linkage influencing the South Coast Ecoregion (Penrod et al. 2003) and it is likely as important to the Central Coast Ecoregion. The significance of this linkage results from the Central and South Coast ranges generally existing as ecological islands. Many of the plants and animals found in the coast ranges south of San Francisco Bay are essentially isolated from the rest of the continent by the Mojave and Sonoran Deserts to the southwest and intensive human land uses in the Bay Area and Central Valley. The Tehachapi Mountains and the low elevation bands of habitat on its slopes are thus the last intact connection for species unable to cross desert or human land uses (Mas et al. 2006). The system of passes and valleys separating the Tehachapi and Sierra Nevada Mountains also provides the greatest connectivity opportunity for species occupying low lying areas of the Central Valley and Mojave Desert.

A recent genetic study of Western U.S. mountain lion populations identified the Tehachapi region as vital for maintaining mountain lion movement and genetic diversity throughout California (Gustafson et al. 2018). In the Sierra Nevada Mountains, the populations of mountain lions are healthy and well connected, however the South and Central Coast regions contain six sub-populations of mountain lions or with poor connectivity and low genetic diversity. Due to poor landscape connectivity leading to genetic isolation, the mountain lion in southern California may go extinct in the next 50 years (Benson et al. 2019). The protection of the Tehachapi linkage is necessary to allow mountain lion gene flow into the South and Central Coast regions. Therefore, it is imperative that the connectivity, biodiversity and ecological integrity of this region be upheld, for both the mountain lion and for the full suite of species impacted by habitat loss and fragmentation in the South and Central Coast regions.

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TNC DEIR Comments:

Permanent impact areas

789-341

TNC understands that significant areas will be subjected to permanent impacts in deep-cut sections. These areas will have 2:1 cut-slopes with benches. Based on communications with HSRA consultants and staff, as well as WM-IAMF #6, it is our understanding that some of these areas will be revegetated with native vegetation. WM-IAMF #6 states that "the Contractor's Project Biologist will prepare a Restoration and Revegetation Plan for ground-disturbances within areas within natural areas and agriculture areas that could provide movement corridors for wildlife." The language that such activities may only occur "within natural areas and agricultural areas that could provide movement corridors for wildlife," is subjective and leaves significant uncertainty in what areas will actually be revegetated. TNC feels that a mitigation measure should be included that requires all natural areas be revegetated with locally sourced native species. WM-IAMF #6 further states "Steps to restore natural vegetation using seed stock, cuttings and plants salvaged from the construction footprint." The language "Steps to restore" provides no assurances that restoration will be carried out to ensure restoration actions achieve replacement of vegetation communities impacted by construction activities. For each area, goals for revegetation should be established based on vegetation communities present prior to

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disturbance. The goals must include actions that will achieve replacement of all mature oak trees similar to those described in the El Dorado County Ordinance Number 5061 that are based on percent of the oak woodland to be impacted, the size of each tree, and the technique used to replace each tree. The cover, composition and distribution of other native tree species, native shrubs, grasses and forbs prior to disturbance should define the restoration goals for each area to be impacted. Success criteria should be established for restoration areas that include successful establishment of native trees, shrubs, grasses and forbs to pre-disturbance levels for at least 5 years. As these revegetated areas will attract wildlife seeking food and shelter, all fences to exclude wildlife should be placed where the revegetated areas meet the operational footprint of high speed rail (areas required to be devoid of native habitat for safe operation), not at the edge of the HSR right-of-way. TNC further suggests that the mitigation measures be revised to require establishment of an independent committee of local experts in restoration, plant ecology, and native plant propagation to help review and approve all restoration plans.

Mitigation

789-342

TNC is concerned that determinations on mitigation will be made after the DEIR is finalized. The timing of such actions removes an important component of both NEPA and CEQA, the requirement for public participation in the process. TNC believes that the mitigation determinations should be made with input and feedback from conservation organizations and local stakeholders with detailed knowledge of the challenges and opportunities present in the project area. As proposed in the DEIR, all of the specific mitigation requirements will be determined by regulatory agencies after the public-facing environmental review process has concluded. Similarly, all compensatory mitigation plans will be developed with a lack of transparency that potentially misses out on information that local organizations can provide, and does not seem appropriate for such a large public project in an extremely sensitive area. WM-IAMF #6 provides a few examples of why TNC has concerns with delaying defining mitigation (see specific comments above). WM-IAMF #6 uses vague language for both where mitigation will be required and does not include quantitative mitigation goals or success criteria. TNC believes that mitigation goals should be established in the DEIR document for both the number of acres to be protected to offset unavoidable impacts, the number of acres of impacted lands to be restored, and success criteria for each vegetation community should be developed (examples presented above) in order to facilitate transparency and allow organizations with relevant expertise to provide feedback.

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TNC suggests that all mitigation requirements and plans should be subject to a public comment period and that all comments should be addressed. Additionally, as noted above, TNC suggests that independent committees of local experts in restoration, plant ecology, and native plant propagation with relevant experience should be created to review and approve all mitigation requirements (ratios, locations, and success criteria) and compensatory mitigation plans to ensure impacts are adequately offset to support the DEIR findings that impacts are less than significant.

Excess material stockpile

789-344

TNC has concerns about the location selected for permanently stockpiling the excess material (dirt) associated with the project. The excess material stockpile location at the northwest corner of Bealville Road and Hwy 58 has been identified as important habitat for wildlife connectivity by multiple analyses (Penrod et al. 2003 and Spencer et al. 2010). This area is situated completely within the SC Wildlands Tehachapi Linkage (Penrod et al. 2003) and the entire area has been identified as an Essential Connectivity Area by the State of California (Spencer et al. 2010). This area is also the only area where

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789-344 blue oak woodlands are protected immediately north and south of Hwy 58 providing an important opportunity for woodland species to cross without interference from human activities into the future. Additionally, more than half of the stockpile area occurs on lands covered by a conservation easement on Tejon Ranch funded by the State of California. The area supports hundreds of mature blue oaks. The replacement time for mature oaks would greatly impact the movement of oak woodland species in the only area with protected oak woodlands immediately north and south of Hwy 58 until restoration efforts resulted in the presence of mature trees. TNC feels that this is the incorrect location for such an impactful land use and that the excess material should not be deposited on any area supporting natural habitat, but only stockpiled on areas already impacted by past intensive human land uses.

Tunnel Construction

789-345 To avoid impacts to intact natural lands when digging tunnels, TNC requests that all tunneling should be completed using the boring machine rather than digging from the surface.

Wildlife Connectivity Assessment

789-346 In our review of the Wildlife Connectivity Assessment (WCA) it was found that the vegetation data used did not incorporate the vegetation data (Proposed Tehachapi Pass High-Speed Rail Corridor Vegetation Map) created by the Geographical Information Center, California State University, Chico in 2014 commissioned by the Strategic Growth Council. The Vegetation Classification and Mapping Program (VegCAMP) found this data to meet their high accuracy standards. One of the key differences is that oak woodlands are crossed by 8.9 miles of HSR at-grade in the Chico State data, but only 0.38 miles in the data used for the WCA (Table 5-1). This is just one example of the differences in the vegetation data used for the WCA. TNC also found inconsistencies in reported impacts of HSR to habitats. For example, Table 5-1 reports 0.38 miles of blue oak woodland intersect HSR, while Table 6-4 reports 6.21 miles. These both differ from the Chico State data which was assessed for accuracy. TNC is concerned that the use of less accurate data compromises the results and conclusions drawn from the WCA and potentially to the suitable habitat mapped for special-status species. In addition to the Chico State data, there are other more accurate data available, including CAL VEG, that encompass the entire study area (USDA 2020). TNC is also concerned that the WCA used only the HSR centerline for its least cost corridor analyses and did not use the permanent impact areas in order to represent the 8,757 to 9,334 acres of impacts stated to occur under Alternative 2 (Table S-7). As an example of how the impacts may have been underestimated, the mule deer and mountain lion Post-Project Improved Permeability cost surface through the ~600-acre excess material stockpile location appears virtually identical to the Pre-Project Permeability cost surface. There does not appear to be a mitigation measure that guarantees this area will be restored to its pre-project condition, including supporting hundreds of mature blue oak trees. Without such a mitigation measure, this and all areas defined as experiencing permanent impacts without specific restoration mitigation measures should have been modeled as less permeable due to the lack of intact habitat.

789-347 TNC is also concerned with the conclusions based on the WCA comparing the project with and without wildlife crossing structures. As discussed in the WCA, the modeling has limitations as a result of the scale of available data. The modeling was completed using 30 m x 30 m meter pixels. As a result, even small crossing structures (described as 6-foot arch undercrossings) were represented by a 30-meter-wide crossing opportunity across HSR. This greatly overestimates the benefits each crossing structure by as much as 15 times. Similarly, dual crossing structures (wildlife and roads) appear to have been modeled as completely permeable to movement despite being located immediately adjacent to

789-347 roads. As depicted in Figure 7-2 of the Wildlife Corridor Assessment Report, TNC has concerns about the dual-use road crossings or dual-purpose road and wildlife undercrossings. The barrier between the road and wildlife area will trap animals crossing the road on the road-side of the barrier. In places where this is the case, TNC requests that mitigation measures be implemented to minimize impacts of animals becoming trapped on the road. These could include wildlife jump-outs as used along Highway 241 in Orange County, California, ramps, opening large enough to allow animals to enter from the road-side, but too small to enter from the wildlife side be installed frequently along the road side of barrier. Additionally, exclusionary fencing should be installed so animals cannot cross the roadways in the vicinity of dual crossing barriers and find themselves trapped on roadways

789-348 TNC found multiple irregularities in the model outputs for the species presented. For mountain lions, there is a high cost area immediately adjacent to an elevated section of HSR near Mile Post 18 in the Post-Project Permeability output. The elevated section of HSR thus appears less permeable than extremely long at-grade sections east of MP 19 and between MPs 28 and 29. Another irregularity associated with this high cost area is that it only occurs on one side of the HSR alignment. A similar irregularity appears in the badger outputs, where east of MP 12, a high cost area appears only north of HSR and not to the south. These results are difficult to interpret. Comparison of the maps appear to show virtually no decrease in cost following adding small crossing structures. As mentioned above the large pixel size compared to the size of the undercrossing means that outputs should be viewed with caution. TNC requests that HSRA increase the size of all crossing structures to better fit those in the models and to allow them to function for a wider range of species.

789-349 It is encouraging that roadkill data from along Hwy 58 were used to help determine the location of potential crossing structures. The amount of roadkill data used to in the HSRA analyses was, however, very limited. TNC completed a systematic survey of roadkill along Hwy 58 between SR 223 and Tehachapi from January 2018 to June 2019. This survey effort recorded 65 roadkill locations along this section of Hwy 58 that could be used to further refine the placement of wildlife crossing structures starting as early as the winter of 2018 if TNC had been informed of HSRA's analyses.

789-350 In conclusion, TNC is concerned with the finding that wildlife connectivity will not be impacted by the presence of HSR based on the WCA and other assessments presented in Section 3.7 (Biological and Aquatic Resources). Both Section 3.7 and the WCA recognize that at-grade rail segments would restrict wildlife movement and that at-grade segments will cross significant areas of natural lands. There are detailed discussions of the impacts to individual species modeled habitat and wildlife movement corridors. For species discussed, at-grade segments of HSR cross from 57% to 92% of modeled habitat. With the significant limitations of the permeability assessments (e.g. vegetation data, over estimation of crossing structure size and irregularities) and the fact that Least Cost Corridor modeling may not even be the appropriate modeling approach to evaluate such small-scale changes to an impermeable feature (i.e. it will find a path through the least cost area regardless of its actual permeability), TNC disagrees with the conclusion that HSR will have less than significant impacts to wildlife movement. TNC suggests that additional mitigation measures would be required to conclude that HSR will have less than significant impacts to wildlife movement. These additional measures include: (1) more and or longer tunnels and viaducts resulting in less at-grade miles, (2) placement of wildlife crossing structures or culverts 6 feet or larger adjacent to culverts and other structures over and under Highway 58 deemed potentially suitable for wildlife movement by experts, (3) placing the excess material outside of important linkage areas and on highly degraded land previously impacted by human land uses (not including rangeland), and (4) 1-3 be completed in a transparent manner working with local and connectivity experts.

Changes following release of the DEIR

789-351 TNC has been informed by Caltrans that three truck climbing lanes in the Tehachapi foothills are planned for construction in the near future. Despite the existence of a programmed project, none of these lanes are presented in the DEIR's assessment of cumulative impacts. The new climbing lanes cross SC Wildlands Tehachapi Linkage and State ECAs. Two of the climbing lanes are in very close proximity to HSR Alternative 2. Of particular concern to wildlife connectivity is the area in the vicinity of Bealville Road located in the Tehachapi linkage and ECA that is to be impacted by climbing lanes, at-grade HSR, and the ~600-acre material deposition area. Another area of concern is in the vicinity of the Broome Road overpass. There will be additional climbing lanes, significant permanent impacts associated with HSR, and a significant stretch of HSR will be at-grade. This will greatly impact the use of two existing relatively large Highway 58 undercrossing structures and the only overpass that could be potentially used by wildlife in this unfragmented area.

789-352 Recently, the State Fish and Game Commission granted mountain lions in six regions from San Francisco to San Diego candidate status to be listed as threatened. One of the boundaries for the listing region is Highway 58. This is based on poor genetic diversity of lions south and west of Highway 58, but healthy genetic diversity to the north in the Sierra Nevada Mountains. The significant barrier imposed by HSR in addition to Highway 58 without additional mitigation measures could further reduce genetic connectivity between the Sierra Nevada Mountains and the South and Central Coast region for mountain lions. Based on the candidate status of the mountain lion, TNC feels additional mitigation measures to ensure connectivity across the combined barrier of Highway 58 and HSR be added. These additional measures include: (1) more tunnel and viaducts resulting in less at-grade miles, (2) place wildlife crossing structures or culverts 6 feet or larger adjacent to culverts and other structures over and under Highway 58 deemed potentially suitable for wildlife movement by experts, (3) placing the excess material outside of important linkage areas and on highly degraded land previously impacted by human land uses (not including rangeland), and (4) 1-3 be completed in a transparent manner working with local and connectivity experts.

