

Comment Letter L029 (Grassland Water District, October 26, 2007)

L 029
Part 1

**Comments of
Grassland Water District
Grassland Resource Conservation District
and
The Grassland Conservation, Education and Legal
Defense Fund**

on the

Draft Bay Area to Central Valley
High-Speed Train
Program Environmental Impact Report/
Environmental Impact Statement

SCH Number: 2005112051

VOLUME 1

October 26, 2007

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U.S. Department
of Transportation
**Federal Railroad
Administration**

Comment Letter L029 – continued (Letter 1: Thomas Enslow, Adams Broadwell Joseph & Cardozo, October 25, 2007)

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October 25, 2007

Dan Leavitt
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Re: Comments of Grassland Water District, Grassland Resource Conservation District, and The Grassland Conservation, Education and Legal Defense Fund on the Draft Bay Area to Central Valley High-Speed Train Program EIR/ EIS, SCH # 2005112051

Dear Mr. Leavitt:

On behalf of the Grassland Water District ("GWD"), the Grassland Resource Conservation District ("GRCD") and the Grassland Conservation, Education and Legal Defense Fund ("GCELDLF"), this letter provides comments on the Draft Bay Area to Central Valley High-Speed Train Program Environmental Impact Report/ Environmental Impact Statement ("DEIR/S"), State Clearinghouse number 2005112051.

The EIR/S is a second-phase Program EIR/S being prepared for the California High Speed Train System ("HST") pursuant to the California Environmental Quality Act² ("CEQA") and the National Environmental Policy Act³ ("NEPA). A first-phase Program EIR/S on the statewide HST has already been completed ("Statewide HST Program EIR/S"). The purpose of the DEIR/S is to select the HST

¹ The GCELDLF is also known as the Grassland Conservation and Education Fund ("GCEF"). The GCEF is currently in the process of formalizing the change of its name to the GCELDLF.

² Pub. Resources Code §§ 21000 *et seq.*

³ 42 U.S.C. § 4321 *et seq.*
1124-650a

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alignment from the Central Valley to the Bay Area ("the Project" or "the Northern Crossing alignment").

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The High Speed Rail Authority ("Authority") is the lead agency for this Project for purposes of CEQA, while the Federal Railroad Administration ("FRA") will serve as the federal lead agency for environmental review under NEPA.

The primary controversy regarding the Northern Crossing alignment is the dispute over whether the HST should cross from the Central Valley to the Bay Area over the Altamont Pass corridor or over the Pacheco Pass corridor. The DEIR/S evaluates several alignment options within each corridor. The Altamont Pass alignment options run generally along Interstate 580. The Pacheco Pass alignment options run generally along State Routes 140 and 152 ("Highway 140 alignment" or "GEA North Alignment") or Henry Miller Road and 152 ("Henry Miller Road alignment").

L029-2

The GWD and GRCD (collectively, "the Districts") are concerned about the Project because the proposed Pacheco Pass alignments would pass through or otherwise impact the Districts' jurisdictional boundaries. The combined area of the GWD and GRCD contains approximately 60,000 acres of privately owned wetlands located north, east and south of the City of Los Banos in Merced County. The Districts are charged under state law and federal contract with the responsibility to manage water resources and carry out conservation programs in order to preserve and protect this resource, primarily as habitat for waterfowl and other wildlife species. Land stewardship in the Districts mostly comprises privately owned and managed waterfowl hunting clubs that receive their water supply from GWD.

L029-3

The Districts together with the adjacent federal wildlife refuges, state wildlife areas and state park lands make up the Grasslands Ecological Area ("Grasslands" or "GEA"). Attached as Appendices 1 through 3 to volume 2 of this Comment are three maps that show the boundary of the GEA and the federal and state lands and easements within the GEA. Encompassing approximately 180,000 acres, the GEA is the largest wetland complex in California and contains the largest block of contiguous wetlands remaining in the Central Valley.⁴ This region is

⁴ Appendix 8, Grassland Water District, Land Use and Economics Study: Grasslands Ecological Area (July 2001), p. 2 (hereafter "Grassland Land Use and Economics Study").
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considered a critical component of the Central Valley wintering habitat for waterfowl and has been recognized as a resource of international significance.

L029-3
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The GCELDf is concerned about the Project because of its potential impacts on the GEA. The GCELDf is a non-profit organization dedicated to the protection of the GEA through education, conservation and advocacy efforts. The GCELDf runs the Grassland Environmental Education Center and is a member of the Grasslands Stewardship Plan project team. The GCELDf is a past recipient of the PG&E Community Service Award and the Association of California Water Agencies Theodore Roosevelt Environmental Award. The GCELDf's Grassland Environmental Education Center is located at the Los Banos Wildlife Area's Interpretative Marsh at 18110 W. Henry Miller Road, Los Banos, California. The proposed Henry Miller Road alignment would run directly through this location.

L029-4

The GWD, GRCD and GCELDf strongly oppose the proposed Pacheco Pass alignment options over Henry Miller Road and Highway 140 due to their potential to result in devastating impacts on the GEA. The Highway 140 alignment is referred to in the DEIR/S as the GEA north alignment because it bisects the northern corner of the GEA. The Henry Miller Road alignment bisects a critical and endangered corridor separating the north GEA from the south GEA. Both of these alignments pose a serious threat to the GEA and could result in substantial injury to this internationally important resource.

Bisection of the GEA by a high speed rail may interfere with critical wildlife corridors, disrupt canals and waterways, degrade water quality, interfere with waterfowl nesting and breeding, induce inconsistent growth in and adjacent to the GEA, and increase wildlife mortality rates due to noise, shock and collision impacts. Contrary to the assumptions made in the DEIR/S, construction of a few wildlife underpasses alone would be insufficient to address this impact.

L029-5

The Henry Miller Road alignment is particularly troublesome because the area along Henry Miller Road is already dangerously fragmented. According to experts, this proposed alignment could provide the "final blow" in fragmenting the vulnerable linkage between the north and south units of the Grassland Management Area.⁵ This would "have a profound effect on the movement of waterfowl between different parts of the refuges they now utilize on a daily basis."⁶

⁵ Appendix 9, Thomas Reid Associates, *Grassland Water District Land Planning Guidance Study* 1124-590a

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We urge the Authority to reject any HST alignment that would cross or otherwise fragment the GEA. At a minimum, the Authority must ensure that no decision on the alignment shall be made until the potential impacts on the GEA are fully and thoroughly examined.

L029-5
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As these comments will demonstrate, the DEIR/S is a fatally flawed document. It fails in almost all aspects to perform its function as an informational document that is meant "to provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project."⁷ The DEIR/S must be revised and re-circulated before it can be relied upon to support agency decisions such as selection of a Pacheco Pass alignment.

L029-6

We have prepared these comments with the assistance of GWD staff biologist Rich Wright (biological resources, land use and other impacts). In addition, we have attached reports by planning expert Terry Watt and biologist Dr. Karen Weissman which also evaluate the potential impacts associated with locating a HST system through or adjacent to the GEA. The comments of these experts are attached hereto as Exhibit A (*Wright Comments*), Appendix 17 (*Watt Comments*) and Appendix 4 (*Dr. Weissman Comments*). Please note that these experts' comments supplement the issues addressed below and should be addressed and responded to separately.

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I. IMPORTANCE OF GRASSLAND ECOLOGICAL AREA

The GEA is an irreplaceable, internationally significant ecological resource. The GEA is located west of the City of Merced and surrounds the City of Los Banos to the north, east and south. Originally, this area was part of a four million acre wetland system in the Central Valley of California. Of the 300,000 acres that remain, the GEA is the largest contiguous block of wetlands in the Central Valley. The protection of this area has been the result of private and public investments and partnerships.

L029-8

(1995), Appendix A (Noss, R.F., *Translating Conservation Principles to Landscape Design for the Grassland Water District* (1994), p. 47; see also Exhibit A, Rich Wright Comments.

⁶ Appendix 8, *Grassland Land Use and Economics Study*.

⁷ *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 391. 1124-550a



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The GEA boundary is a non-jurisdictional boundary designated by the U.S. Fish and Wildlife Service in order to identify an area for priority purchase of public easements for wetland preservation and enhancement.⁸ The GEA includes federal wildlife refuges, a state park, state wildlife management areas and the largest block of privately managed wetlands in the state. The GEA also includes a large and growing portfolio of federal and state conservation easements. Through 1998, conservation easements had been acquired on over 64,000 acres at a total cost of over \$28 million.⁹ Acquisitions since 1998 have increased the number of acres protected by conservation easements to over 70,000 acres. Significant areas of the GEA, however, remain unprotected from future development.

The U.S. Fish and Wildlife Service recently proposed significantly expanding the GEA boundary to the east by an additional 45,000 acres. The area of the proposed expansion is indicated on the brochure attached as Appendix 16.

The GEA is of considerable importance because it preserves a variety of habitats important to the maintenance of biodiversity on a local, regional, national and international scale. It has been estimated that thirty percent (30%) of the Central Valley migratory population of waterfowl use this area for winter foraging.¹⁰ The GEA is a major wintering ground for migratory waterfowl and shorebirds of the Pacific Flyway. Over a million waterfowl are regularly found in the GEA during the winter months.¹¹ The GEA also provides habitat for more than 550 species of plants and animals, including 47 plant and animal species that are endangered, threatened or candidate species under state or federal law, including San Joaquin kit fox, Aleutian Canada [cackling] geese, sandhill cranes, California tiger salamander, vernal pool fairy shrimp, tadpole shrimp, California red-legged frog, the giant garter snake, Swainson's hawks and tri-colored blackbirds.¹²

The Western Hemisphere Shorebird Reserve Network has designated the GEA as one of only 15 international shorebird reserves in the world.¹³ The GEA

⁸ *Grassland Land Use and Economics Study* at p. 2.
⁹ *Id.* at pp. 11-12.
¹⁰ U.S. Bureau of Reclamation, *Final NEPA EA, Refuge Water Supply Long-Term Water Supply Agreements* (January 2002).
¹¹ Appendix 8, *Grassland Land Use and Economics Study* at p. 2.
¹² *Id.*
¹³ Appendix 11, Fredrickson, Leigh H. and Laubhan, Murray K, *Land Use Impacts and Habitat* 1124-550a

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was also recently recognized in February 2005 as a Wetland of Worldwide Importance by the Ramsar Convention.¹⁴ The Ramsar Convention is an international agreement dedicated to the worldwide protection of particular ecosystems. Ramsar member nations work to coordinate wetland conservation efforts, particularly for species that rely on ecosystems that span member nation's borders. The designation of the GEA as a Wetland of Worldwide Importance illustrates the tremendous worldwide ecological value of the GEA ecosystem. The GEA is one of only four such wetland sites in California, and one of twenty-two sites in the country. The GEA has also been recognized by the American Bird Conservancy as a Globally Important Bird Area.¹⁵

In addition to providing critical biological habitat, the Grasslands' wetlands also provide a wide range of other benefits to the area, including flood control and educational and recreational opportunities. This concentration of wetlands and wildlife is a unique feature of the area, attracting hunters and other recreational visitors who make significant contributions to the economy of the area. The GEA receives over 300,000 user visits per year for hunting, fishing and non-consumptive wildlife recreation.¹⁶ Recreational and other activities related to habitat values within the GEA contribute \$41 million per year to the Merced County economy, and account for approximately 800 jobs.¹⁷

A thorough study of the potential impacts that the Project may have on the GEA is vital to ensure it does not damage this irreplaceable ecological resource of international importance.

II. CEQA REQUIRES AGENCIES AND THE GENERAL PUBLIC TO BE INFORMED ABOUT THE ENVIRONMENTAL CONSEQUENCES OF AGENCY DECISIONS BEFORE THEY ARE MADE

CEQA has two basic purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a

Preservation in the Grasslands of Western Merced County, CA (February 1995), p. 3.
¹⁴ See <http://international.fws.gov/ramsar/ramsar.htm>.
¹⁵ See <http://www.abcbirds.org/iba/california.htm>.
¹⁶ Appendix 8, *Grassland Land Use and Economics Study* at p. 14
¹⁷ *Id.* at p. 21.
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project.¹⁸ “Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions *before* they are made. Thus, the EIR ‘protects not only the environment but also informed self-government.’”¹⁹

Second, CEQA directs public agencies to avoid or reduce environmental damage when possible by requiring alternatives or mitigation measures.²⁰ If the project has a significant effect on the environment, the agency may approve the project only upon finding that it has “eliminated or substantially lessened all significant effects on the environment where feasible” and that any unavoidable significant effects on the environment are “acceptable due to overriding concerns” specified in CEQA section 21081.²¹

In the case at hand, the DEIR/S fails to satisfy either of these basic purposes. The DEIR/S, as presently constituted, is legally deficient because: (1) it employs an inaccurate and incomplete description of the project setting which, among other defects, fails to disclose that the Henry Miller Road alignment would bisect a critical corridor of the GEA; (2) it contains an incomplete project description that omits critical details of the project, including, but not limited to, significant construction, engineering and operational aspects of the project, frequency of train pass-bys, location and size of appurtenant operational and maintenance facilities, and the location of a Merced County station if the Henry Miller Road alignment is chosen; (3) it fails to disclose the crossing of the GEA as an area of controversy; (4) it fails to support its findings regarding significance of environmental impacts, feasibility of mitigation and feasibility of alternatives with substantial evidence; (5) it fails to adequately consider and/or identify numerous potential significant impacts to the important habitat and wildlife within the GEA, including, but not limited to, fragmentation impacts, noise and vibration impacts, collision impacts, water quality and water flow impacts, construction and maintenance impacts, and growth-inducing impacts; (6) it improperly defers the identification of mitigation measures or standards and/or improperly relies upon uncertain, vague and unenforceable mitigation “strategies;” (7) it fails to provide an intelligible

¹⁸ 14 Cal. Code Regs. (“CEQA Guidelines”) § 15002, subd. (a)(1).
¹⁹ *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564.
²⁰ CEQA Guidelines § 15002, subd. (a)(2)-(3); see also, *Berkeley Keep Jets Over the Bay Committee v. Board of Port Commissioners* (2001) 91 Cal.App.4th 1344, 1354; *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564; *Laurel Heights Improvement Assn. v. Regents of the University of California* (1988) 47 Cal.3d 376, 400.
²¹ CEQA Guidelines § 15092, subd. (b)(2)(A)-(B).
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comparison of the environmental impacts of the Pacheco Pass alignments with the Altamont Pass alignments; (8) it impermissibly defers identification of the environmentally preferred alternative; and (9) for numerous other reasons as described throughout this document and its supporting exhibits and appendices.

The Authority must correct these shortcomings and recirculate a revised DEIR/S for public review and comment before it may choose a preferred HST alignment that may impact the GEA.

III. THE DEIR/S FAILS TO ADEQUATELY DESCRIBE THE PROJECT SETTING

The DEIR/S employs an inaccurate and incomplete description of the project setting, thereby rendering the impact analysis legally deficient. An accurate description of the environmental setting is critical because it establishes the baseline physical conditions against which a lead agency can determine whether an impact is significant.²² Under CEQA and NEPA, an EIR must include a description of the physical environmental conditions in the vicinity of the project from both a local and regional perspective.²³

The DEIR/S must provide an accurate description of the environmental baseline, because “[t]he impacts of the project must be measured against the ‘real conditions on the ground.’”²⁴ While the absence of information in the DEIR/S does not per se constitute a prejudicial abuse of discretion, “a prejudicial abuse of discretion occurs if the failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process.”²⁵

Here, the DEIR/S fails to describe the sensitive and critical North/South Corridor of the GEA that the proposed Henry Miller Road alignment would bisect. The DEIR/S also fails to identify the areas of the GEA that currently lack formal protection and, thus, are particularly vulnerable to growth impacts and to purchase

²² CEQA Guidelines § 15125, subd. (a).
²³ *Id.*; 40 C.F.R. § 1502.15.
²⁴ *Save Our Peninsula Committee v. Monterey Board of Supervisors* (2001) 87 Cal.App.4th 99, 121.
²⁵ *Berkeley Keep Jets Over the Bay Committee v. Board of Port Commissioners* (2001) 91 Cal.App.4th 1344, 1355.
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by land speculators. The DEIR/S description of the biological resources in the GEA that may be impacted by the HST is also incomplete. The DEIR/S fails to conduct biological surveys along the proposed alignments and instead relies upon databases that are recognized as incomplete. As a result, the DEIR/S fails to identify the potential existence of important biological resources located in the GEA that may be affected by the Project such as the California tiger salamander. The DEIR/S also incorrectly suggests that the Henry Miller Road Alignment would run adjacent to the GEA, when, in fact, the Henry Miller Road Alignment is *within* the GEA.²⁶ These failures are fatal to the DEIR/S as they preclude any semblance of informed decision-making and informed public participation.