Species distribution models

789-353 Detailed modeling methods were not distributed to stakeholders along with the release of the DEIR or provided in stakeholder meetings with knowledgeable organizations including TNC, leading to a lack of transparency associated with methodologies used to document impacts to special status species. Although there is a general description of the types of data incorporated and modeling techniques used, specific sources and techniques are necessary to allow an assessment of the modeling methods and results. Total impacts to habitat must also be considered in combination with the spatial distribution of the impacts and the configuration of the remaining habitat. TNC requests that the detailed modeling methods be released to the public, and that additional time be provided for review and comment following its distribution.

Conclusion

789-354 It is our hope that HSRA will hold additional meetings with presentations followed by question and comment sessions within and outside of the CEQA process. Without better communication it will be hard to collectively work to find solutions to multiple issues that are impacting one of the most important geographies for connectivity in California, if not the most important landscape-scale wildlife linkage in the state.

We thank you for giving us this opportunity to comment and thank you for your time. We hope to continue to work better together in the future.

Sincerely yours,

Cara Lacey, AICP, LEED AP
Associate Director, Cities Program
The Nature Conservancy in California

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789-337

The commenter states that the HSR implementation has the potential to impact the valued biodiversity of Tejon Ranch. The commenter also states that if the HSR project is not designed and constructed in the least impactful way and using the latest science to evaluate and mitigate for the impacts, the long-term effects of the HSR project will significantly impact the biological resources of the Tehachapi region.

Extensive environmental analysis of impacts on biological resources is discussed in Section 3.7, Biological and Aquatic Resources, in this Final EIR/EIS and includes mitigation measures to reduce adverse impacts to biological resources.

789-338

The commenter states that the document was substantial, complex, and difficult to review and notes that it would have been helpful to have additional time to review. The Bakersfield to Palmdale Project Section Draft EIR/EIS was originally made available for a 45-day public review beginning on February 28, 2020, and ending on April 13, 2020. However, due to the uncertainty caused by the outbreak of COVID-19, the Authority extended the public review period 15 days to end on April 28, 2020. The public hearing was also shifted to a virtual format and rescheduled for April 23, 2020. This extension provided members of the public and key stakeholders additional time to review the Draft EIR/EIS and submit a comment. This is consistent with CEQA and NEPA requirements (CEQA Guidelines Section 15080-15088 and 40 C.F.R. 1506.6(c) and 40 C.F.R. 6.23 (c)(3)(vii)).

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The commenter expressed concern about the level of communication with the public and with stakeholders. The commenter explains that for the San Jose to Merced Project Section, data and scientific studies were shared, which resulted in changes to the design of the project to avoid impacts on key landscapes and species.

Pursuant to the requirements of CEQA and NEPA, the Authority has conducted an extensive public and agency involvement program as part of the environmental review process. Chapter 9, Public and Agency Involvement, of this Final EIR/EIS details the public and agency involvement opportunities, which included development and provision of informational materials such as fact sheets, informational and scoping meetings (including town hall meetings and open houses), agency meetings, meetings with individuals and groups, and presentations and briefings to interested and/or affected organizations and associations. As described in Section 9.4.3 of the Final EIR/EIS, the Authority held public open houses and briefings with stakeholders during the alternatives analysis process in 2015 and 2016 to gather, confirm, and understand key community and stakeholder concerns and to inform the development of the B-P Build Alternatives and the environmental process for the Bakersfield to Palmdale Project Section. The Authority will continue to coordinate with the public and private sectors during the environmental process and subsequent phases of the project (right-of-way acquisition, regulatory permitting, final design, etc.).

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789-340

The commenter states that it is imperative that the connectivity, biodiversity, and ecological integrity of this region be upheld, for both the mountain lion and for the full suite of species affected by habitat loss and fragmentation in the South and Central Coast regions.

See Responses to Comments 777-315(b), 777-315(c), and 777-315(f), contained in this chapter.

The mountain lion was included in the EIR/EIS special-status (CDFW species of concern) mammal species analysis (as it was not listed as threatened or endangered), and specifically analyzed for movement across the HSR alignment, which is limited to the Tehachapi mountain range. Impacts associated with special-status wildlife habitat and wildlife movement are described in Section 3.7.4 of the EIR/EIS and will be avoided, minimized, or mitigated in accordance with applicable regulations and agency requirements, as specified in Section 3.7.4.2, Impact Avoidance and Minimization Features, and Section 3.7.7, Mitigation Measures. Section 3.7, Table 3.7-7, of this Final EIR/EIS lists special-status wildlife species and impacts on habitat for each B-P Build Alternative. To correct the omission of the mountain lion in this table, the Authority has included this species and impacts on its habitat in this Final EIR/EIS.

789-341

a) The commenter suggests that the language in WM-IAMF#6, which states that activities may only occur "within natural areas and agricultural areas that could provide movement corridors for wildlife," is subjective and leaves significant uncertainty as to what areas will actually be revegetated. The commenter feels that mitigation measures should be included that require all natural areas to be revegetated with locally sourced native species and ensures that replacement of vegetation communities is achieved. All impacted natural areas and agricultural areas are considered potential movement corridors for wildlife and would therefore be revegetated accordingly.

WM-IAMF#1 through WM-IAMF#6 were incorporated into BIO-IAMF #1 through BIO-IAMF #12 and into various mitigation measures that were identified in Section 3.7.7 of the Draft EIR/EIS. Revegetation and restoration mitigation measures have been provided in F-B LGA BIO-MM#6, F-B LGA BIO-MM#47, BIO-MM#6, BIO-MM#32, BIO-MM#33, BIO-MM#46, BIO-MM#47, BIO-MM#53, BIO-MM#61, and BIO-MM#79. Native plants and seed mixes used for revegetation will be obtained from stock originating from areas within the local watershed and from local venders to the extent feasible/available, as specified by BIO-MM#6, BIO-MM#32, and BIO-MM#33. Specifically, under Section 3.7.7.1, F-B LGA BIO-MM#6 and Section 3.7.7.2, BIO-MM#6 require preparation of a Restoration and Revegetation Plan by the Project Biologist that will specify the success criteria for re-establishment of plant communities to ensure that replacement of vegetation communities is achieved and would therefore restore opportunities for wildlife movement.

b) The commenter states that the goals in the revegetation plan must include actions that will achieve replacement of all mature oak trees similar to those described in El Dorado County Ordinance Number 5061 that are based on percent of the oak woodland to be affected, the size of each tree, and the technique used to replace each tree. The cover, composition, and distribution of other native tree species, native shrubs, grasses, and forbs prior to disturbance should define the restoration goals for each area to be affected. Success criteria should be established for restoration areas that include successful establishment of native trees, shrubs, grasses, and forbs to pre-disturbance levels for at least 5 years. The commenter further suggests that the mitigation measures be revised to require establishment of an independent committee of local experts in restoration, plant ecology, and native plant propagation to help review and

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approve all restoration plans.

The Bakersfield to Palmdale Project Section is not within El Dorado County and therefore El Dorado County Ordinance Number 5061 does not apply in the project area. However, as discussed in Section 3.7, Biological and Aquatic Resources, of this Final EIR/EIS, wherever possible, oak trees will be protected by adhering to the Kern County Municipal Code of Regulations that addresses oak trees, which will be incorporated into the project development plans as applicable (there are no oak communities within the Los Angeles County portion of the project).

Per WM-IAMF#6, all ground disturbed in wildlife movement corridors would require Restoration and Revegetation Plans to return the disturbed area to its pre-construction state. Revegetation and restoration mitigation measures have also been provided in Section 3.7, Biological and Aquatic Resources, in this EIR/EIS. The following mitigation measures are discussed in detail in Sections 3.7.7.1 and 3.7.7.2: F-B LGA BIO-MM#6, F-B LGA BIO-MM#47, BIO-MM#6, BIO-MM#32, BIO-MM#33, BIO-MM#35, BIO-MM#46, BIO-MM#47, BIO-MM#50, BIO-MM#53, BIO-MM#61, and BIO-MM#79. Mitigation Measures F-B LGA BIO-MM#6 and BIO-MM#6 require replacement vegetation communities and preparation of a Restoration and Revegetation Plan by the Project Biologist that will specify the success criteria and specifications for monitoring re-establishment of plant communities to ensure that replacement of vegetation communities is achieved in order to mitigate the impacts to less than significant. Additionally, BIO-MM#1 requires pre-construction surveys and GIS mapping of all sensitive plant communities within the work area. This measure will ensure the provision of appropriate buffers during construction and the accurate quantification of affected oaks. BIO-MM#35 requires pre-construction surveys to identify protected trees such as oaks within the work area. These pre-construction surveys ensure accurate quantification of impacted oaks for purposes of either tree replacement at a 3:1 ratio (10:1 for heritage trees) or the Authority's contribution to a tree-planting fund in order to mitigate impacts to less than significant.

These mitigation measures will be enforceable through the MMEP pursuant to NEPA. The MMEP is consistent with CEQA requirements for mitigation monitoring as set forth in Section 15097 of the CEQA Guidelines (Title 14 California Code of Regulations,

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Division 6, Chapter 3). The MMEP will identify responsible parties, timing of implementation, reporting criteria, and when the measure is complete. The MMEP will be considered for adoption at the time the Authority Board considers certification of the EIR and approval of the project. While the MMEP will be part of the Record of Decision issued pursuant to NEPA, all IAMFs and mitigation measures identified in this Final EIR/EIS will be included in the MMEP at project approval.

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The commenter expresses concerns that mitigation is deferred. The commenter specifically notes WM-IAMF#6, which requires that, prior to any ground-disturbing activity, the contractor's Project Biologist prepare a Restoration and Revegetation Plan for ground-disturbances in areas that could provide movement corridors for wildlife. It should be noted that the measure cited by the commenter is a design element and is not mitigation. Regardless, the Restoration and Revegetation Plans that result from this IAMF would be site-specific. For each wildlife movement corridor area disturbed, the plans would include required steps to discourage public access and remove any construction debris, as well as steps to reinstate the soil, hydrology, and vegetation to its preconstruction state. Finally, the plans would include monitoring and measurable success criteria, along with steps to follow up with treatments as needed.

The Draft EIR/EIS does not improperly defer development of specific mitigation measures to address impacts. In addition to the IAMFs identified to avoid and minimize adverse impacts, the Draft EIR/EIS provides an extensive set of enforceable mitigation measures to address impacts. Where the specific site for implementing a mitigation measures is not yet identified, the mitigation measures provide performance standards to be achieved. Performance standards establish specific measurable parameters that must be achieved by a mitigation measure. For example, BIO-MM#6: Prepare and Implement a Restoration and Revegetation Plan, consistent with Section 1415 of the Fixing America's Surface Transportation Act, will implement restoration activities that would provide habitat for native pollinators through plantings of native forbs and grasses. The Project Biologist will obtain a locally sourced native seed mix. The restoration success criteria will include limits on invasive species, as defined by the California Invasive Plant Council, to an increase no greater than 10 percent compared to the pre-disturbance condition, or to a level determined through a comparison with an appropriate reference site consisting of similar natural communities and management regimes. The Restoration and Revegetation Plan will outline at a minimum:

a. Procedures for documenting pre-construction conditions for restoration purposes.
b. Sources of plant materials and methods of propagation.
c. Specification of parameters for maintenance and monitoring of re-established habitats, including weed control measures, frequency of field checks, and monitoring reports for temporary disturbance areas.
d. Specification of success criteria for re-established plant communities.

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e. Specification of the remedial measures to be taken if success criteria are not met.
f. Methods and requirements for monitoring restoration/replacement efforts, which may involve a combination of qualitative and/or quantitative data gathering.
g. Maintenance, monitoring, and reporting schedules, including an annual report due to the Authority by January 31st of the following year.

The Restoration and Revegetation Plan will be submitted to the Authority and regulatory agencies, as defined in the conditions of regulatory authorizations, for review and approval.

BIO-MM#6 will be effective because it creates an Restoration and Revegetation Plan to restore, revegetate, and monitor lands that provide suitable habitat for the special-status species affected by the project. The Restoration and Revegetation Plan would establish success criteria to ensure effective restoration, including the function of the mitigation lands. Management and monitoring of the mitigation lands would ensure the intended ecologic function of compensation habitat for sensitive plant species and special-status species habitat loss related to the project.

Response to Submission 789 (Cara Lacey, The Nature Conservancy San Diego, April 28, 2020) - Continued

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Refer to Standard Response BP-Response-Section 3.7 BIO-01: Mitigation Measures (Resources, Details and Phasing, Responsibilities and Future Planning).

The commenter suggested that mitigation measures be subject to public comment and that local experts be involved in the development of mitigation measures and compensatory mitigation plans to ensure impacts on biological resources are less than significant.

The Draft EIR/EIS includes reference to biological resources mitigation measures developed for the California HSR Program and modified to correspond with the B-P Build Alternatives. These are detailed in Section 3.7, Biological and Aquatic Resources, of this Final EIR/EIS; Section 3.7.4.2 provides the IAMFs and Section 3.7.7 discusses specific mitigation measures. As part of the Draft EIR/EIS, mitigation measures and IAMFs were subject to comment during the 60-day public review period that took place from February 28, 2020, through April 28, 2020. The public was given the opportunity to comment on the content, analysis, and conclusions of the Draft EIR/EIS. This comment does not provide specific suggestions related to the biological resources mitigation measures.