The inadequate consideration and documentation in the DEIR/S of existing environmental conditions renders it impossible for the agencies and general public to assess the impact of the proposed Pacheco Pass alignments, to determine appropriate mitigation measures for those impacts and to determine an environmentally preferred alternative. The description of the environmental setting in the DEIR/S thus is not only, in and of itself, inadequate as a matter of law, but it also taints the impact analysis, alternatives analysis and mitigation findings, rendering them legally inadequate as well.²⁷

IV. THE DEIR/S FAILS TO ADEQUATELY DESCRIBE THE PROJECT

An accurate and stable project description is the *sine qua non* of an informative, legally adequate EIR.²⁸ A legally sufficient project description must contain a “general description of the project’s technical, economic, and environmental characteristics, considering the principal engineering proposals if any and supporting public service facilities.”²⁹ While an EIR need not contain a design-level description of the project, it must contain sufficient specific information about the project to allow an evaluation and review of its environmental impacts.³⁰ Without an accurate description on which to base an EIR’s analysis, CEQA’s objective of furthering public disclosure and informed environmental

²⁶ See DEIR/S at p. 3.16-11.
²⁷ *San Joaquin Raptor/Wildlife Rescue Ctr. v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 729.
²⁸ *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 192.
²⁹ CEQA Guidelines § 15124, subd. (c).
³⁰ *Cry Creek Citizens Coalition v. County of Tulare* (1999) 70 Cal.App.4th 20, 1124-550a

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decisionmaking would be impossible, and consideration of mitigation measures and alternatives would be rendered useless.³¹

In the case at hand, the DEIR/S provides an incomplete project description in its summary section and “Project Description” section. Instead, critical details of the project, including, but not limited to, significant construction activities, engineering and operations aspects of the project, are buried in the DEIR/S appendices or in referenced studies. As a result of the DEIR/S’ failure to discuss or to identify key project components, potentially significant environmental impacts are not adequately described, analyzed or addressed.

For example, the DEIR/S fails to clearly state how often trains will pass by on these tracks. An appendix to the Statewide HST Program EIR/S states that at least 134 total daily trains will pass through Los Banos; an average of more than one train every 11 minutes.³² However, trains would be expected to pass through more frequently during peak hours and less frequently during off-peak hours. This is critical Project information for establishing potential visual, noise, vibration, and wildlife collision impacts and for providing the public with the real picture of what will be going through their parks, wildlife refuges, hunting clubs and neighborhoods. Yet, it is utterly absent in the body of the DEIR/S itself.

The summary section and “Project Description” section of the DEIR/S also fail to clearly describe the existence, location and size of appurtenant operational and maintenance facilities. These facilities are a major component of the project and will, themselves, result in numerous significant impacts. Based on the estimated power needs of the HST system, 20,000 square foot power supply stations will be necessary every 30 miles. 7,5000 square foot switching stations would be required at approximately 15 mile intervals. 5,000 square foot paralleling (booster) stations would be required at approximately 7.5-mile intervals. Fleet storage/service facilities and inspection/light maintenance facilities would also be required. The location and construction of these appurtenant facilities must be disclosed in the project summary and/or description sections of the DEIR/S.

³¹ *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 192-193, 197-198, 203.
³² See DEIR/S, High Speed Train Operations Report, Appendix E (online at http://www.cahighspeedrail.ca.gov/eir/pdf/rgn_studies/state/Operations/Op_App_E.pdf).
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The DEIR/S not only fails to adequately disclose the existence and location of these appurtenant facilities in the project summary and description sections, it also fails to adequately evaluate the impacts of these facilities in its evaluation of Project impacts. The evaluation of wetland impacts, agriculture impacts, biological impacts and other impacts do not appear to take these facilities into account.

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The DEIR/S also fails to fully describe key project features such as noise barriers, which are identified as mitigation measures in the DEIR/S. Such barriers could have devastating impacts on wildlife and further fragment habitat areas.³³

L029-16

Another key project feature that the DEIR/S fails to adequately describe is the major crossing it must build over the San Joaquin River. Under the proposed Pacheco Pass alignment, this crossing would occur just a few miles from the sensitive habitat of the GEA. Yet, the DEIR/S fails to identify this project component or to describe how this undertaking would be accomplished.

L029-17

The DEIR/S also fails to describe where a Merced area station would be located if the Henry Miller Road alignment is selected. The DEIR/S ridership analysis assumes that a Pacheco Pass alignment will include riders traveling to and from the Merced area. However, the Henry Miller Road alignment would skip Merced during the initial Los Angeles to San Jose phase of the project. The DEIR fails to address where a Merced area central valley station would be located.

L029-18

The Statewide HST Program EIR/S initially proposed placing a station in Los Banos. Due to widespread concern over the impacts from locating a station in the heart of the GEA, the HSRA announced that it would withdraw the Los Banos station from consideration. The DEIR/S must be revised to explain where a Merced area central valley station would be located if the Henry Miller Road alignment was selected.

If these and all other key project features are not thoroughly described, related impacts cannot be evaluated and mitigated, and the relative impacts of alternatives cannot be meaningfully assessed. These and other omissions in the description of the Project must be corrected in a revised DEIR/S.

L029-19

³³ Appendix 9, Thomas Reid Associates, *Grassland Water District Land Planning Guidance Study* (1995), Appendix A (Noss, R.F., *Translating Conservation Principles to Landscape Design for the Grassland Water District* (1994)), p. 44-47.
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V. THE EVALUATION OF THE HENRY MILLER ROAD ALIGNMENT'S IMPACT ON THE GEA LACKS FOUNDATION AND IS ARBITRARY AND CAPRICIOUS

L029-20

The DEIR/S is legally inadequate because it concludes without any foundation and contrary to all available evidence that the Henry Miller Road alignment would not have any impact on the GEA.³⁴ This conclusion is particularly troublesome because the potential for the Henry Miller Road alignment to negatively impact the GEA had been explained to HSRA authority staff numerous times in prior written and oral comments and personal meetings. The fact that the DEIR/S recognizes the Highway 140 alignment as potentially impacting the GEA, but not the Henry Miller Road alignment, unfortunately suggests that the DEIR/S is a results-orientated document intended to support selection of the Henry Miller Road alignment rather than to fairly and neutrally evaluate Project alternatives.

A couple of factors underscore this impression of impropriety. First, the Henry Miller Road alignment is the only alignment evaluated in the DEIR/S that was also proposed in the original Statewide HST Program EIR/S. This suggests a strong preference for this alignment has been built into the process. Second, when the NOP was first released, HSRA staff informed counsel for the GWD, GRCD and GCELDLF that the DEIR/S would evaluate a Pacheco Pass alternative that avoided the GEA altogether. No such alternative is included in the DEIR/S.

The DEIR/S is correct to identify the proposed alignment along Highway 140 as potentially significantly impacting the GEA since it will create new fragmentation impacts. The Henry Miller Road alignment, however, poses an even greater danger to the GEA because it would further separate an already fragmented, critical southern spur of the GEA from the rest of the contiguous wetlands.

Contrary to the assumptions made in the DEIR/EIS, construction of a few wildlife underpasses alone would likely be insufficient to address this impact, especially along Henry Miller Road. Fragmentation does not require complete separation. Rather, it is a relative and cumulative problem. After some threshold

³⁴ DEIR/S at p. 3.15-46 ("The Henry Miller alignment alternatives would not impact the GEA").
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of fragmentation is exceeded, movement of individuals will no longer occur regularly enough to maintain the population of a fragmentation-sensitive species.

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The area along Henry Miller Road is already dangerously fragmented. A study by noted conservation biologist Reed Noss concluded that “[a]ny further fragmentation of the vulnerable linkage between the north and south units of the Grassland Management Area could well provide the ‘final blow’ in fragmenting the wetland ecosystem” and “could have a profound effect on the movement of waterfowl between different parts of the refuges they now utilize on a daily basis.” Rich Wright, staff biologist for the GWD and GRCD, states that the proposed alignment along Henry Miller Road could very well be this final blow.