Further, all measures were developed and reviewed by qualified biologists who meet the industry standards for addressing special-status species and their habitats within the project corridor. Once measures were developed, they were reviewed by agencies that evaluate species and habitats for listing (i.e., CDFW and USFWS). The Authority has a team of biology experts who crafted the mitigation measures. The on-site Project Biologist will oversee and approve implementation of all mitigation before, during, and after construction.

Also refer to BP-Response-Section 3.7 BIO-01: Mitigation Measures (Resources, Details and Phasing, Responsibilities and Future Planning).

789-344

The commenter expresses concern that the location selected for permanently stockpiling the excess material (dirt associated with the project) will impact wildlife connectivity.

The proposed stockpile area north of SR 58 near Bealville Road has been proposed as part of the Refined CCNM Design Option to provide an available area for the construction contractor to place excess materials from project grading and tunneling. The stockpile area location was based on its proximity to the Refined CCNM Design Option construction area, where the excess materials would be generated. Providing a stockpile area as close as possible to the construction area will minimize the length of truck haul trips and the associated vehicle miles traveled and vehicle emissions. The need for the construction contractor to use any of this stockpile area will depend upon how the limits of the project construction packages are defined for a future design-build contractor procurement.

The Draft EIR/EIS conservatively characterizes the entire area as potential permanent impact, because more detailed information regarding the nuances of the impact is not available with the current level of project design. Temporary impacts as a result of construction, such as staging, are discussed in Section 3.7.6.4.

As part of the project, BIO-IAMF#1 through BIO-IAMF#3 and BIO-IAMF#5 through BIO-IAMF#12 would be incorporated to avoid and/or minimize construction impacts on biological and aquatic resources, including wildlife movement, as applicable and discussed in Section 3.7.4.2 of this Final EIR/EIS. In particular, the implementation of BIO-IAMF#5, will include development and implementation of a Biological Resources Management Plan to identify areas of biological resources, including oak woodland and wildlife movement opportunities, to be avoided during construction to the extent feasible, and designate them as Environmentally Sensitive Areas. As the commenter notes, it may not be feasible to restore the entire area of subsoil placement, particularly if the entire area is used for that purpose. Therefore, BIO-IAMF#5 and subordinate IAMFs and mitigation measures, will also provide implementation details for identification of restoration opportunities and methods. Toward this end, the Draft EIR/EIS incorporated measures for topsoil salvage and utilization, articulated in BIO-MM#2 and F-B LGA BIO-MM#48, for areas that are to be restored. While restoration would improve as vegetation

Response to Submission 789 (Cara Lacey, The Nature Conservancy San Diego, April 28, 2020) - Continued

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matures, the area could be utilized for wildlife crossings as soon as the project is complete. In addition, there are several wildlife crossings near the proposed stockpile area, of which one is a dual-use road wildlife overcrossing at Bealville Road.

The Authority would incorporate these IAMFs to reduce and minimize impacts by designating a Project Biologist and species-specific and general biological monitors during construction (BIO-IAMF#1). The Authority would require construction crews to attend Worker Environmental Awareness Program training and certify that they understand the regulatory agency requirements and procedures necessary to protect biological resources (BIO-IAMF#3). This would avoid some (but not all) direct impacts on special-status plant communities and wildlife corridors, because it would establish that contractors must be aware of and avoid affecting Environmentally Sensitive Areas during construction.

Finally, the soil stockpile is designed to be contoured and revegetated in an effort to facilitate wildlife movement utilization of the wildlife crossing, consistent with Mitigation Measure BIO-MM#6 in this Final EIR/EIS.

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The commenter requests that tunneling be completed using boring machines rather than digging from the surface. Boring machines and similar methods will be used to the greatest extent possible. Table 2-25 of this Final EIR/EIS shows the approximate lengths of each tunnel excavation method. Surface disruption would occur with construction of tunnel portals and cut-and-cover tunnels. Cut-and-cover is excavated by open-cut methods to create standalone structures where soil conditions are questionable or the amount of overburden is less than desirable. Cut-and-cover tunnels would only be used for short distances. A cut-and-cover tunnel is proposed for all B-P Build Alternatives at the beginning of Tunnel No. 3. An additional cut-and-cover tunnel is proposed for Alternative 3 at the end of Tunnel No. 9. Per WM-IAMF#6, all ground disturbed in wildlife movement corridors would require Restoration and Revegetation Plans to return the disturbed area to its pre-construction state. See also Impact BIO #2 in this Final EIR/EIS for a list of mitigation measures that would allow for the removal or exclusion of special-status wildlife species from the construction site prior to ground disturbance. In the case of fully protected terrestrial species (i.e., the blunt-nosed leopard lizard and ringtail), capture is not authorized and “removal” must be passive (BIO-MM#11, BIO-MM#13, and BIO-MM#28). Other fully protected species are birds, which naturally avoid humans in close proximity; however, the curiosity of the California condor may lead to a situation where hazing in accordance with USFWS-approved methods, which is not considered take, is appropriate per the mitigation measures provided in Section 3.7.7. Impact BIO#2 also lists the compensatory mitigation measures that would allow for on-site and off-site habitat restoration and preservation of special-status wildlife species.

As part of the B-P Build Alternatives, BIO-IAMF#1 through BIO-IAMF#3 and BIO-IAMF#5 through BIO-IAMF#11 would be incorporated to avoid and/or minimize impacts on biological and aquatic resources from project construction, as applicable and discussed in Section 3.7.4.2 of this Final EIR/EIS. In addition, the Authority would develop and implement a Biological Resources Management Plan to identify special-status species to be avoided during construction (BIO-IAMF#5). The Biological Resources Management Plan would be a compilation of the biological resources avoidance and minimization measures applicable to the project section and other project environmental plans, such as the Restoration and Revegetation Plan and Weed Control Plan.

Response to Submission 789 (Cara Lacey, The Nature Conservancy San Diego, April 28, 2020) - Continued

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789-346

a) The commenter suggests Table 5-1 and Table 6-4 of the WCA, which is Appendix I to the BARTR (Authority 2018b), present inconsistent data. The commenter states that the values in the tables differed from the Chico State data.

To clarify, Table 5-1 shows the length of blue oak woodland crossed by the project, whereas Table 6-4 shows the length of aggregated regional habitats of oak woodland that, as footnoted, also includes Oak Woodland, Foothill Pine and Oak Savannah from Bealville Road to near Tehachapi and Annual Grassland, Blue Oak Woodland, Montane Hardwood, and Other Shrubs.

b) The commenter found inconsistencies in reported impacts on habitats. For example, Table 5-1 reports 0.38 mile of blue oak woodland intersects HSR while Table 6-4 reports 6.21 miles. These both differed from the Chico State data, which were assessed for accuracy.

To clarify, Table 5-1 shows the length of blue oak woodland crossed by HSR, whereas Table 6-4 shows the length of aggregated regional habitats of oak woodland that, as footnoted, also includes Oak Woodland-Foothill Pine and Oak Savannah from Bealville Road to near Tehachapi Annual Grassland, Blue Oak Woodland, Montane Hardwood, and Other Shrub.

c) The commenter expressed concern that the use of less accurate data compromises the results and conclusions drawn from the WCA and potentially to the suitable habitat mapped for special-status species.

The data used for the LPA model used the California Department of Forestry and Fire Protection (CAL FIRE) vegetation data set, which is the same data used for the Missing Linkages least-cost corridor models, so that the parameters would be the same using the same focal species analyzed. The Tehachapi Pass High-Speed Rail Corridor Vegetation Map (created by the Geographical Information Center, California State University, Chico) is synonymous with the reference to the Vegetation Classification and Mapping Program (VegCAMP) (Klein and Keeler-Wolf 2014) data. The VegCAMP data set does not capture the entire extent of the project. Merging data from multiple sources with different resolutions and collection methods creates an issue with data integrity.

Response to Submission 789 (Cara Lacey, The Nature Conservancy San Diego, April 28, 2020) - Continued

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The Authority used data from a single source that was previously used by the South Coast Wildlands Missing Linkages project. The CAL FIRE vegetation data, which spans the entire 75-mile-long project section, is appropriate for this effort because it models relative movement cost for this large-scale project analysis and is consistent with the Missing Linkages report analysis.

c) The commenter expressed concern that the use of less accurate data compromises the results and conclusions drawn from the WCA and potentially the suitable habitat mapped for special-status species.

The data used for the LPA model used the same data as used for the Missing Linkages least-cost corridor models, so that the parameters would be the same using the same focal species analyzed.

d) The commenter expressed concern that the WCA used only the HSR centerline for its least-cost corridor analyses and did not use the permanent impact areas in order to represent the Alternative 2 impacts (Table S-7). The commenter suggests that the mule deer and mountain lion Post-Project Improved Permeability cost surface through the approximately 600-acre excess material stockpile location appears virtually identical to the Pre-Project Permeability cost surface.

One of the primary issues addressed in the analysis is how wildlife would move across the linear project. At the time of the evaluation, the extent of the project footprint was still being developed, but the openings across the project were known to be associated with the underground tunnel and elevated viaducts where wildlife could move across the project unimpeded. The LPA model was developed based on modeling wildlife movement across those openings. In addition, the soil stockpile was not known at the time the LPA model was run, so the results are not indicative of the soil stockpile. Although now known, the stockpile area was evaluated for impacts and mitigated by designing the area to funnel wildlife across the project at the wildlife crossing through the use of soil contouring and restoration to native plant communities. While restoration would improve as vegetation matures, the area could be utilized for wildlife crossings as soon as the project is complete. In addition, there are several wildlife crossings near the proposed stockpile area, of which one is a dual-use road wildlife overcrossing at

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Bealville Road.

Figure 6-12 and Figure 6-13 in the WCA show heat maps of the relative movement cost change for mountain lion and mule deer, respectively, at approximately Milepost 19. Graph 6-1 and Graph 6-2 in the WCA also show the same data using a moving window average in a graphical illustration. By adding the two wildlife crossings at those locations, the effects on wildlife movement are not identical to pre-project conditions but are more closely aligned by creating two wildlife crossing opportunities across the 2.22-mile fenced, at-grade surface segment (Table 6-7 in the WCA).

e) The commenter expresses concern that the mitigation measure does not guarantee the soil stockpile will be restored to its pre-project condition, including supporting hundreds of mature blue oak trees. Without such a mitigation measure, this and all areas defined as experiencing permanent impacts without specific restoration mitigation measures should have been modeled as less permeable due to the lack of intact habitat.

The soil stockpile was not modeled as part of the WCA; however, it will be contoured and revegetated with blue oak woodland to help facilitate wildlife movement at those wildlife crossing locations, as described in Mitigation Measure BIO-MM#6 of this Final EIR/EIS.

Response to Submission 789 (Cara Lacey, The Nature Conservancy San Diego, April 28, 2020) - Continued

789-347

a) The commenter expresses concern with the conclusion based on the WCA, which is Appendix I to the BARTR (Authority 2018b), comparing the project with and without wildlife structures. The commenter notes that the modeling was completed using 30x30-meter pixels, and as a result, even small crossing structures (described as 6-foot-arch undercrossings) were represented by a 30-meter side crossing opportunity across HSR.

The base modeling data used for the LPA model were from South Coast Wildlands Missing Linkages project (South Coast Wildlands no date), which had a 30x30-meter pixel resolution. The resolution of the model was not changed to be consistent with the parameters of the previously established resolution for the focal species used. Although one pixel is larger than the wildlife crossings being constructed, they are representative of a single opening across the project and the specific dimensions do not create an appreciable difference in the model.

b) The commenter expresses concern about the dual-use road crossings or dual-purpose road and wildlife under crossings as depicted in Figure 7-2 of the WCA. The commenter opines that the barrier between the road and wildlife area will trap animals crossing the road on the road side of the barrier. In places where this is the case, the commenter requests that mitigation measures be implemented to minimize the impacts of animals becoming trapped on the road. Additionally, the commenter recommends that exclusionary fencing be installed so animals cannot cross the roadways in the vicinity of dual crossing barriers and find themselves trapped on roadways.

Section 2.3.5 of this Final EIR/EIS discusses wildlife crossings, which will be designed with consideration given to traffic, noise, and lighting. The wildlife crossings will be designed where appropriate, practicable, and feasible to be consistent with the United States Department of Transportation's Wildlife Crossing Structure Handbook, Design and Evaluation in North America (Clevenger and Huijser 2011) and the Caltrans Wildlife Crossings Guidance Manual (Meese et al. 2009). Section 7.3.4 of the WCA highlights wildlife crossing design features that will be implemented, including 10-foot-tall concrete arches to accommodate areas within mule deer species range, crossing length, slopes, substrate, revegetation, fencing, artificial cover, jump outs, etc.

Additionally, Chapter 2, Section 2.3.5, of this Final EIR/EIS discusses the various grade

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separation features, including wildlife crossings that have been designed for the project. As shown in Table 2-25 of this Final EIR/EIS, the project would include 53 viaduct openings and 9 tunnel openings between the fenced surface rail segments. The 9 tunnels are located primarily through the mountainous Tehachapi region and range in length from 0.30 mile (2,997 feet) to 2.36 miles (9,504 feet), with a median tunnel length of 0.99 mile (5,250 feet). The 53 elevated viaduct sections range from 0.04 mile (189 feet) to 2.94 miles (12,500 feet), with the median viaduct span being 0.09 mile (367 feet).

Wildlife can freely pass over the underground tunnel sections and cross under the elevated viaduct sections. An additional 39 wildlife crossings are designed to provide additional opportunities across at-grade surface segments that exceeded the recommended interval length. The size of the wildlife undercrossings is based on the size of wildlife that would use the crossings. In areas where larger species such as mountain lion and mule deer occur, 10-foot arch culverts will be used for the larger overhead clearance; all other locations would include a 6-foot arch culvert to accommodate smaller species.

These crossings in the project design are expected to maintain genetic connectivity for numerous plant and animal species. Impact BIO #5 and Impact BIO #11 of this Final EIR/EIS discuss the construction and operation impacts on wildlife movement, respectively. As discussed under Impact BIO #5, the project impact on wildlife crossings and habitat linkages under CEQA would be potentially significant during construction. However, with implementation of BIO-IAMF#8, BIO-IAMF#5, BIO-MM#42, BIO-MM#37, BIO-MM#56, BIO-MM#64, BIO-MM#77, and BIO-MM#78, impacts on wildlife crossings and habitat linkages would be reduced to a less than significant level through avoidance, protection, or restoration methods.

As discussed under Impact BIO #11, the project impact on wildlife crossings and habitat linkages under CEQA would be potentially significant because potential disturbance of wildlife crossings and habitat linkages during maintenance activities could have a substantial adverse effect on areas that did not previously have this type of disturbance. However, with implementation of BIO-MM#76, BIO-MM#78, and BIO-MM#64, impacts on wildlife crossings and habitat linkages would be reduced to a less-than-significant

Response to Submission 789 (Cara Lacey, The Nature Conservancy San Diego, April 28, 2020) - Continued

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level through protection of habitat linkages.

During the final design stage, the dual-use road crossings will be evaluated to determine if jump outs and exclusionary fencing would be effective with the intended functional design when the wildlife crossings are designed beyond the illustrated concepts.

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The commenter requests that the Authority increase the size of all crossing structures to better fit those in the models and to allow them to function for a wider range of species.

The various modeling methods employed for the biological resources analysis are described in Section 3.7.4.3 of this Final EIR/EIS and Section6.3.4 of the BARTR. The detailed methods, analysis, and results of the modeling effort are provided in Section 5.2, Section 6.3.4, and Appendix C of the BARTR, respectively. Additionally, Graph 6-1 of the WCA (Appendix I) shows the mountain lion habitat for the pre-project or existing condition at Milepost 19 is at the edge of mountain lion species range and is less suited compared to the existing mountain lion habitat between Mileposts 28 and 29. As shown in Table 6-7 in the WCA, the length of the at-grade section at Milepost 19 is 2.22 miles and the at-grade segment between Mileposts 28 and 29 is 1.53 miles long. Graph 6-1 also highlights both the lower existing habitat suitability at Milepost 19 compared to Mileposts 28 and 29, as well as the relative difference that the project has on these areas, and the addition of the wildlife crossings.

The 62 openings in the project created by underground tunnel segments and elevated viaduct segments, as shown in Table 2-1 of the WCA, were represented with the 30x30-meter pixels in the LPA model. These openings in the project range from several miles to 189 feet in width. A single pixel was a representation of a wildlife crossing and allows the model to simulate movement across the HSR alignment. The model is limited by the resolution of the input used from South Coast Wildlands Missing Linkages project (South Coast Wildlands no date). Changing the pixel size would not have an appreciable difference at this scale of modeling. The size of the wildlife under crossings is based on the size of wildlife that would use the crossings and will be designed consistent with the U.S. Department of Transportation's Wildlife Crossing Structure Handbook, Design and Evaluation in North America (Clevenger and Huijser 2011) and the Caltrans Wildlife Crossings Guidance Manual (Meese et al. 2009). In areas where larger species such as mountain lion and mule deer occur, 10-foot-tall arch culverts will be used for the larger overhead clearance; all other locations would include a 6-foot-tall arch culvert to accommodate smaller species.

Response to Submission 789 (Cara Lacey, The Nature Conservancy San Diego, April 28, 2020) - Continued

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The commenter states that the roadkill data used to determine potential wildlife crossings were limited. The commenter states that The Nature Conservancy conducted roadkill surveys in 2018 and 2019, which recorded 65 roadkill locations along SR 58 between SR 223 and Tehachapi. The commenter also states that their analysis could have been used to refine placement of wildlife crossings if they had been informed of the HSR analysis as early as winter 2018.

The Authority hosted a stakeholder meeting on June 14, 2016, at which two representatives from The Nature Conservancy were present. The meeting conducted a project overview, the intent of the Wildlife Crossing Analysis, and a request for available data from the stakeholders that could inform and support the Wildlife Crossing Analysis.

The Authority appreciates the information related to The Nature Conservancy's roadkill surveys. The Authority has requested The Nature Conservancy's roadkill data and has considered the data in this Final EIR/EIS.

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The commenter is concerned with the finding that wildlife connectivity will not be affected by the presence of the HSR system based on the WCA, which is Appendix I to the BARTR (Authority 2018b), and other assessments presented in Section 3.7 of the EIR/EIS. The commenter also states that for species discussed, at-grade segments of the HSR alignment cross from 57 percent to 92 percent of modeled habitat. The commenter suggests additional mitigation measures would be required to conclude that the HSR project will have less than significant impacts on wildlife movement, including: (1) more and or longer tunnels and viaducts, resulting in fewer at-grade miles; (2) placement of wildlife crossing structures or culverts 6 feet or larger adjacent to culverts and other structures over and under SR 58 deemed potentially suitable for wildlife movement; (3) placing the excess material outside of important linkage areas and on highly degraded land previously affected by human land uses (not including rangeland); and (4) completing the previous items 1 through 3 in a transparent manner, working with local and connectivity experts.

Refer to Response for Comment 789-344, contained in this chapter, regarding stockpile impacts.

Impact BIO #5 and Impact BIO #11 of this Final EIR/EIS discuss the construction and operations impacts on wildlife movement, respectively. As discussed under Impact BIO #5, the project impact on wildlife crossings and habitat linkages under CEQA would be potentially significant during construction. However, with implementation of BIO-IAMF#8, BIO-IAMF#5, BIO-MM#42,BIO-MM#37, BIO-MM#56, BIOMM#64, BIO-MM#77, and BIO-MM#78, impacts on wildlife crossings and habitat linkages would be reduced to a less than significant level through avoidance, protection, or restoration methods.

As discussed under Impact BIO #11, the project impact on wildlife crossings and habitat linkages under CEQA would be potentially significant because potential disturbance of wildlife crossings and habitat linkages during maintenance activities could have a substantial adverse effect on areas that did not previously have this type of disturbance. However, with implementation of BIO-MM#76, BIO-MM#78, and BIO-MM#64, impacts on wildlife crossings and habitat linkages would be reduced to a less than significant level through protection of habitat linkages.

Response to Submission 789 (Cara Lacey, The Nature Conservancy San Diego, April 28, 2020) - Continued

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The Authority has considered the commenter's suggestions; however, the project includes 9 tunnels of varying length located throughout the project (Table 2-25 of this Final EIR/EIS) and 53 viaduct openings. Wildlife can freely pass over the underground tunnel sections and cross under the elevated viaduct sections. The additional wildlife crossings, which are designed to provide additional opportunities across at-grade surface segments, are considered adequate and would result in a less than significant impact on wildlife movement corridors.

The placement of these wildlife crossings considers the modeling effort described in Section 3.7.4.3 of this Final EIR/EIS and Section 6.3.4 of the BARTR. The detailed methods, analysis, and results of the modeling effort are provided in Section 5.2, Section 6.3.4, and Appendix C of the BARTR, respectively. The modeling conducted for the project has identified the probable locations of wildlife crossings and has informed the location of these crossings in the design.

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The commenter suggests that an additional cumulative project (proposed construction of truck climbing lanes on SR 58) in the Tehachapi foothills should have been included and evaluated for cumulative impacts on wildlife connectivity in the Draft EIR/EIS. Refer to Response to Comment 759-287, contained in Chapter 22 of this Final EIR/EIS, for a discussion of the projects included on the cumulative project list and what is considered a reasonably foreseeable project for this analysis. Caltrans documents were also reviewed to identify reasonably foreseeable projects between 2014 and 2016. Text clarifying this has been added to Section 3.19 of this Final EIR/EIS. Aside from a small portion of the truck climbing lanes project in the vicinity of Bealville and Bena roads, which was accounted for in the cumulative wildlife crossing analysis, the most recent Caltrans SR 58 Transportation Concept Report did not identify the aforementioned project at the time the cumulative project list was compiled or updated, which was dated 2014; therefore, the entire project as it is now identified by Caltrans was not evaluated in the analysis. However, inclusion of this project would not change the conclusions of the analysis of potential cumulative impacts on wildlife movement corridors in Section 3.19.5.7 of this Final EIR/EIS. As stated, construction of the proposed improvements within the Bakersfield to Palmdale Project Section and cumulative projects, including but not limited to other linear projects, could result in construction activities and placement of wildlife movement barriers in natural lands such that they would interfere with the movement of wildlife species.

The Bakersfield to Palmdale Project Section includes IAMFs that would require the creation of wildlife-crossing features at frequent intervals and along sensitive areas to facilitate wildlife movement and minimize or avoid impacts on wildlife corridors. The incorporation of these measures would reduce the impacts of interfering with established wildlife movement corridors and other impacts relating to the potential for isolation of populations. By including wildlife-crossing features in the project design, the proposed improvements within the Bakersfield to Palmdale Project Section are expected to maintain existing wildlife movement corridors within the project footprint. Cumulative projects, including but not limited to other linear projects, could also restrict wildlife movement. However, these projects would be subject to environmental review and would be required to address impacts on wildlife movement corridors through incorporation of design features and/or mitigation measures. The Bakersfield to Palmdale Project Section's incremental contribution to this impact would not be

Response to Submission 789 (Cara Lacey, The Nature Conservancy San Diego, April 28, 2020) - Continued

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cumulatively considerable, and no additional mitigation is required.

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The commenter states that the California Fish and Game Commission granted mountain lions in six regions candidate status to be listed as threatened. The commenter requests additional mitigation measures to ensure connectivity across the combined barrier of SR 58 and HSR be added. These additional measures include: (1) more tunnel and viaducts resulting in less at-grade miles, (2) place wildlife crossing structures or culverts 6 feet or larger adjacent to culverts and other structures over and under SR 58 deemed potentially suitable for wildlife movement by experts, (3) placing the excess material outside of important linkage areas and on highly degraded land previously affected by human land uses (not including rangeland), and (4) completing the previous items (1) through (3) be completed in a transparent manner working with local and connectivity experts.

The mountain lion was included in the EIR/EIS special-status (CDFW species of concern) mammal species analysis (as it was not listed as threatened or endangered), and specifically analyzed for movement across the HSR alignment, which is limited to the Tehachapi mountain range. Impacts associated with special-status wildlife habitat and wildlife movement are described in Section 3.7.4 of the EIR/EIS and will be avoided, minimized, or mitigated in accordance with applicable regulations and agency requirements, as specified in Section 3.7.4.2, Impact Avoidance and Minimization Features, and Section 3.7.7, Mitigation Measures. Specifically, Impact BIO #5 and Impact BIO #11 of this Final EIR/EIS discuss construction and operations impacts on wildlife movement, respectively. As discussed under Impact BIO #5, the project impact on wildlife crossings and habitat linkages under CEQA would be potentially significant during construction. However, with implementation of BIO-IAMF#8, BIO-IAMF#5, BIO-MM#42, BIO-MM#37, BIO-MM#56, BIO-MM#64, BIO-MM#77, and BIO-MM#78, impacts on wildlife crossings and habitat linkages would be reduced to a less-than-significant level through avoidance of specific linkages when possible, protection of the linkage system during construction, or restoration of wildlife crossings after construction is completed. As discussed under Impact BIO #11, the project impact on wildlife crossings and habitat linkages under CEQA would be potentially significant because potential disturbance of wildlife crossings and habitat linkages during maintenance activities could have a substantial adverse effect on areas that did not previously have this type of disturbance. However, with implementation of BIO-MM#76, BIO-MM#78, and BIO-MM#64, impacts on wildlife crossings and habitat linkages would be reduced to a less

Response to Submission 789 (Cara Lacey, The Nature Conservancy San Diego, April 28, 2020) - Continued

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than significant level through protection of habitat linkages.

Section 3.7, Table 3.7-7, of this Final EIR/EIS lists special-status wildlife species and impacts on habitat for each B-P Build Alternative. To correct the omission of the mountain lion in this table, the Authority has included this species and impacts on its habitat in this Final EIR/EIS.

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The commenter states that detailed modeling methods were not distributed to stakeholders and requests that detailed modeling methods be released to the public and additional time be provided for review and comment.

The various modeling methods employed for the biological and aquatic resources analysis are described in Section 3.7.4.3 of this Final EIR/EIS and Section 6.3.4 of the BARTR (Authority 2018b). The detailed methods, analysis, and results of the modeling effort are provided in Section 5.2, Section 6.3.4, and Appendix C of the BARTR, respectively. The Authority provided access to the technical reports, in which detailed modeling methodologies were described, upon request and at public libraries in the project vicinity, as well as at Authority offices. Electronic media containing these documents were also made available free of charge to anyone who requested them in writing or via the project hotline.

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The commenter expressed a desire for additional future meetings and comment sessions during and beyond the CEQA process. The Authority recognizes the importance of connectivity and the delicacy of the ecosystems through which the project would pass, if approved and built. The Authority will continue to coordinate with the private and public sectors during the environmental process and subsequent phases of the project (right-of-way acquisition, regulatory permitting, final design, etc.) in order to address concerns and resolve issues.