Unfortunately, the DEIR fails to disclose or evaluate the risks of the Henry Miller Alignment to the GEA or to assess cumulative fragmentation impacts whatsoever. Moreover, the DEIR astoundingly concludes that the Henry Miller Road alignment would not have any impact on the GEA.³⁵

As stated above, this conclusion lacks any foundation and is arbitrary and capricious. No rationale or explanation is provided to support this conclusion. Conclusions in an EIR must be supported by facts and analysis.³⁶

This conclusion also directly contradicts the undisputed evidence and the expert comments of numerous federal, state and local agencies that had been provided to the authority both during the prior Statewide HST Program EIR/S proceedings and during the NOP comment period for this proceeding.

On August 21, 2008, we submitted a public record request for all documents relied upon in reaching this conclusion. While a large list of general statewide databases and studies were provided in response, none of the documents identified evaluated or discussed the risk to the GEA and its resources from creating barriers along Henry Miller Road. Moreover, none of the extensive reports and studies on this issue that we provided the HSRA during the NOP comment period was consulted. In addition, prior comments from the U.S. Fish & Wildlife Service and the California Department of Fish & Game were also ignored and not included in the list of documents consulted. Indeed, it is not clear what the purpose of the NOP

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³⁵ DEIR/S at p. 3.15-46.

³⁶ *Santiago Water District v. County of Orange* (1981) 118 Cal.App.3d 818, 831, 1124-550a

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comments were, given that the extensive comments submitted on this issue were wholly ignored in the preparation of this document.

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VI. THE DEIR/S FAILS TO IDENTIFY THE CROSSING OF THE GEA AS AN AREA OF CONTROVERSY

The DEIR/S is also deficient because it fails to identify the potential impact of the Pacheco Pass alignments on the GEA as an “area of controversy” in the document summary section. CEQA Guidelines provide that the summary of an EIR “shall” identify “[a]reas of controversy known to the Lead Agency including issues raised by agencies and the public.”³⁷ The most meaningful and useful part of an EIR for decisionmakers and the public is the executive summary. As such, failure to identify all areas of controversy in the executive summary calls into question the integrity of the document, making it an unreliable and useless decisionmaking tool.

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During the Statewide HST Program EIR/S proceedings and during the NOP comment period, literally thousands of pages of comments were submitted on this issue by federal, state and local agencies and non-profit organizations. The proposal to route the HST system is controversial and almost universally opposed by the federal, state and local agencies with jurisdiction over this resource. This controversy must be identified in the EIR/EIS summary.

VII. THE DEIR/S FAILS TO ADEQUATELY EVALUATE PROJECT IMPACTS

The evaluation of potential impacts to the GEA contained in the DEIR/S is woefully inadequate. Both CEQA and NEPA require that the DEIR/S identify all potentially significant Project impacts and identify feasible mitigation measures to reduce those impacts to less than significant.³⁸ The DEIR/S fails to comply with these requirements by failing to identify and mitigate potentially significant impacts related to the GEA, including impacts associated with construction and operation of the Project and impacts associated with population growth, land

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³⁷ CEQA Guidelines § 15123, subd. (b)(2).

³⁸ Pub Resources Code §§ 21002.1, subd. (a), 21100, subd. (b)(1) & (b)(3); CEQA Guidelines §§ 15126, subd. (a), 15126.4, 15143; 40 C.F.R. §§ 1502.16, 1508.8, 1508.25, 1124-550a



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speculation and urban encroachment induced by the alignment of the HST through the GEA and by the placement of HST stations in Merced County.

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The DEIR/S attempts to excuse these failings by stating that it is a “program” EIR/EIS and that more detailed analysis of impacts and mitigation measures will be given in subsequent project-specific EIR/S. The DEIR/S, however, also states that a preferred alignment will be chosen in the final version of this DEIR/S *without any further environmental review*. Accordingly, even though a subsequent project-level EIR/EIS will be prepared, the potential impacts of choosing a HST alignment that passes through the GEA must be evaluated and mitigated now in the program DEIR/S. Evaluation and mitigation of these impacts may not be deferred until after a decision on alignment has already been made. Such post-hoc review is too late and is inconsistent with CEQA’s goal of informed decision-making.

The High-Speed Rail Authority should correct these errors by analyzing all of the Project’s potential impacts and identifying feasible and enforceable mitigation measures in a revised DEIR/S that is circulated for public review.

A. A Program DEIR/S Must Provide Sufficiently Detailed Analysis To Support The Decisions Being Made In Reliance Upon It

A program EIR may be prepared on a series of actions that can be characterized as one large project and are related either: (1) geographically; (2) as logical parts in the chain of contemplated actions; (3) in connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program; or (4) as individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.³⁹ Program EIRs allow the lead agency to consider broad policy alternatives and program-wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts.⁴⁰

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Subsequent activities in the program must be examined in light of the program EIR to determine what additional environmental documents must be

³⁹ CEQA Guidelines § 15168, subd. (a).
⁴⁰ CEQA Guidelines § 15168, subd. (b)(4).
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prepared.⁴¹ If the potential impacts of the subsequent activity were not fully examined in the program EIR, a new EIR or negative declaration would have to be prepared to address these impacts.⁴²

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Where an EIR is a program EIR, it must be sufficiently detailed to provide a full analysis of the potential environmental impacts of any discretionary decisions that would be made in reliance on the EIR, but may defer to a later study full analysis of the potential environmental impacts of actions or decisions that would not be taken until after further environmental study.⁴³ In the case at hand, the DEIR/S states that its intended use is to choose a preferred alignment between the Bay Area and the Central Valley.⁴⁴ In order to make such a choice, the DEIR/S must first fully analyze all the potential impacts that may arise if a particular alignment is chosen and it must identify feasible mitigation measures to address these impacts.

CEQA prohibits deferring analysis of these impacts under the guise of “tiering.” Both NEPA and CEQA require analysis of a project’s impacts at the “earliest possible stage, even though more detailed environmental review may be necessary later.”⁴⁵ This requirement holds regardless of any intention to undertake site-specific environmental review for future project phases.⁴⁶ California courts require detailed analyses of all potentially significant impacts that may result from a project. Under CEQA, an EIR must focus on the changes in the environment that would result from the project.⁴⁷ An EIR must examine all phases of the project including planning, construction and operation.⁴⁸

A lead agency cannot ignore the requirement for an analysis of impacts from planning, construction or operation or defer the requirement to identify feasible mitigation measures simply by deferring the analysis in a “program” EIR.⁴⁹ In

⁴¹ CEQA Guidelines § 15168, subd. (c).
⁴² CEQA Guidelines § 15168, subd. (c)(1).
⁴³ CEQA Guidelines § 15162, subd. (b); *Stanislaus Natural Heritage Project v. County of Stanislaus* (1996) 48 Cal.App.4th 182.
⁴⁴ DEIR/S at 1-12.
⁴⁵ *McQueen v. Board of Directors* (1988) 202 Cal.App.3d 1136, 1147; see 40 C.F.R. §§ 1501.1, 1501.2.
⁴⁶ *Stanislaus Nat’l Heritage Project v. County of Stanislaus* (1996) 48 Cal.App.4th 182, 199.
⁴⁷ CEQA Guidelines § 15161.
⁴⁸ *Id.*
⁴⁹ *Stanislaus Nat’l Heritage Project v. County of Stanislaus* (1996) 48 Cal.App.4th 182, 199.
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Stanislaus Natural Heritage Project, the County asserted that a specific plan EIR was both a “program EIR” for some aspects of the project and a “project-level” EIR for other aspects.⁵⁰ The court rejected the County’s argument that it could review certain project phases and their environmental impacts in the future:

the County’s approval of the project under these circumstances [would] defeat [...] a fundamental purpose of CEQA: to “inform the public and responsible officials of the environmental consequences of their decisions *before* they are made.”⁵¹

The court held that tiering is not a device for deferring the identification of significant environmental impacts that the adoption of a specific plan could be expected to cause. The court stated that calling a specific plan a “program” does not relieve an agency from having to address the significant effects of that project.⁵²

The High-Speed Rail Authority’s approach in this case fails to provide the requisite level of review required by CEQA. The DEIR/S fails to adequately describe the Project setting, fails to adequately describe the Project itself, fails to analyze Project impacts, and fails to mitigate impacts that it does identify with specific, enforceable measures. Rather, the document repeatedly defers critical analysis and Project description on the grounds that the DEIR/S is a program EIR/S. The DEIR/S’ vague and tentative analysis with respect to numerous Project elements precludes a full and proper analysis of Project impacts. Equally flawed, the DEIR/S repeatedly determines that Project impacts would not be significant based solely on assumptions that vague and unspecified mitigation measures would be identified in later documents.