Submission 767 (T. Winston Vickers, UC Davis Wildlife Health Center, April 28, 2020)

Bakersfield - Palmdale - RECORD #767 DETAIL

Status :	Action Pending
Record Date :	4/28/2020
Response Requested :	
Affiliation Type :	Business and/or Organization
Submission Date :	4/28/2020
Interest As :	Business and/or Organization
Submission Method :	Project Email
First Name :	T. Winston
Last Name :	Vickers
Professional Title :	Associate Veterinarian
Business/Organization :	UC Davis Wildlife Health Center
Address :	
Apt./Suite No. :	
City :	
State :	
Zip Code :	0000
Telephone :	
Email :	twvickers@ucdavis.edu
Cell Phone :	949-929-8643
Email Subscription :	Bakersfield to Palmdale
Add to Mailing List :	Yes
EIR/EIS Comment :	Yes

Stakeholder Comments/Issues :

From: Winston Vickers <twinstonvickers@gmail.com>
Sent: Monday, April 27, 2020 4:30 PM
To: HSR info@HSR <info@hsr.ca.gov>
Subject: Comment on Bakersfield to Palmdale segment EIS

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To Whom It May Concern,

767-496 I am writing to express my concerns with the alignment and distances that the line is projected to run on the surface in the HSR Bakersfield to Palmdale segment. Having the train running on the surface versus underground or significantly elevated seems to me to make the impacts on wildlife unacceptable. Many segments appear to run at the surface for over 1 mile without wildlife crossing potential - these are unacceptable distances between crossing opportunities for many species.

767-497 I am a wildlife researcher who focuses especially on mountain lions, but also smaller carnivores and certain bird species. I am concerned especially about this segment of the project impacting the already severely restricted movement of mountain lions between the Sierras and populations to the south and along the coast. The genetic fragmenting of mountain lion subpopulations in the state that is reflected in numerous research papers and the recent action by the Fish and Game Commission to advance the petition to list six subpopulations as threatened, is strong evidence that further restriction of movement of mountain lions through the project area should be avoided.

The disruption of wildlife connectivity should be addressed much more aggressively by the project, and alignment and issues of tunneling versus surface or elevating should be put front and center. Elevated sections should be planned and constructed in such a way as to ensure large mammal passage, including mule deer, bear, and mountain lion. Sound should be minimized where track sections run at ground level or above. There is no going back once a structure like the high speed rail line is in place, and mountain lion populations that become even more isolated due to this project could easily be pushed closer to extinction or over the brink.

Wildlife have not received adequate consideration in the EIS document and I respectfully suggest that planning should take many species, but especially mountain lions, into greater consideration so that connectivity is not only maintained but improved through mitigation efforts.

Thank you,

T. Winston Vickers, DVM, MPVM

--
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Associate Veterinarian, UC Davis Wildlife Health Center
949-929-8643 (cell)
twvickers@ucdavis.edu<mailto:twvickers@ucdavis.edu>,
twinstonvickers@gmail.com<mailto:twinstonvickers@gmail.com>

Response to Submission 767 (T. Winston Vickers, UC Davis Wildlife Health Center, April 28, 2020)

767-496

The commenter expresses concern that many segments appear to run at the surface for over 1 mile without wildlife crossings.

The project would minimize impacts on wildlife movement through the incorporation of tunnels and viaducts into the design that allow wildlife to move freely over or under the alignment. In addition, the design incorporates 39 wildlife crossings, including 27 small undercrossings (6-foot arch), 3 medium undercrossings (10-foot arch), 5 dual-use road undercrossings (combined road and wildlife undercrossing), 2 dual-use drainage overcrossings (synonymous with the term overhead) (combined drainage and wildlife overcrossing), 1 dual-use road overcrossing (combined road and wildlife overcrossing), and 1 overcrossing (Authority 2018b). The wildlife crossings were sited to maintain permeability through the at-grade segments throughout the project section, consistent with Wildlife Crossing Structure Handbook (Clevenger and Huijser 2009) and Wildlife Crossings Guidance Manual (Meese et al. 2009) recommendations where feasible. Of the 39 wildlife crossings, 8 of the crossings are within the Tehachapi linkage. BIO-IAMF#1 through BIO-IAMF#3 and BIO-IAMF#5 through BIO-IAMF#11 include measures to minimize impacts on biological resources and wildlife connectivity from project construction and operation, as applicable and discussed in Section 3.7.4.2 of this Final EIR/EIS. The Authority would incorporate these IAMFs to reduce and minimize impacts by designating a Project Biologist and species-specific and general biological monitors during construction (BIO-IAMF#1).

Additionally, specific wildlife movement features developed to address impacts on wildlife movement are outlined as WM-IAMF #1 through WM-IAMF #6 in the WCA (Appendix I of the BARTR). These measures have been incorporated into the BIO-IAMFs, and the BIO-MMs outlined in Sections 3.7.4.2 and 3.7.7.2 of the Final EIR/EIS. These wildlife movement IAMFs and mitigation measures are discussed under Impact BIO#5 of the Final EIR/EIS and include avoidance of impediments to movement, measures to reduce impacts from night lighting and construction noise, wildlife exclusion fencing, measures for impacts from vehicle traffic, and restoration and revegetation plans for impacts on special-status species and wildlife movement corridors.

Chapter 2, Section 2.3.5, of this Final EIR/EIS discusses the various grade separation features, including wildlife crossings that have been designed for the project. As shown

767-496

in Table 2-25 of this Final EIR/EIS, the project would include 53 viaduct openings and 9 tunnel openings between the fenced surface rail segments. The 9 tunnels are located primarily through the mountainous Tehachapi region and range in length from 0.30 mile (2,997 feet) to 2.36 miles (9,504 feet), with a median tunnel length of 0.99 mile (5,250 feet). The 53 elevated viaduct sections range from 0.04 mile (189 feet) to 2.94 miles (12,500 feet), with the median viaduct span being 0.09 mile (367 feet).

Wildlife can freely pass over the underground tunnel sections and cross under the elevated viaduct sections. An additional 39 wildlife crossings are designed to provide additional opportunities across at-grade surface segments that exceeded the recommended interval length. It was not feasible to add additional wildlife crossings at all locations that did not meet the crossing interval criteria because of engineering limitations or conflicts with adjacent land use issues. The size of the wildlife under crossings is based on the size of wildlife that would use the crossings. In areas where larger species such as mountain lion and mule deer occur, 10-foot arch culverts will be used for the larger overhead clearance; all other locations would include a 6-foot arch culvert to accommodate smaller species. A list of the proposed wildlife crossings are provided in Table 4-4 of the WCA (Appendix I of the BARTR [Authority 2018b]) and shown on Figure 4-7 of the WCA.

767-497

The commenter is concerned that the disruption of wildlife connectivity should be addressed by the project, as should alignment and issues of tunneling versus surface or elevating.

Wildlife connectivity is addressed in Section 3.7.6.5 of this Final EIR/EIS. Refer to Response to Comment 767-496, contained in this chapter, for additional information.

Furthermore, the project is being designed with certain engineering constraints, and often the terrain determines how much of the HSR would be located at the surface, underground, or elevated. The smallest viaduct length provided in the design is 189 feet, which would allow passage for large mammals to cross under the alignment.

Submission 794 (T. Winston Vickers, UC Davis Wildlife Health Center, April 28, 2020)

Bakersfield - Palmdale - RECORD #794 DETAIL

Status :	Action Pending
Record Date :	4/30/2020
Affiliation Type :	Business and/or Organization
Submission Date :	4/28/2020
Interest As :	Business and/or Organization
Submission Method :	Project Email
First Name :	T. Winston
Last Name :	Vickers
Professional Title :	Associate Veterinarian
Business/Organization :	UC Davis Wildlife Health Center
Address :	
Apt./Suite No. :	
City :	
State :	
Zip Code :	0000
Telephone :	
Email :	twvickers@ucdavis.edu
Cell Phone :	949-929-8643
Email Subscription :	
Add to Mailing List :	
EIR/EIS Comment :	Yes

Stakeholder Comments/Issues :

From: Winston Vickers <twinstonvickers@gmail.com>
Sent: Tuesday, April 28, 2020 12:52 PM
To: HSR info@HSR <info@hsr.ca.gov>
Subject: Re: Comment on Bakersfield to Palmdale segment EIS

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To Whom It May Concern,

As addenda to my previous comments in my email of 4/27/20:

794-506 I would like to also take issue with the lack of online availability of all the DEIR and other documents that are supposed to be available for public review. The excuse that seemed to be stated on the website of document size being too large does not comport with modern information management and data availability norms. For the HSRA to be claiming inability to make these documents readily available online while building the most advanced rail line in the country is more than a bit ridiculous, and raises questions about whether that is an attempt to reduce scrutiny of the plans by a wider audience of the public.

794-507 Additionally, odd inconsistencies appear in the Wildlife Connectivity Assessment that would seem related to the choices of data for vegetation mapping and connectivity assessment, as well as what appear to be unrealistically positive portrayals of connectivity disruptions expected as a result of the project. An example is the projection that wildlife permeability based on the models presented would be essentially unchanged in the area of the ~600 acre excess material stockpile. That would seem to defy common sense and suggest modeling deficiencies that are significant. Also, the fact that at-grade segments of the line cross from 57% to 92% of modeled habitat suggests that the statements in the document that no disruption would occur with surface linear infrastructure over that percentage of the habitat is again - far fetched to say the least.

Overall, given the well-documented negative effects on wildlife connectivity that are exerted by all kinds of human activities, especially linear transportation projects, for these documents to maintain that there will be little or no impact would seem to be a pretty ludicrous statement on its face given all the different ways that connectivity impacts occur.

794-508 I believe that a much more thorough vetting by the public and wildlife experts, especially those that are well versed in the local ecology along this segment, should be undertaken by the HSRA, and that public presentations by the HSRA should be done online in formats where questions from the public can be posed and addressed. Several of these sessions should be held in order to allow maximum participation. As regards

794-509 mountain lions specifically, there is a very large constituency of the public that is quite concerned with preventing the worsening of isolation of coastal and southern populations that threatens their existence. This was in evidence when the Fish and Game Commission considered advancing the candidacy for listing under CESA of six subpopulations, all of which will be negatively affected by reduced connectivity in the Bakersfield to Palmdale segment area.

Thank you for the opportunity to comment.

T. Winston Vickers, DVM, MPVM

On Mon, Apr 27, 2020 at 4:30 PM Winston Vickers <twinstonvickers@gmail.com<mailto:twinstonvickers@gmail.com>> wrote:
To Whom It May Concern,

794-510 I am writing to express my concerns with the alignment and distances that the line is projected to run on the surface in the HSR Bakersfield to Palmdale segment. Having the train running on the surface versus underground or significantly elevated seems to me to make the impacts on wildlife unacceptable. Many segments appear to run at the surface for over 1 mile without wildlife crossing potential - these are unacceptable distances between crossing opportunities for many species.

794-511 I am a wildlife researcher who focuses especially on mountain lions, but also smaller carnivores and certain bird species. I am concerned especially about this segment of the project impacting the already severely restricted movement of mountain lions between the Sierras and populations to the south and along the coast. The genetic fragmenting of mountain lion subpopulations in the state that is reflected in numerous research papers and the recent action by the Fish and Game Commission to advance the petition to list six subpopulations as threatened, is strong evidence that further restriction of movement of mountain lions through

Submission 794 (T. Winston Vickers, UC Davis Wildlife Health Center, April 28, 2020) - Continued

794-511

the project area should be avoided.

The disruption of wildlife connectivity should be addressed much more aggressively by the project, and alignment and issues of tunneling versus surface or elevating should be put front and center. Elevated sections should be planned and constructed in such a way as to ensure large mammal passage, including mule deer, bear, and mountain lion. Sound should be minimized where track sections run at ground level or above. There is no going back once a structure like the high speed rail line is in place, and mountain lion populations that become even more isolated due to this project could easily be pushed closer to extinction or over the brink.

Wildlife have not received adequate consideration in the EIS document and I respectfully suggest that planning should take many species, but especially mountain lions, into greater consideration so that connectivity is not only maintained but improved through mitigation efforts.

Thank you,

T. Winston Vickers, DVM, MPVM

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Response to Submission 794 (T. Winston Vickers, UC Davis Wildlife Health Center, April 28, 2020)

794-506

Refer to Standard Response BP-Response-GENERAL-02: Public Outreach on the Draft EIR/EIS.

The commenter asserts that the Draft EIR/EIS and other documents were not available online. This is not correct. The Draft EIR/EIS, including the Technical Appendices and the Engineering Alignment Plans, were available at the Authority's website (https://www.hsr.ca.gov/programs/environmental/eis_eir/draft_bakersfield_palmdale.aspx) at the start of the comment period. Other documents that were provided online were the technical reports. Both paper and electronic copies of the Draft EIR/EIS, technical appendices, and technical reports were available at 17 public libraries in the project vicinity. In addition, information in Chapter 10 of at the Draft EIR/EIS as well as on the Authority's website indicated that these documents were available for free upon request by contacting one of the Authority's two offices, neither or which closed for any period during the comment period.

794-507

The commenter expresses concern with perceived inconsistencies in the WCA.

Without a specific inconsistency identified by the commenter, it is difficult to address their overall concern. However, regarding the specific comment regarding at-grade segments crossing habitat, the soil stockpile will be contoured and revegetated to facilitate wildlife movement across the alignment. The percent of habitat crossed by at-grade segments alone can be misleading when the number and lengths of openings provide a more accurate picture of the project effects. Refer to Response to Comment 777-315(b), contained in this chapter.

794-508

Refer to Standard Response BP-Response-GENERAL-02: Public Outreach on the Draft EIR/EIS.

The commenter questions the degree to which the public and wildlife experts were able to comment upon the environmental evaluation and asks about public presentations being conducted online.

Refer to BP-Response-General-02: Public Outreach on the Draft EIR/EIS. Further, Chapter 9, Public and Agency Involvement, of this Final EIR/EIS describes coordination among environmental resource agencies. As described in Section 9.4.5 of this Final EIR/EIS, the Authority has consulted with several environmental resource agencies, including the USEPA, USFWS, USACE, CDFW, and the State Water Resources Control Board. The Authority facilitated monthly regulatory agency coordination meetings to provide project updates and seek input on the project. In addition, as shown in Table 9-1 of this Final EIR/EIS, the Authority also met with wildlife and land conservation organizations such as the Tejon Ranch Conservancy and The Nature Conservancy. In addition, pursuant to the requirements of CEQA and NEPA, the Authority has conducted an extensive public and agency involvement program as part of the environmental review process. Public involvement and outreach included development and provision of informational materials such as fact sheets, informational and scoping meetings (including town hall and open house meetings), public and agency meetings, meetings with individuals and groups, and presentations and briefings to interested and/or affected organizations and associations. Additionally, a virtual public meeting was held during the public review period of the Draft EIR/EIS on April 23, 2020. During this meeting, questions from the public were received which are responded to in this Final EIR/EIS. Refer also to Response to Comment 789-343, contained in this chapter.

Response to Submission 794 (T. Winston Vickers, UC Davis Wildlife Health Center, April 28, 2020) - Continued

794-509

The commenter expresses concern with impacts on mountain lions.

Refer to Response to Comment 777-315(j) and 789-352, contained in this chapter.

The mountain lion was included in the EIR/EIS special-status (CDFW species of concern) mammal species analysis (as it was not listed as threatened or endangered), and was specifically analyzed for movement across the HSR alignment, which is limited to the Tehachapi mountain range. Impacts associated with special-status wildlife habitat and wildlife movement are described in Section 3.7.4 of the EIR/EIS and will be avoided, minimized, or mitigated in accordance with applicable regulations and agency requirements, as specified in Section 3.7.4.2, Impact Avoidance and Minimization Features, and Section 3.7.7, Mitigation Measures. Section 3.7, Table 3.7-7, of this Final EIR/EIS lists special-status wildlife species and impacts on habitat for each B-P Build Alternative. To correct the omission of the mountain lion in this table, the Authority has included this species and impacts on its habitat in this Final EIR/EIS.

794-510

The commenter expresses concern that many segments appear to run at the surface for over 1 mile without wildlife crossings.

Refer to Response to Comment 767-496, contained in this chapter.

794-511

The commenter expresses concern that the disruption of wildlife connectivity should be addressed by the project, as should alignment and issues of tunneling versus surface or elevating.

Refer to Response to Comment 767-497, contained in this chapter.

Submission 760 (Adrian Guerrero, Union Pacific Railroad, April 27, 2020)

Bakersfield - Palmdale - RECORD #760 DETAIL

Status :	Action Pending
Record Date :	4/27/2020
Response Requested :	
Affiliation Type :	Business and/or Organization
Submission Date :	4/27/2020
Interest As :	Business and/or Organization
Submission Method :	Project Email
First Name :	Adrian
Last Name :	Guerrero
Professional Title :	Network Planning & Operations
Business/Organization :	Union Pacific Railroad
Address :	9451 Atkinson Road
Apt./Suite No. :	
City :	Roseville
State :	CA
Zip Code :	95747
Telephone :	916-789-6360
Email :	aguerre@up.com
Cell Phone :	
Email Subscription :	
Add to Mailing List :	Yes
Stakeholder Comments/Issues :	

Adrian Guerrero
Network Planning & Operations
Union Pacific Railroad
916-789-6360 (o)

**

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**

EIR/EIS Comment :	Yes
Attachments :	UPRR Comments to CHSRA Bakersfield to Palmdale DEIR-DEIS, April 24-2020.pdf (640 kb)

BUILDING AMERICA

April 24, 2020

Attn: Draft EIR/EIS for the Bakersfield to Palmdale Project Section

California High Speed Rail Authority
770 L Street, Suite 620 MS-1
Sacramento, CA 95814

To Whom It May Concern:

Union Pacific Railroad Company (UPRR) submits these comments in response to the California High-Speed Rail Authority's (CHSRA) Draft Environmental Impact Report/Environmental Impact Statement (DEIR/DEIS): Bakersfield to Palmdale Project Section.

UPRR owns and operates a common carrier freight railroad network in the western two thirds of the United States, including the State of California. Specifically, UPRR owns and operates rail main lines connecting the San Francisco Bay Area to Sacramento and points east and north, and to Los Angeles and points east and southeast. UPRR is the largest rail carrier in California in terms of both mileage and train operations. UPRR's network in California is vital to the economic health of the state and the nation as a whole, and its rail service to California customers is crucial to the current and future success and growth of those customers.

UPRR has been actively engaged in discussions with CHRSA for many years in order to ensure that the safety and efficiency of the UPRR system, including UPRR's ability to serve current and future customers, is preserved during the planning, construction, and operation of the California high-speed rail project. UPRR and CHSRA have entered into several agreements that reflect these interests, including the Memorandum of Understanding and Implementing Agreement Related to High-Speed Rail Development in California dated July 11, 2012 (MOU) and the Engineering, Construction, and Maintenance Agreement Related to the California High-Speed Rail Authority Project Merced to Bakersfield Segment dated December 23, 2014.

UPRR has also submitted formal comments in response to proposals at several points during the environmental permitting process for various aspects of the high-speed rail project. That communication has included comments on plans for the proposed Fresno to Bakersfield high-speed rail segment and the Downtown Bakersfield High-Speed Rail Station Area Plan.

UNION PACIFIC CORPORATION
9451 Atkinson Road
Roseville, CA 95747

Adrian Guerrero
Gen Dir Network Dev
Network Planning & Operations

P 916-789-6360
E aguerre@up.com

Submission 760 (Adrian Guerrero, Union Pacific Railroad, April 27, 2020) - Continued

760-328 CHSRA's DEIR/DEIS proposes a Preferred Alternative alignment that is largely parallel to and appears to cross above and below the grade of UPRR right of way, raising several concerns for UPRR. Except where UPRR has, following negotiation with CHSRA, implemented significant capacity improvements and other mitigation measures to address adverse impacts to its franchise, UPRR will not allow any part of the high-speed rail system to be located on UPRR-owned property. Where UPRR operates on rights of way owned by others, CHSRA facilities and operations must not interfere with UPRR's operations. Where the CHSRA and UPRR alignments run in close proximity, a safe and operationally functional distance must be maintained between them. All CHSRA facilities that may cross above or below UPRR right of way must clear-span the UPRR property and be constructed a sufficient distance away to permit UPRR's full utilization of its property for railroad purposes.

With these general principles as context, UPRR offers these specific points:

760-329 • Please outline for UPRR where the proposed CHSRA tracks come within 102 feet of UPRR right of way.

760-330 • Any new facilities that cross UPRR's right of way in relation to the project, including new or realigned roads, must be grade-separated and comply with UPRR's then-current minimum engineering standards.

760-331 • Depending on the design and proximity of the CHRSA facilities to the UPRR right of way, special conditions such as safety barriers may be required.

760-332 • To comply with the terms of the MOU, CHSRA must design its alignment in a manner that does not interfere with UPRR's access to current or future customers. Section 2(A)(2) of the MOU says CHSRA "will take all steps available under law to avoid impeding UPRR's commercially reasonable access to current and potential customers and the access of current and potential customers to UPRR along the corridor." Drawings for the Preferred Alternative through Palmdale appear to depict the CHSRA alignment realigning UPRR right of way for several miles, thereby impacting existing UPRR spur tracks and facilities owned or operated by current UPRR customers. The proposed alignment also appears to separate UPRR from developable property adjacent to the UPRR main line at various points along the proposed route. Impacts to existing and future freight rail customers associated with the proposed Preferred Alternative alignment are unacceptable. If the Preferred Alternative is chosen as the selected route, UPRR will seek to require modification of the route per the terms of the MOU so that there are no impacts to our ability to serve existing or future customers.

760-333 • It is not clear whether the DEIR/DEIS has examined the impact that construction of the CHSRA alignment may have on the future ability of cities or other road authorities to grade-separate roads that cross the UPRR tracks along the route. State and federal policies encourage the elimination of railroad grade crossings for the benefit of safety and the efficient movement of trains and vehicular traffic. The design of the CHSRA alignment and its proximity to the UPRR right of way under the Preferred Alternative may permanently prevent roads that currently cross the freight tracks at grade from being grade-separated in the future. UPRR requests that an analysis be completed to determine the extent of these potential impacts and that the results be formally communicated to the respective roadway authorities who might be impacted and to UPRR.

760-334 • UPRR does not anticipate operating over any new route(s) through the Tehachpi Mountains. UPRR does not have any interest in doing so or have the physical capabilities to do so.

760-335 Considering the potentially serious and detrimental impacts to UPRR facilities, operations, current and future customer access, and to long-term roadway accessibility over UPRR tracks along the Preferred Alternative route, UPRR encourages CHSRA to continue working with UPRR to develop an alignment that meets UPRR safety and engineering guidelines, addresses the concerns identified in this letter or that have yet to be identified, and meet the obligations outlined in our standing agreements. If CHSRA does select the Preferred Alternative route, then CHSRA must mitigate any and all impacts to UP and our customers. CHSRA must provide solutions to overcome the impacts to UPRR noted above and any others UPRR identifies as the design of the Preferred Alternative route is developed in more detail.

Thank you for considering our comments.

Sincerely,

Adrian Guerrero
General Director Network Development

Response to Submission 760 (Adrian Guerrero, Union Pacific Railroad, April 27, 2020)

760-328

The commenter reiterates Union Pacific Railroad 's (UPRR's) requirement that no portion of the Bakersfield to Palmdale Project Section be located on UPRR property or interfere with UPRR operations on rights-of-way owned by others. Further, when the Bakersfield to Palmdale Project Section and UPRR alignments run adjacent, or where the Bakersfield to Palmdale Project Section crosses above or below UPRR right-of-way, UPRR indicates that a safe and operationally functional distance must be maintained and HSR must not prevent UPRR from fully utilizing its property.

The Bakersfield to Palmdale Project Section follows existing transportation corridors and rights-of-way to the extent feasible, consistent with the objectives of the HSR system. The Authority acknowledges that the Bakersfield to Palmdale Project Section parallels the UPRR corridor as described in Chapter 2, Alternatives of this Final EIR/EIS. However, the Bakersfield to Palmdale Project Section does not physically encroach on UPRR property or where UPRR operates within rights-of-way owned by others, and maintains a minimum 102-foot clearance between UPRR right-of-way and the centerline of the HSR when all tracks are at ground level. As described in Appendix 2-B, the Bakersfield to Palmdale Project Section would cross the UPRR track three times and the Metrolink track in Lancaster once. In two of these areas, the UPRR and Metrolink tracks would be relocated to the east of their current location to accommodate the HSR track. Details about railroad modifications due to Bakersfield to Palmdale Project Section implementation are provided in Chapter 2 under the subheading Freight or Passenger Railroad Modifications and in Table 2-16 of this Final EIR/EIS. Volume 3 of this Final EIR/EIS (Alignment Plans Profiles, and Cross Sections), available on the Authority's website, provides more detail associated with the location of the Bakersfield to Palmdale Project Section in relation to the UPRR corridor.

The majority of the Preferred Alternative that parallels the UPRR corridor would be on a viaduct. The Preferred Alternative would be aligned so that the edge of the structure does not fall within the active UPRR operating corridor. Drawings TT-D1203 through TT-D1254 in Volume 3 of this Final EIR/EIS show the viaduct in relation to the UPRR right-of-way. Plan and profile drawings for the segment of the Preferred Alternative that parallels the UPRR are shown in this same set of plans.

The Preferred Alternative would be in or near, would cross, or would relocate the UPRR

760-328

alignment through Edison, near Keene, in Tehachapi, and through Lancaster and Palmdale. The Preferred Alternative would relocate the Metrolink tracks through Lancaster and Palmdale. Within the HSR project footprint, the UPRR provides freight transport, while Metrolink is used for passenger service. The following would occur with respect to the UPRR and Preferred Alternative:

In Edison, the Preferred Alternative would run parallel to the UPRR from Oswell Street to SR 184 and would not directly affect the UPRR tracks. There is an existing grade-separated crossing of a UPRR spur line in Algoso; as such, a grade-separated crossing is proposed where the UPRR crosses SR 184.

In Keene, near Hart Flat Road, the Preferred Alternative would cross the UPRR on a new viaduct and would not directly affect UPRR operations.

In Tehachapi, the Preferred Alternative would cross over the UPRR alignment near Goodrick Drive and E Tehachapi Boulevard on a new viaduct and would not directly affect UPRR operations.

In Lancaster, the Preferred Alternative would relocate the existing UPRR and Metrolink tracks from approximately Avenue G to approximately 0.5 mile north of Avenue L. The Authority would obtain right-of-way from UPRR and would purchase the land necessary to relocate the UPRR tracks to the east. The Authority would relinquish that land to the UPRR when construction is complete. The construction would occur in sequences to allow for little to no downtime for the UPRR and Metrolink.

In Palmdale, the Preferred Alternative would run parallel to and west of the existing Metrolink and UPRR tracks. Design considerations allow for connections to the planned High Desert Corridor that would cross under or over the HSR, Metrolink, and UPRR tracks and connect to the HSR alignment between Avenue O and Avenue Q. A crossing of Sierra Highway under the Metrolink and UPRR tracks would require bridges to be built within the existing rail corridor.

Refer to Drawings TT-D1001 through TT-D1030 (Edison); TT-D1031 through TT-D1040 (Keene); TT-D1041 through TT-D1079 (Tehachapi); TT-D1080 through TT-D1093 (Lancaster); and TT-D1217 (Palmdale), included in Volume 3 of this Final EIR/EIS

Response to Submission 760 (Adrian Guerrero, Union Pacific Railroad, April 27, 2020) - Continued

760-328

(Lancaster); and TT-D1217 (Palmdale), included in Volume 3 of this Final EIR/EIS (Roadway and Roadway Structure Plans). All overcrossings would be designed to meet freight height clearances and would not prohibit UPRR's full utilization of its property for railroad purposes.