A program EIR/EIS may defer analysis of the impacts of decisions that would not be made until after additional environmental review. Here, however, the DEIR/S states that the preferred alignment will be chosen in the final version of this DEIR/S *without any further environmental review*. Accordingly, the potential impact of choosing a HST alignment that passes through the GEA must be

⁵⁰ *Id.* at 202.

⁵¹ *Id.* at 195 (emphasis added), quoting *Laurel Heights Improvement Association v. Regents of University of California (“Laurel Heights II”)* (1993) 6 Cal.4th 1112, 1123.

⁵² *Id.* at 197.
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evaluated now if the DEIR/S is to be relied upon to support a decision that would commit the HSRA to such an alignment.

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B. The DEIR/S Must Meaningfully Evaluate All Significant Environmental Impacts

Both CEQA and NEPA require that the DEIR/S identify and analyze all direct and indirect potentially significant environmental impacts of a project.⁵³ A significant environmental impact is “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.”⁵⁴ In preparing an EIR, a lead agency is required to

analyze the relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human uses of land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality and public services. The EIR [must] also analyze any significant environmental effects the project might cause by bringing development and people into the area affected.⁵⁵

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The primary function of an EIR is to “inform the public and responsible officials of the environmental consequences of their decisions before they are made.”⁵⁶ To fulfill this function, an EIR must be detailed, complete, and must “reflect a good faith effort at full disclosure.”⁵⁷ An adequate EIR must also contain facts and analysis, not just an agency’s conclusions.⁵⁸

⁵³ Pub. Resources Code § 21100, subd. (b)(1); CEQA Guidelines § 15126.2, subd. (a); 40 C.F.R. §§ 1508.8, 1502.16.

⁵⁴ CEQA Guidelines § 15382.

⁵⁵ CEQA Guidelines § 15126.2, subd. (a).

⁵⁶ *Laurel Heights Improvement Assn. v. Regents of the University of California* (1993) 6 Cal.4th 1112, 1123.

⁵⁷ CEQA Guidelines § 15151; *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 721-722.

⁵⁸ See *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 568 (1990).
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In the case at hand, the DEIR/S does not meet these requirements. The DEIR/S fails to provide the necessary facts and analyses to allow the Authority and the public to make an informed decision concerning the significance of the Project's impacts. The DEIR/S fails to identify, whatsoever, a number of potentially significant Project impacts. In many cases, the DEIR identifies impacts generally, but fails to evaluate them in any context or to describe the potential scope or severity of the impacts. The DEIR/S also frequently fails to indicate whether an impact is considered significant, less than significant or reduced to less than significant after mitigation. Where the DEIR/S does make findings as to an impact's significance, it often fails to provide supporting evidence or the analytic rationale for its conclusions.

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C. The DEIR/S Fails To Adequately Evaluate the Potential Biological Impacts Of The HST On GEA Wildlife and Habitat

The DEIR/S is legally deficient because it merely lists biological resources while deferring evaluation of impacts on these resources. Once the presence of the biological resources in the GEA have been identified and described, the DEIR/S must then analyze how the direct and indirect impacts of the project and cumulative projects would affect these resources.⁵⁹ The discussion should include relevant specifics of the area, the resources involved, physical changes, and alterations to the ecological systems.⁶⁰

What little analysis that the DEIR/S does provide of the project's biological impacts is extremely cursory and incomplete. The DEIR/S merely provides narrative lists of species and habitat that may be potentially affected by the project. There is no meaningful evaluation of how the project may adversely affect species or habitat. As a result, identification of mitigation measures is precluded. In addition, the DEIR/S is unable to provide any guidance as to which alignments will result in impacts that may be mitigated to a level of insignificance and which alignments will result in impacts that may be significant and unavoidable.

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By relying solely on incomplete statewide data sets, the DEIR/S also fails to identify numerous potentially impacted biological resources, including impacts on

⁵⁹ CEQA Guidelines Section 15126, subd. (a).

⁶⁰ *Id.*
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the California Tiger Salamander and impacts on critical migratory waterfowl and shorebird habitat. The failure to require location-specific field studies of biological resources is fatal to the DEIR/S' stated purpose of providing sufficient analysis to permit an informed selection of a preferred alignment between the Central Valley and the Bay Area. The Authority cannot base a possible selection of a preferred alignment through the GEA on such incomplete data.

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A complete analysis of the potential biological impacts of the HST on the GEA is essential due to the considerable importance of this area. The complex of wetland habitats within the GEA is of special significance because the size, juxtaposition, and connectivity of the different wetland types provide a unique opportunity to sustain migratory and resident wildlife populations.⁶¹ The associated grasslands surrounding the semi-permanent wetlands are also of special importance, because they provide nesting areas for waterbirds, important food sources for grazers such as geese, and essential habitat for listed species and numerous upland wildlife.

Prior to the selection of an alignment through this area, a meaningful evaluation of the Project's potential biological impacts on this important ecological resource must be made. These potential impacts include interruption of habitat connectivity, train noise and vibration impacts, shock wave impacts, train collisions with large animals, electrocution impacts, water quality impacts and construction impacts.

1. The DEIR/S Fails To Meaningfully Evaluate The Impact The Proposed Pacheco Alignments Would Have Due To Their Bisection And Fragmentation Of The Grassland Ecological Area

a. Interference With Wildlife Corridors

The proposed Henry Miller Road alignment runs directly through the Grassland Ecological Area, fragmenting a critical southern spur of the Grassland Ecological area from the rest of the contiguous wetlands and isolating another small section of wetlands as well. This route cuts across the southern part of the Volta

L029-27

⁶¹ Appendix 11, Fredrickson, Leigh H. and Laubhan, Murray K., *Land Use Impacts and Habitat Preservation in the Grasslands of Western Merced County, CA* (February 1995).
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State Wildlife Management Area and the Los Banos State Wildlife Management Area (the oldest Wildlife Management Area in the state - created in 1929) and severs the important wildlife corridor connecting the North and South grasslands.⁶²

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The proposed GEA North alignment would also fragment the Grasslands. The GEA North alignment would create a new physical barrier that bisects the southern half of the China Island Unit of the North Grasslands Wildlife Area along State Highway 140.

The proposed Pacheco alignments would thus both create physical barriers bisecting the GEA and would likely result in significant fragmentation impacts on the wetland habitat and wildlife.⁶³ Such potential impacts include interference with wildlife movement and migration corridors, interference with drainage and the flow of irrigated water through the managed wetlands and interference with access to hunting clubs.

These impacts could be particularly dire along the Henry Miller Road alignment. As discussed *supra*, the linkage between the north and south units of the GEA are already dangerously fragmented along Henry Miller Road. Any further fragmentation could be the "final blow" to this vulnerable corridor and result in significant disruption of migratory bird movement patterns.⁶⁴

The DEIR/S does state that construction of wildlife overcrossings and undercrossings could be considered to provide wildlife movement corridors.⁶⁵ However, no specifics or analysis of such measures are provided in the DEIR/S.

Moreover, a few underpasses alone would not be sufficient to address this impact. Fragmentation does not require complete separation. Rather:

⁶² See Appendix 1, Map of Federal, State and Privately Owned Lands in GEA. The Pacheco Alignment is proposed to run just north of and parallel to Henry Miller Road, isolating the sections of the GEA south of this area. See also Appendices 2, 3 & 19.

⁶³ Appendix 4, *Dr. Weissman Comments*.

⁶⁴ Appendix 8, *Grassland Land Use and Economics Study*; Appendix 9, Thomas Reid Associates, *Grassland Water District Land Planning Guidance Study* (1995), Appendix A (Noss, R.F., *Translating Conservation Principles to Landscape Design for the Grassland Water District* (1994)), p. 47.