The Authority will provide UPRR review and approval rights of engineering, construction, and maintenance plans from the point in time that the project is approved by the Authority (i.e., environmentally cleared) through the point of acceptance of the final engineering design and construction plans. Through this process, the Authority and UPRR will agree to a final design that complies with the requirements of UPRR.

No revisions have been made to this Final EIR/EIS in response to this comment.

760-329

The commenter requests information on where the proposed project comes within 102 feet of UPRR right-of-way. The project maintains a minimum 102-foot clearance between UPRR right-of-way and the centerline of the HSR when all tracks are at ground level. The only location where the project is closer than 102 feet is along the Edison Highway, where the project alignment is on a viaduct parallel to the UPRR right-of-way for a length of approximately 3.2 miles for the Bakersfield to Palmdale Project Section design portion. Measuring from the UPRR centerline to the HSR centerline the separation is a minimum 70 feet.

760-330

The commenter indicates that any new HSR facilities that cross UPRR's right-of-way in relation to the project, including new or realigned roads, must be grade-separated and comply with UPRR's then-current minimum engineering standards.

The project would cross UPRR facilities at several locations, and as shown on the design plans in Volume 3 of this Final EIR/EIS, all crossings would be grade-separated and clear-span the UPRR right-of-way to fully avoid conflicts with or impacts on UPRR freight operations at ground level. Refer to Response to Comment 760-328, contained in this chapter, which details the design of the Bakersfield to Palmdale Project Section adjacent to the UPRR and Metrolink tracks through Edison, Keene, Tehachapi, Lancaster, and Palmdale.

Consistent with Technical Memorandum 2.1.7, Rolling Stock and Vehicle Intrusion Protection for High-Speed Rail and Adjacent Transportation Systems (Authority 2013), all overcrossings would be designed to meet freight height clearances and would not prohibit UPRR's full utilization of its property for railroad purposes. Furthermore, the Authority will provide UPRR review and approval rights of engineering, construction, and maintenance plans from the point in time the project is approved by the Authority through the point of acceptance of the final engineering design and construction plans. Through this process, the Authority and UPRR would agree to a final design that complies with the requirements of UPRR.

No revisions have been made to this Final EIR/EIS in response to this comment.

Response to Submission 760 (Adrian Guerrero, Union Pacific Railroad, April 27, 2020) - Continued

760-331

The commenter indicates that, depending on the design and proximity of the UPRR alignment to the project, special considerations such as safety barriers may be required.

Safety considerations are included in the design of the Preferred Alternative with regard to proximity of the HSR line to other transportation facilities, including railroads or highways. Separation requirements, described in Technical Memorandum 2.1.7: Rolling Stock and Vehicle Intrusion Protection for High-Speed Rail and Adjacent Transportation Systems (Authority 2013), were developed specifically for the California HSR System. A horizontal separation of approximately 102 feet between the centerlines of adjacent conventional and HSR trackways has been determined to be a distance sufficient to require no additional protection. The project maintains a minimum 102-foot clearance between UPRR right-of-way and the centerline of the HSR when all tracks are at ground level.

The majority of the project that parallels the UPRR corridor would be on a viaduct. Refer to Response to Comment 760-328, contained in this chapter, which details the design of the Preferred Alternative adjacent to the UPRR and Metrolink tracks through Edison, Keene, Tehachapi, Lancaster, and Palmdale. Section 2.3.1 of this Final EIR/EIS indicates that for safety, the Bakersfield to Palmdale Project Section would be fully grade-separated and access-controlled with intrusion detection and monitoring systems. In areas where the project operates at greater than 125 miles per hour and is adjacent to existing freight/passenger railroads (UPRR or Metrolink tracks), intrusion-protection barriers may be required to prevent encroachment into the HSR guideway. The project has been designed so that the edge of the structure does not fall within the active UPRR operating corridor.

No revisions have been made to this Final EIR/EIS in response to this comment.

760-332

The commenter notes that the design of the project must comply with terms of the Memorandum of Understanding between the Authority and UPRR. The commenter further notes that drawings for the Preferred Alternative appear to realign UPRR right-of-way for several miles and appears to separate UPRR from developable property adjacent to the UPRR main line at various points along the proposed route.

The Authority acknowledges the July 11, 2012, Memorandum of Understanding and Implementing Agreement Related to High-Speed Rail Development as it relates to the Bakersfield to Palmdale Project Section of the California HSR System (Agreement) and notes that it has been working cooperatively with UPRR under that Agreement to address issues of concern. The Authority acknowledges that the HSR alignment potentially separates the UPRR corridor from developable right-of-way in Palmdale. The Authority also appreciates UPRR's concern related to the HSR limiting UPRR's ability to serve future customers. Consistent with the Agreement and MOU, the Authority will continue to work collaboratively with UPRR to preserve UPRR's ability to serve current and future customers.

The Preferred Alternative follows existing transportation corridors and rights-of-way to the extent feasible, consistent with the objectives of the HSR system. The Authority acknowledges that the Preferred Alternative parallels the UPRR corridor. However, consistent with the Agreement, the Preferred Alternative maintains a minimum 102-foot clearance between the UPRR right-of-way and the centerline of the HSR when all tracks are at ground level. Volumes 1 (Sections 2.4.1 and 2.4.2) and 3 (Alignment Plans) of this Final EIR/EIS provide more detail associated with the location of the Preferred Alternative in relation to the UPRR corridor.

The Agreement provides UPRR review and approval rights of engineering, construction, and maintenance plans from the point in time that the project is approved by the Authority (i.e., environmentally cleared) through the point of acceptance of the final engineering design and construction plans. Through this process, the Authority and UPRR will agree to a final design that satisfies the requirements and concerns of UPRR.

Affected UPRR spurs will be relocated to maintain existing connectivity.

Response to Submission 760 (Adrian Guerrero, Union Pacific Railroad, April 27, 2020) - Continued

760-332

760-333

As discussed in Section 2.3.5 in Section 2, Alternatives, in this Final EIR/EIS, an optimally operating HSR system consists of a fully grade-separated and access-controlled guideway. Unlike existing passenger and freight trains in the project vicinity, the HSR system would have no surface road crossings that would require future grade separations. Additionally, the B-P Build Alternatives would not preclude the future grade separations of existing roadways that cross the UPRR rail line. For example, Vineland Road and Neumarkel Road could potentially be limited to undercrossings due to HSR improvements but are still feasible as grade separations.

760-334

The commenter states that UPRR does not anticipate operating any new routes through the Tehachapi Mountains. As outlined in Section 2.4.2.2 of this Final EIR/EIS, the Preferred Alternative would not disrupt UPRR existing operations through the Tehachapi Mountains. The commenter does not provide a comment on the Draft EIR/EIS. No changes to the EIR/EIS have been made in response to this comment.

760-335

The Authority will continue to coordinate with the private and public sectors during the environmental process and subsequent phases of the project (right-of-way acquisition, regulatory permitting, final design, etc.) in order to address concerns and resolve issues. As requested by the commenter, the Authority will meet the obligations of any standing agreements and will mitigate impacts on UPRR facilities, as described in TR-IAMF#9, Protection of Freight and Passenger Rail during Construction, in Appendix 2-E of this Final EIR/EIS. Refer to Responses to Comments 760-328 through 760-334, contained in this chapter, for discussion of specific concerns raised by the commenter.

Submission 699 (Luz Sandoval, University of Antelope Valley, March 13, 2020)

Bakersfield - Palmdale - RECORD #699 DETAIL

Status :	Action Pending
Record Date :	3/13/2020
Response Requested :	Yes
Affiliation Type :	Business and/or Organization
Submission Date :	3/13/2020
Interest As :	Business and/or Organization
Submission Method :	Project Email
First Name :	Luz
Last Name :	Sandoval
Professional Title :	Executive Assistant To The Vice-President
Business/Organization :	University of Antelope Valley
Address :	44055 North Sierra Highway
Apt./Suite No. :	
City :	Lancaster
State :	CA
Zip Code :	93534
Telephone :	Office: (661) 726-1911 x114
Email :	luz.sandoval@uav.edu
Cell Phone :	
Email Subscription :	
Add to Mailing List :	
Stakeholder Comments/Issues :	

Good morning,

699-253 My name is Luz Sandoval, Executive Assistant at University of Antelope Valley, I am reaching out on behalf of our Founders Marco and Sandra Johnson. We are requesting a meeting to further discuss the potential impact that this project could have on our school.

Please feel free to reach me at the below contact information. I look forward to hearing back from your office soon.

Thank you!

Best Regards,

[http://staff.uav.edu/emailsigs/UAV-Logo.jpg]
Luz Sandoval
Executive Assistant To The Vice-President
University of Antelope Valley<http://www.uav.edu/>
Office: (661) 726-1911 x114
Luz.Sandoval@uav.edu<mailto:Luz.Sandoval@uav.edu>
44055 North Sierra Highway
Lancaster, CA 93534

A Regionally Accredited Institution<http://www.uav.edu/>

Response to Submission 699 (Luz Sandoval, University of Antelope Valley, March 13, 2020)

699-253

The commenter requested a meeting to discuss the potential impacts the HSR would have on University of Antelope Valley. The project team met with the stakeholder in April 2020.

Submission 709 (Wyatt Philabaum, University of Arizona, April 5, 2020)

Bakersfield - Palmdale - RECORD #709 DETAIL

Status :	Action Pending
Record Date :	4/5/2020
Response Requested :	
Affiliation Type :	Individual
Submission Date :	4/5/2020
Interest As :	Individual
Submission Method :	Website
First Name :	Wyatt
Last Name :	Philabaum
Professional Title :	Student(s)
Business/Organization :	University of Arizona
Address :	
Apt./Suite No. :	
City :	Tucson
State :	AZ
Zip Code :	85719
Telephone :	
Email :	wphilabaum@email.arizona.edu
Cell Phone :	
Email Subscription :	
Add to Mailing List :	No
Stakeholder Comments/Issues :	

709-260 We are students studying environmental policy and law. We are specifically concerned with how the California High-Speed railway will affect the socioeconomic status and economic health of the designated area (Bakersfield to Palmdale). Alternative forms of transportation are not only better for the environment but they are better for community connectivity and one's health. We thank you for your efforts in providing different forms of transportation and goals of connecting metropolitan areas.

709-261

EIR/EIS Comment :	Yes
Attachments :	EISPublicCommentFinal.pdf (108 kb)

THE UNIVERSITY OF ARIZONA.
School of Natural Resources and the Environment
College of Agriculture and Life Sciences

1064 E. Lowell St, ENRII
P.O. Box 210137
Tucson, AZ 85719
Telephone: (520) 621-7255
Fax: (520) 621-8801
www.snre.arizona.edu

March 31, 2020

Daniel Velasco, Enya Keenan, Wyatt Philabaum, Francisco Montijo

EIS Number: 2020005

To whom it may concern,

709-262 We are students studying environmental policy and law. We are specifically concerned with how the California High-Speed railway will affect the socioeconomic status and economic health of the designated area (Bakersfield to Palmdale). Alternative forms of transportation are not only better for the environment but they are better for community connectivity and one's health. We thank you for your efforts in providing different forms of transportation and goals of connecting metropolitan areas. Below are our specific comments and concerns on the socio economic issues the railway can cause.

709-263

709-264 In terms of the overall synthesis of this EIS' Environmental Analysis, our team reviewed the Affected Environment, Environmental Consequences, and Mitigation Measures of the given EIS in accordance with the Code of Federal Regulations Title 40: Protection of the Environment, Chapter V. Council on Environmental Quality's mandate for NEPA. In our findings, we concluded Chapter 3 of the EIS, while following guidelines a-g of section 1502.16, the EIS in our opinion, fails to detail a plan for potential mitigation of the adverse socioeconomic impacts that will be experienced by agricultural businesses, school districts, and current occupants of several hundred residential units along the proposed alignment that will be permanently displaced as a result of the construction of the proposed action. While our team is not arguing that this EIS is avoiding mitigation measures all together, the lead agency subjecting the stakeholders of the aforementioned categories to these adverse measures in the pursuit providing a reliable means of transportation is something in of itself that demands compensation at the very least.

709-265 A specific issue we looked at was how the railway would cause permanent changes to school district funding. We support the railway because of its relief of traffic congestion and connection of different metropolitan areas however we believe alternative 2 should be chosen over the other three alternatives. Alternative 2 has the least amount of infrastructure needed to be built and displaces the least amount of people, businesses, and agricultural practices. If other alternatives were chosen, California High-Speed Rail Authority should provide compensation for displaced residents and business owners. Moreover, they should also provide compensation, through the form of donations, to the school districts that will inadvertently be affected by the displacement of residents. Another option would be providing discounts or specific train passes for students and school staff so they could use the train as a form of transportation.

709-266 Additionally, each alternative requires over 700 acres of land to be permanently converted from agricultural-use to non-agricultural use. Any current agricultural producers

Submission 709 (Wyatt Philabaum, University of Arizona, April 5, 2020) - Continued

709-266 displaced or adversely affected by the permanent conversion of the land should be properly notified, and compensated.

709-267 Furthermore, the other proposed alternatives worked in a similar fashion. While Bakersfield and Palmdale are quite smaller compared to other cities there would cause a significant impact to 300 businesses and over 200 residential units to be displaced causing damages to the people living there and the businesses that serve them. This would also cause damage to agricultural land between the 2 cities that would damage the local economy of both.

709-268 Another thing that would be affected are the local school districts that serve the people.