⁶⁵ DEIR/S at p. 3.15-67. 1124-550a

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it is a relative and cumulative problem. After some threshold of fragmentation is exceeded, movement of individuals will no longer occur regularly enough to maintain the population of a fragmentation-sensitive species. Until detailed, long-term studies of species in the [GEA] are performed, the prudent course is to prevent any further fragmentation of the system. Indeed, professional opinion among scientists is now firm that the burden of proof in such matters must rest on those who propose activities that may fragment or otherwise degrade ecosystems.⁶⁶

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The DEIR/S must provide evidence for the success of the proposed mitigation measures in a wetland environment like the GEA and provide more detail on the number, location and type of such structures to facilitate wildlife movement across the railroad right-of-way. Without such information, the impact of the proposed Pacheco Pass alignments on the GEA cannot be fairly assessed.

b. Disruption Of Canals And Waterways

Wetland ecosystems are also sensitive to disruption of water flow and other hydrological impacts that accompany fragmentation.⁶⁷ For example, drainage canals, dikes, and roads have had severe effects on the hydrology, vegetation, flora and fauna of the Everglades.⁶⁸

In the case at hand, the proposed Pacheco Pass alignments would bisect several waterways within the GEA essential to the management of these critically important wetlands and wildlife habitat.⁶⁹ The Santa Fe and San Luis Canals convey water to more than 31,000 acres of public and privately owned wetlands. Mud Slough South (a natural channel) and the Porter-Blake Bypass serve as drainage facilities for thousands of acres of additional wetlands, thus making possible the timely release of water, a crucial element in the management of seasonal habitat.

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⁶⁶ Appendix 9, Thomas Reid Associates, *Grassland Water District Land Planning Guidance Study* (1995), Appendix A (Noss, R.F., *Translating Conservation Principles to Landscape Design for the Grassland Water District* (1994)), p. 47.

⁶⁷ *Id.*; see also Appendix 4, *Dr. Weissman Comments*.

⁶⁸ *Id.*

⁶⁹ Appendix 7, *Don Marciocchi Letter*. 1124-550a



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The DEIR/S, however, fails to even identify these waterways, much less analyze the potential impacts the Project may cause by bisecting them. Furthermore, no mitigation measures are proposed or identified to ensure that the design and construction of the Project will not impede the flow and maintenance of water in these channels. Without such information, the impact of this alignment on the GEA cannot be fairly assessed.

The bisecting of these waterways by the HST may also have a significant impact on important wildlife corridors. Among the threatened species that would likely be affected by the bisecting of the GEA is the giant garter snake (*thamnophis gigas*), a state and federally listed threatened species.⁷⁰ This snake is historically known in the GEA and has been recently documented in waterways both north and south of the City of Los Banos.⁷¹ These snakes were found in both natural channels and water conveyance canals. It is well documented that the giant garter snake inhabits waterways, including irrigation and drainage canals, sloughs and low gradient streams.

The San Luis Canal, which would be bisected by the Henry Miller Road alignment, has been found to contain the necessary habitat components for the giant garter snake, including: adequate water during the snake's active season, populations of food organisms, emergent, herbaceous wetland vegetation for escape cover and foraging, and grassy banks and openings in waterside vegetation for basking.⁷² In addition, the San Luis Canal functions as a movement corridor for the giant garter snake.⁷³

The DEIR/S, however, fails to identify the potential for interference with waterway habitats and corridors. The Authority must assess the threat the HST project may pose to the giant garter snake's habitat and waterway corridor before it commits itself to a particular HST alignment.

⁷⁰ Appendix 15, Dean Kwasny letter.
⁷¹ *Id.*
⁷² *Id.*
⁷³ *Id.*
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c. Interference With Access To Hunting Clubs

The proposed bisecting of the GEA by the HST also poses the potential to impede the access of GWD members to their hunting clubs.⁷⁴ The continued protection of these privately managed wetlands depends largely on the continued viability of these lands as private duck hunting clubs. Currently, 181 duck hunting clubs exist within the GWD and the GRCD. The DEIR/S fails to consider the impact that its proposed Pacheco Pass alignments may have on access to these clubs. This issue must be examined prior to any final decision being made as to the selection of this route.

2. Noise And Vibration

The DEIR/S compares the various routes for noise sensitivity and compares the HST alternative with the other alternatives. However, the evaluation of noise impacts in the DEIR/S lacks foundation and fails to clearly reveal what the actual noise exposure would be in decibels, at varying distances from the track as the HST passes through or adjacent to the GEA. The DEIR/S also fails to evaluate what impact noise and vibration may have on wildlife and habitat in the GEA.

The DEIR/S lacks foundation for its findings because it uses 100 decibels ("dBA") as the sound threshold for impacts to wildlife. However, the 2005 High Speed Ground Transportation Noise and Vibration Assessment cited as the basis for the DEIR/S noise analysis presents data showing wildlife impacts at sound levels as low as 77 dBA. Moreover, a Federal Railroad Administration ("FRA") report rates as a "severe impact" any case where the project noise exceeded 60 dBA where the ambient noise level was near 50 or 55 dBA Ldn, as would be the case in the GEA.⁷⁵ The FRA report also states that impacts on wild birds and mammals must be assessed by dB SEL rate, not just by the decibel rate. The SEL is a measure of all sound energy during an event expressed as the equivalent sound level with a duration of one second.

The DEIR/S concludes that "wildlife in natural areas would be minimally affected by train passbys at speeds of up to 180 mph at distances of 60 feet or

⁷⁴ Appendix 7, Don Marciochi Letter.
⁷⁵ Appendix 4, Dr. Weissman Comments.
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more.⁷⁶ This DEIR/S fails, however, to make clear that wildlife within 60 feet would be *significantly impacted* by noise and vibration.⁷⁷

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Moreover, the DEIR states that trains running through flat and straight areas, such as the Henry Miller alignment through the GEA, will be traveling at speeds up to 220 miles per hour.⁷⁸ The DEIR/S, however, limits its evaluation of noise levels to 180 miles per hour train speed. Accordingly, it fails to evaluate the actual noise impacts the HST would have on the GEA.

In her attached comments, Dr. Weissman examines the available data on this issue and estimates that the Lmax noise from the train at 200 mph would be around 101.5 dB.⁷⁹ Even at high speed, the train will take three to four seconds to pass a point receptor. This means the SEL at 50 feet distance is probably around 105 to 110 dB. With 3 dB drop-off per doubling distance for a line source, the high-speed train will likely exceed a 100 dB SEL significance threshold for wild birds and mammals out to a distance of 500 feet.⁸⁰ This distance would increase significantly at a train speed of 220 miles per hour or at a significance level of 77 dB SEL.

Train frequency will also determine the overall impact of the project. However, the DEIR/S analysis fails to assess the impact of train frequency at all. Estimates contained in the appendices to the Statewide HST Program EIR/S show that the HST may pass through the GEA on an average of every 11 minutes, but as frequently as every 5 minutes during the busy portion of the business day. The high frequency means that startle effects will be frequent and that the overall sound level will rise substantially.⁸¹

Noise disturbances of wildlife in the GEA are of significant concern. Noise disturbances may displace waterfowl from feeding grounds, may cause desertion of nests, may increase energetic costs associated with flight, and may lower productivity of nesting or brooding waterfowl, among other impacts.⁸² The DEIR/S

⁷⁶ DEIR/S at p. 3.4-6.

⁷⁷ See Appendix 4, *Dr. Weissman Comments*.

⁷⁸ DEIR/S at p. 3.4-9.

⁷⁹ *Id.*

⁸⁰ *Id.*

⁸¹ *Id.*

⁸² Appendix 12, U.S. Fish & Wildlife Leaflet 13.2.15; Appendix 4, *Dr. Weissman Comments* at pp. 3-4 (citing numerous reports).
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must evaluate the potential impacts of HST train noise and vibration on the sensitive wildlife species in the GEA before the Authority may commit to an alignment that would run through this area.

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3. Shock Wave

High-speed trains will produce a significant shock wave each time they pass.⁸³ The shock wave can be felt at varying distances from the train, depending upon its speed. The shock wave has been likened to the impact of a supersonic plane breaking the sound barrier. It could produce a startle response in wildlife or, if birds are flying within the immediate area where the train passes, it could possibly interrupt their flight.⁸⁴ The DEIR/S should quantify the shock wave that emanates from the train moving at over 200 mph, and determine its potential effects on wildlife in the GEA.