709-269 Displacement of over 200 residential, would result in relocation to other cities or parts of town, resulting in less students in certain school districts. This would cause less funding for these districts that primarily serve lower middle class families. While Section 3.12 Social Economics addresses and acknowledges certain aspects stating that it will even increase employment in the area it does not address what will happen after the HRS is finished building.

Environmental consequences - CFR Chapter V Guidelines for EIS publication

- ✓ Direct effects and their significance
- ✓ Indirect effects and their significance
- ✓ Cumulative
- ✓ Possible conflicts between the proposed action and the objectives of Federal, regional, state, and local land use plants, policies and controls for the area concerned
- ✓ Energy requirements and conservation potential of various alternatives and mitigation measures
- ✓ Natural or depletable resource requirements and conservation potential of various alternatives and mitigation measures
- ✓ Urban Quality, historic and cultural resources
- ✘ Means to mitigate adverse environmental impacts
- ✓ Labeled? Separated or together?

Thank you for taking time out to hear our concerns, we hope they help with the process.

Works Cited:

40 CFR Chapter V: Council on Environmental Quality in "Electronic Code of Federal Regulation (eCFR)". Federal Register. https://www.law.cornell.edu/cfr/text/40/chapter-V Accessed, March 31st, 2020.

Response to Submission 709 (Wyatt Philabaum, University of Arizona, April 5, 2020)

709-260

The commenters note that they are interested in the socioeconomic status and economic health of the communities along the proposed HSR alignment between Bakersfield and Palmdale. The Authority shares the same concerns as the commenters regarding the socioeconomic status and economic health of the communities along the proposed HSR alignment. Section 3.12, Socioeconomics and Communities, and Chapter 5, Environmental Justice, of this Final EIR/EIS describe the socioeconomic and environmental justice impacts affecting the communities within the resource study areas for those environmental topics.

709-261

The commenter expresses appreciation for the efforts to provide alternative modes of transportation to connect metropolitan areas, and acknowledges benefits resulting from the HSR project. The commenter's support of the HSR project is acknowledged.

709-262

The commenters note that they are interested in the socioeconomic status and economic health of the communities along the proposed HSR alignment between Bakersfield and Palmdale. The Authority shares the same concerns as the commenters regarding the socioeconomic status and economic health of the communities along the proposed HSR alignment. Section 3.12, Socioeconomics and Communities, and Chapter 5, Environmental Justice, of this Final EIR/EIS describe the socioeconomic and environmental justice impacts affecting the resource study area.

709-263

The commenters express appreciation for the project efforts to provide alternative modes of transportation to connect metropolitan areas and acknowledges benefits resulting from the HSR project. The commenters' support of the HSR project is acknowledged.

709-264

The commenters state that the Draft EIR/EIS does not provide mitigation for displacement impacts on agricultural businesses, school districts, and current residential occupants along the proposed alignment.

The project incorporates standardized HSR features to avoid and minimize impacts. These features are referred to as IAMFs. These features are considered part of the project and are included in the baseline for the environmental impact analysis. If significant impacts are determined to occur even with the implementation of IAMFs, feasible mitigation measures are identified and implemented as required under CEQA. The Authority, in coordination with the property owners, will implement IAMFs during project design, construction, and operations. As such, the analysis of impacts on agricultural businesses, school districts, and current residential occupants along the proposed alignment from the project takes into account the implementation of all applicable IAMFs. Appendix 2-E, Impact Avoidance and Minimization Features, provides a detailed description of the IAMFs that are included as part of the project design.

SOCIO-IAMF#2 and SOCIO-IAMF#3 detail the project's compliance with Uniform Relocation Assistance and Real Property Acquisition Policies Act (42 United States Code [U.S.C.] 4601 et seq.) (Uniform Act) and outline the development of a relocation mitigation plan in consultation with affected cities, counties, and property owners.

The Uniform Act requires provision of relocation benefits to all eligible persons regardless of race, color, religion, sex, or national origin. Benefits to which eligible owners or tenants may be entitled are determined on an individual basis and explained in detail by an assigned right-of-way specialist. The California Relocation Assistance Act essentially mirrors the Uniform Act and also provides for consistent and fair treatment of property owners. However, because the project would receive federal funding, the Uniform Act takes precedence. Owners of private property have federal and state constitutional guarantees that their property would not be acquired or damaged for public use unless owners first receive just compensation. Just compensation is measured by the "fair market value," where the property value is considered to be the highest price that would be negotiated on the date of valuation. The value must be agreed upon by a seller who is willing to sell, but under no particular or urgent obligation or necessity, and by a buyer who is ready, willing, and able to buy but under no

Response to Submission 709 (Wyatt Philabaum, University of Arizona, April 5, 2020) - Continued

709-264

particular necessity. Both the owner and buyer must deal with the other with the full knowledge of all the uses and purposes for which the property is reasonably adaptable and available (Code of Civil Procedure Section 1263.320a).

The relocation mitigation plan would be designed to meet the following objectives:
Provide affected property and business owners and tenants with a high level of individualized assistance in situations when acquisition is necessary and the property owner desires to relocate the existing land use.
Coordinate relocation activities with other agencies acquiring property resulting in displacements in the study area to provide for all displaced persons and businesses to receive fair and consistent relocation benefits.
Make a best effort to minimize the permanent closure of businesses and nonprofit agencies as a result of property acquisition.
Within the limits established by law and regulation, minimize the economic disruption caused to property owners by relocation.
In individual situations, where warranted, consider the cost of obtaining the entitlement permits necessary to relocate to a suitable location and take those costs into account when establishing the fair market value of the property.
Provide those business owners who require complex permitting with regulatory compliance assistance.
The relocation mitigation plan would include the following components:
A description of the appraisal, acquisition, and relocation process, as well as a description of the activities of the appraisal and relocation specialists.
A means of assigning appraisal and relocation staff to affected property owners, tenants, or other residents on an individual basis.
Individualized assistance to affected property owners, tenants, or other residents in applying for funding, including research to summarize loans, grants, and federal aid available, and research areas for relocation.
Creation of an ombudsman's position to act as a single point of contact for property owners, residents, and tenants with questions about the relocation process. The ombudsman would also act to address concerns about the relocation process as it applies to the individual situations of property owners, tenants, and other residents.

As described in Section 3.12, Socioeconomics and Communities, of this Final EIR/EIS,

709-264

the implementation of SOCIO-IAMF#2 and SOCIO-IAMF#3, as described above, would minimize the potential for construction to relocate agricultural businesses outside their existing communities. Additionally, the HSR project is required to comply with the Farmland Protection Policy Act and other agricultural statutory and regulatory requirements. The IAMFs also minimize the potential for construction to relocate residents outside their existing communities, thereby minimizing losses to school district funding. Although as described in Section 3.12, the construction of the Palmdale Station site would displace R. Rex Parris High School, the Final EIR/EIS requires the implementation of Mitigation Measure SO-MM#3, which requires that the Authority consult with appropriate parties prior to land acquisition to assess potential opportunities to reconfigure buildings and/or relocate affected facilities, as necessary, to minimize any disruptions to activities and services at those facilities. Pursuant to SO-MM#3, to avoid disruption to these community amenities, the Authority will provide for reconfiguring land uses or buildings, or relocating community facilities before demolishing existing structures. Therefore, the replacement school would be constructed before the demolition of Rex Parris High School to accommodate the students. Although compliance with Mitigation Measure SO-MM#3 would reduce the Palmdale Station site's potential impacts related to community facility displacements, the potential impacts of the displacement during construction would remain significant and unavoidable. The relocation of the school could result in physical impacts associated with the provision of new or physically altered facilities, the construction of which could cause significant environmental impacts. Additionally, the relocation of Rex Parris High School would result in a noticeable localized social change, though it would not result in a long-term social change in Palmdale, because the school would continue to operate elsewhere in the community.

In conclusion, the Final EIR/EIS would not result in significant impacts related to agricultural business displacements and residents along the proposed alignment with the incorporation of IAMFs, and Mitigation Measure SO-MM#3 would be implemented to reduce impacts on Rex Parris High School, although the impact would remain significant and unavoidable. Therefore, the Final EIR/EIS provides mitigation measures as required under CEQA to address these impacts.

Response to Submission 709 (Wyatt Philabaum, University of Arizona, April 5, 2020) - Continued

709-265

The commenters express support for Alternative 2 because it would require the least amount of infrastructure to be built and would displace the least amount of people, businesses, and agricultural practices. Alternative 2 with the Refined CCNM Design Option is the Authority's Preferred Alternative for the Bakersfield to Palmdale Project Section.

The commenters also state that if another alternative is selected, the Authority should provide compensation for the displaced residents and the school districts affected by the displacement of residents. It should be noted that, regardless of which alternative is chosen, displaced residents would be compensated. See BP-Response-GENERAL-04: General Information on the Relocation Process for Residential and Business Displacements for information on property acquisitions, displacements, and relocations.

Additionally, as described in Section 3.12, Socioeconomics and Communities, Impact SO#10, the project would not result in substantial changes in school district funding. Implementation of SOCIO-IAMF#2 (Compliance with Uniform Relocation Assistance and Real Property Acquisition Policies Act) and SOCIO-IAMF#3 (Relocation Mitigation Plan) would minimize the potential for construction to relocate residents outside their existing school districts, thereby minimizing losses to school district funding.

709-266

The commenters state that agricultural producers displaced or adversely affected by the permanent conversion of farmland should be properly notified and compensated. The provisions of SOCIO-IAMF#2 and SOCIO-IAMF#3 apply for agricultural producers, detail the project's compliance with the Uniform Relocation Assistance and Real Property Acquisitions Policies Act and outline the development of a relocation mitigation plan in consultation with affected cities, counties, and property owners. Refer to Response to Comment 709-264, contained in this chapter.

Additionally, AG-IAMF#3 would assist in selling and consolidating any remnant parcels created by the implementation of the proposed alignment.

The Authority would establish and administer a farmland consolidation program to sell remnant parcels to neighboring landowners for consolidation with adjacent farmland properties. In addition, the program would assist the owners of remnant parcels in selling those remnants to adjacent landowners, upon request. The goal of the program is to provide for continued agricultural use on the maximum feasible amount of remnant parcels that otherwise may not be economical to farm. The program would focus on severed remainder parcels, including those that were under Williamson Act or Farmland Security Act contract at the time of right-of-way acquisition and have become too small to remain in the local Williamson Act or Farmland Security Act program. The program would assist landowners in obtaining lot line adjustments where appropriate to incorporate remnant parcels into a larger parcel that is consistent with size requirements under the local government regulations. The program will operate for a minimum of 5 years after construction of the Bakersfield to Palmdale Project Section is completed. The Authority shall document implementation of this measure through issuance of a compliance memorandum—after the minimum operation period of 5 years has elapsed. The document shall be filed with Environmental Mitigation Management and Assessment system.

Response to Submission 709 (Wyatt Philabaum, University of Arizona, April 5, 2020) - Continued

709-267

The commenter states that there would be a significant impact on the 300 businesses and over 200 residential units that could be displaced, causing damages to the residents and businesses.

The impacts resulting from residential and business displacements are discussed in detail in Section 3.12, Socioeconomics and Communities, of this Final EIR/EIS. As described under Impact SO#4, there are sufficient residential replacement properties in the replacement area to accommodate displaced residents. The project would result in less than significant impacts related to the displacement of substantial numbers of existing housing units and residents.

As described under Impact SO#5, although there is inadequate business space in some areas for displaced industrial businesses, an analysis of vacant parcels properly zoned for commercial and industrial use has indicated that the vacant land parcels could be improved at some future date to accommodate those displaced businesses that are unable to relocate within existing commercial or industrial business space. Additionally, the implementation of SOCIO-IAMF#2 (Compliance with Uniform Relocation Assistance and Real Property Acquisition Policies Act) and SOCIO-IAMF#3 (Relocation Mitigation Plan) would minimize the potential for construction to relocate businesses outside their existing communities.

709-268

The commenters state that there would be impacts on agricultural lands between Bakersfield and Palmdale, and that these impacts would, in turn, have impacts on the economy of Bakersfield and Palmdale. These impacts are discussed in this Final EIR/EIS in Section 3.12 under Impact SO #6: Permanent Effects on Agricultural Businesses from Construction, Impact SO #11: Temporary Agricultural Access Impacts and Road Closures During Construction, Impact SO #12: Permanent Economic Effects on Agriculture from Construction, and Impact SO #21: Permanent Agricultural Access Impacts and Road Closures from Operation.

709-269

The commenter states that the project's residential relocations would reduce funding for school districts that primarily serve lower-middle-class families. This comment also states that while Section 3.12 addresses and acknowledges certain aspects stating it will increase employment in the area, it does not address what will happen after construction of the HSR project is finished.

The discussion under Impact SO#10, Permanent Changes in School District Funding from Construction, provides a detailed analysis of impacts on school district funding. Permanent impacts refer to long-term impacts after the project is built. As described, the project would not result in substantial changes in school district funding. Implementation of SOCIO-IAMF#2 (Compliance with Uniform Relocation Assistance and Real Property Acquisition Policies Act) and SOCIO-IAMF#3 (Relocation Mitigation Plan) would minimize the potential for residents to relocate outside their existing school districts due to construction to relocate residents outside their existing school districts, thereby minimizing losses to school district funding.

Additionally, as described in the Draft Relocation Impact Report (Authority 2018) an examination of suitable replacement housing alternatives finds that a sufficient number of comparable replacement residences are available in all areas with displacements under all B-P Build Alternatives. This analysis also confirms the available housing would meet the needs of households desiring to find relocation housing with their same school district.

Additionally, the discussion under Impact SO#20, Permanent Changes in School District Funding from Operation, Compliance with Section 185040 of the California Public Utilities Code would minimize the potential for construction of the B-P Build Alternatives to result in permanent changes in school district funding by selling land not needed for the right-of-way and thereby returning some land to the property tax rolls and making that land available for development.