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4. Collisions With Trains

Animals that may be crossing the tracks in the GEA can be hit by one of some 100 plus trains per day. Although a likely mitigation for the Project will be subterranean tunnels to allow wildlife passage (EIR/S p. 3.15-31), there may still be substantial numbers of wildlife that attempt to cross the track at grade level and may be hit by trains.

Species at risk include the giant garter snake, San Joaquin kit fox, tule elk and bobcat.⁸⁵ The giant garter snake, for example, can be found as far away as 820 feet from the edge of marsh habitat; U.S. Fish and Wildlife service recommends a minimum buffer of 200 feet from the banks of giant garter snake habitat.⁸⁶ The HST project, however, proposes trains running by every 5 to 11 minutes right through the waterways inhabited by this threatened snake.

L029-32

The DEIR/S should estimate the mortality to each wildlife species that is vulnerable to train collisions and the effect of this mortality on the respective

⁸³ Appendix 4, *Dr. Weissman Comments*.

⁸⁴ *Id.* (citing Howe M. S. "The compression wave produced by a high-speed train entering a tunnel." *Proceedings: Mathematical, Physical & Engineering Sciences*, 1 June 1998, vol. 454, no. 1974, pp. 1523-1534.)

⁸⁵ Appendix 4, *Dr. Weissman Comments*; Appendix 15, Dean Kwasny letter.

⁸⁶ Appendix 15, Dean Kwasny letter.

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populations. For special status species such as the giant garter snake or the San Joaquin kit fox, the DEIR/S should also discuss whether these train impacts would be substantial enough to cause further decline in the status of the species, or would interfere with the recovery of the species. Mitigation measures such as fencing must be evaluated to determine their effectiveness in keeping out the giant garter snake and other potentially impacted species.

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5. Construction and Maintenance Impacts

The DEIR/S fails to meaningfully evaluate the potential impact of construction and maintenance activities on the GEA. The duration of noisy and invasive construction activities through and adjacent to the GEA may severely disrupt biological species, habitat, water quality and air quality. In addition, the construction of the San Joaquin River crossing could pose serious impacts to water quality and riparian habitat. The DEIR, however, fails to evaluate the scope of such impacts and fails to evaluate whether mitigation measures are available to reduce these impacts either substantially or to a level of insignificance. While the DEIR provides a general description of some construction activities, it fails altogether to describe the maintenance activities that may be required over the life of the Project.

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Analysis of potential construction and maintenance impacts on the GEA is required before choosing a preferred alignment because this information could tip the preferred selection to a more developed route where fewer collateral impacts will be imposed to build and maintain the HST. Potential construction impacts on the GEA that must be studied in a revised DEIR/S include the impacts of truck and other vehicular traffic, equipment storage and laydown areas, blasting, and pile-driving, and temporary disruption of water supply deliveries.⁸⁷ If this information is not provided early in the decisionmaking process, a fully informed decision cannot be made.

6. Water Flow and Water Quality

The DEIR/S fails to acknowledge the potential impacts the Project may have on water flow and water quality in the GEA. The HST Project has the potential to cause significant impacts to the complex of natural and man-made channels that move water through the wetlands, establish the waterfowl habitat and support

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⁸⁷ See Appendix 4, *Dr. Weissman Comments*, 1124-550a

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nearly all the GEA ecological functions.⁸⁸ Without illumination of these potential impacts, the Authority would be unable to make an informed decision as to the preferred route between the Central Valley and the Bay Area.

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Construction of the HST through the GEA would entail tremendous wetland fill and the importation of possibly a million cubic yards of fill, depending on the actual route taken. It is unlikely that the earth for berms and other support structures could be excavated from along the route due to soil weight bearing limitations. Berms and other support structures would need to be keyed in to the substrate, meaning that the organic top layer would be removed and drainage ditches and water pumps would be installed to allow engineered placement of fill. Even where trestle construction crossed water channels, there would be disturbance from clearing and pile driving.⁸⁹

Construction may alter the present water flow patterns, introduce sediment and create stagnant sections of the wetlands producing essentially permanent water quality degradation. Water quality impacts on wildlife range from altered growth of feed to increased risk of avian botulism.⁹⁰

The Grassland Water District has spent much time and money managing the application of water in the Grasslands. Historically, water quality problems in the Grasslands have had a tremendous impact on wildlife. Imposition of a hydraulic barrier across the GEA will materially impact the south-to-north water management in the GEA, which is essential to maintaining water quality.⁹¹ The potential impact that construction of a HST would have on water flow and water quality in the GEA must be evaluated before the Authority chooses its preferred alignment.

VIII. DEIR/S IMPROPERLY DEFERS MITIGATION

The DEIR/S is further inadequate because, throughout the document, mitigation measures are improperly deferred or consist of vague and unenforceable

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⁸⁸ Appendix 4, *Dr. Weissman Comments*.

⁸⁹ *Id.*

⁹⁰ *Id.*

⁹¹ *Id.*

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mitigation “strategies.” Both CEQA and NEPA require the proposal and description of mitigation measures sufficient to minimize the significant adverse environmental impacts identified in the EIR/EIS.⁹² This requirement is considered the heart of CEQA. CEQA imposes an affirmative obligation on agencies to avoid or to reduce environmental harm by adopting feasible project alternatives or mitigation measures.⁹³ Without an adequate analysis and description of feasible mitigation measures, it would be impossible for the Authority to meet this obligation.

Mitigation measures must be designed to minimize, reduce or avoid an identified environmental impact or to rectify or to compensate for that impact.⁹⁴ A public agency may not rely on mitigation measures of uncertain efficacy or feasibility.⁹⁵ “Feasible” means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors.⁹⁶ Mitigation measures must be specific and fully enforceable through permit conditions, agreements or other legally binding instruments.⁹⁷ Mitigation measures that are vague, or so undefined that it is impossible to evaluate their effectiveness, are legally inadequate.⁹⁸

An agency must identify mitigation measures for significant impacts *before* it issues a proposed EIR for public review.⁹⁹ Mitigation measures adopted *after* project approval cannot validate the issuance of an EIR, since this deferral denies the public the opportunity to comment on the project as modified to mitigate impacts.¹⁰⁰ Accordingly, deferral of the formulation of mitigation measures to post-approval studies is generally impermissible.¹⁰¹ An agency may only defer the

⁹² Pub. Resources Code §§ 21002.1, subd. (a), 21100, subd. (b)(3); 40 C.F.R. §§ 1502.14, subd. (f), 1502.16, subd. (h); *Robertson v. Methow Valley Citizens Council* (1989) 420 U.S. 332, 352.
⁹³ Pub Resources Code §§ 21002-21002.1.
⁹⁴ CEQA Guidelines § 15370.
⁹⁵ *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 727 (finding groundwater purchase agreement inadequate mitigation measure because no record evidence existed that replacement water was available).
⁹⁶ CEQA Guidelines § 15364.
⁹⁷ CEQA Guidelines § 15126.4, subd. (a)(2).
⁹⁸ *San Franciscans for Reasonable Growth v. City & County of San Francisco* (1984) 151 Cal.App.3d 61, 79.
⁹⁹ Pub. Resources Code § 21061.
¹⁰⁰ *Gentry v. City of Murrieta* (1995) 36 Cal.App.4th 1359, 1393; *Quail Botanical Gardens Foundation v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1604, fn. 5.
¹⁰¹ *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 308-309.
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formulation of mitigation measures when it “recognizes the significance of the potential environmental effect, commits itself to mitigating its impact, and articulates *specific performance criteria* for the future mitigation.”¹⁰²

Here, the DEIR/S consistently fails to identify feasible mitigation measures capable of mitigating the significant environmental impacts of the project alternatives and cumulative impacts. Where the DEIR/S does identify potential impacts, it repeatedly fails to articulate specific, enforceable mitigation measures or mitigation performance criteria. Instead, the DEIR/S refers to what it calls “mitigation strategies.” These “mitigation strategies” are almost entirely vague and unenforceable statements that lack any “specific performance criteria.” Accordingly, it is impossible to determine their efficacy in reducing significant impacts to less than significant.

Nonetheless, the DEIR/S improperly and repeatedly concludes that significant impacts are rendered less than significant on the basis that unspecified “mitigation strategies” would be developed during future project-level review.¹⁰³

In particular, the DEIR/S provides vague and insufficient mitigation measures for the following categories of impacts:

Construction:

“Potential construction impacts, which should be analyzed once more detailed project plans are available, can be mitigated by following local and state guidelines.” DEIR/S page 3.3-20.

Noise and Vibration:

“More detailed mitigation strategies for potential noise and vibration impacts would be developed in the next stage of environmental analysis.” DEIR/S page 3.4-22. “This program-level analysis has identified areas where future analysis should be given to potential HST-induced vibrations. The type of vibration mitigation and expected effectiveness will be determined as part of the second-tier project-level environmental analyses.” DEIR/S page 3.4-22.

¹⁰² *Gentry v. City of Murrieta* (1995) 36 Cal.App.4th 1359, 1411 (emphasis provided), citing *Sacramento Old City Assn. v. City Council* (1991) 229 Cal.App.3d 1011, 1028-1029.
¹⁰³ See, e.g., DEIR/S Table 7.3-1.
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Energy:

“The design particulars would be developed at the project-level of analysis...” L029-38
 DEIR/S page 3.5-17.

Land Use:

“Local land use plans and ordinances would be further considered in the selection of alignment alternatives and station location options. Project-level review would consider consistency with existing and planned land use, neighborhood access needs, and multi-modal connectivity opportunities.” L029-39
 DEIR/S page 3.7-42.

Biological Resources:

“At this programmatic level of analysis, it is not possible to know precisely the location, extent, and particular characteristics of biological resources that would be affected or the precise impacts on those resources.” DEIR/S page 3.15-65.

“Regulatory agencies will be consulted to determine appropriate mitigation ratios.” DEIR/S page 3.15-65.

Development of future Biological Resources Management Plans that will include:

- “Specific measures for the protection of sensitive amphibian, mammal, bird, and plant species during construction.” DEIR/S page 3.15-66.
- “Identification and quantification of habitats to be removed, along with the locations where these habitats are to be restored or relocated.” DEIR/S page 3.15-66.
- “Procedures for vegetation analyses of adjacent protected habitats.” DEIR/S page 3.15-66.
- “Specific parameters for the determination of the amount of replacement habitat for temporary disturbance areas.” DEIR/S page 3.15-66.
- “Specification of performance standards for growth of re-established plant communities and cut and fill slopes.” DEIR/S page 3.15-66.
- “Measures to preserve topsoil and control erosion control.” DEIR/S page 3.15-66.
- “Specific construction monitoring programs for sensitive species.” DEIR/S page 3.15-66.

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- “Specific measures for the protection of sensitive habitats to be preserved.” DEIR/S page 3.15-66.
- Procedures for biological monitoring during construction activities to ensure compliance and success of protective measures. The monitoring procedures would (1) identify specific locations of wildlife habitat and sensitive species to be monitored, (2) identify the frequency of monitoring and the monitoring methodology (for each habitat and sensitive species to be monitored), (3) list required qualifications of biological monitor(s), and (4) identify reporting requirements. DEIR/S page 3.15-66.

Surface Waters, Runoff and Erosion

“Construction methods or facility designs to minimize potential impacts would be considered and used to the extent feasible.” DEIR/S page 3.14-50. L029-41

Groundwater:

“As part of the future project-level analysis, minimize development of facilities in areas that may have substantial groundwater discharge or affect recharge.” DEIR/S page 3.14-51. L029-42

4(f) and 6(f):

“Continue to apply [unspecified] design practices to avoid impacts to park resources, and when avoidance cannot be accommodated, minimize the scale of the impact.” DEIR/S page 3.16-19.

“Apply [unspecified] measures at the project level to reduce and minimize indirect/proximity impacts as appropriate for the particular sites affected, while avoiding other adverse impacts (e.g., visual), such as noise barriers, visual buffers, and landscaping.” DEIR/S page 3.16-19. L029-43

“Apply [unspecified] measures to modify access to/egress from the recreational resource to reduce impacts to these resources.” DEIR/S page 3.16-19.

For a number of the impacts identified above, the DEIR/S proposes deferring the development of mitigation measures until project-level review. CEQA and NEPA, however, require the Authority to identify feasible mitigation measures prior to taking an action that would rely on those mitigation measures. The L029-44

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Authority may not defer the requirement to identify feasible mitigation measures simply by deferring the analysis in a "program" EIR.¹⁰⁴

In the case at hand, the Authority has indicated that it intends to choose a preferred alignment between the Central Valley and the Bay Area solely on the basis of the analysis in the DEIR/S. In order to make such a choice, the DEIR/S must first fully analyze all the potential impacts that may arise if a particular alignment is chosen and it must also identify feasible mitigation measures to address these impacts. Each of the impacts identified above could face unique mitigation difficulties or costs as the HST passes through the GEA. Such difficulties could well tip the balance in the selection of a preferred alignment between the Central Valley and the Bay Area.

Identification of feasible mitigation measures after an alignment has already been chosen would defeat CEQA's goal of informed decisionmaking. Moreover, once an alignment is chosen, mitigation and avoidance options become limited. According to the DEIR/S, the proposed HST alignment alternatives would require relatively straight, flat, long linear features. As a result, moving or curving the alignment to avoid resources "might not always be feasible." The DEIR/S must be revised to identify specific, feasible mitigation and avoidance measures for these impacts prior to selection of an alignment.

To adequately protect GEA resources, mitigation measures that should be considered include: (1) requiring a tunnel under or an aerial structure over all sensitive areas of the GEA (wetlands and grasslands); (2) funding for studies to evaluate the potential impact of the HST on the GEA and to identify specific mitigation measures that shall be adopted; (3) identification of specific performance standards to ensure protection of the GEA's biological resources and waterways; (4) funding of post-construction studies and monitoring to evaluate impacts from Project operation; (5) requiring reduced speeds through the GEA in order to mitigate noise, vibration, shock wave and collision impacts; (6) payment to a fund for acquiring conservation and buffer zone easements; (7) conditioning construction on the completed acquisition of conservation easements for all unprotected GEA land and the completed acquisition of buffer zone easements to ensure no further incompatible adjacent growth; (8) adopting an enforceable, permanent bar on placing a HST station near Los Banos; (9) relocating the proposed Los Banos HST

¹⁰⁴ *Stanislaus Nat'l Heritage Project v. County of Stanislaus* (1996) 48 Cal.App.4th 182, 199, 1124-550a

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maintenance station to Gilroy or Fresno; (10) identifying specific performance requirements to limit the air quality, water quality and biological resource impacts from construction and maintenance activities; and (11) seasonal restrictions on construction impacting the GEA to avoid impacts on migrating birds and other important species. This list is not comprehensive, but rather provides a starting point for meaningfully evaluating potential mitigation measures that could address Project impacts on the GEA.

IX. THE DEIR/S' ANALYSIS OF GROWTH-INDUCING IMPACTS IS INADEQUATE AND INCOMPLETE

The DEIR/S fails to adequately evaluate and mitigate the growth-inducing impacts of the Pacheco Pass alignments. When preparing an EIR, the lead agency must identify, discuss and analyze the growth-inducing impacts of a proposed project.¹⁰⁵ A project must be analyzed to determine if it will facilitate and encourage population growth, economic growth or changes in land use and development patterns.¹⁰⁶ Similarly, NEPA requires that agencies consider the indirect effects of a proposed action, such as growth inducing impacts and other impacts related to induced changes in the pattern of land use, population density or growth rate.¹⁰⁷

Mere identification of growth-inducing impacts, however, is not sufficient to meet the requirements of CEQA. Specific, enforceable mitigation measures to address impacts from this growth must also be identified and evaluated.

A project may indirectly induce growth by reducing or removing barriers to growth or by creating a condition that attracts additional population or new economic activity that is not currently planned. Here, the HST proposal will induce population growth and commuter traffic in the Merced/Los Banos area at a much greater rate than would occur otherwise by removing the barrier of accessibility to jobs in the Bay Area. According to the chart in Appendix 4-E of the DEIR/S, both the Altamont alignment and the Pacheco alignment could cut travel time between

¹⁰⁵ CEQA Guidelines § 15126.2, subd. (d).

¹⁰⁶ *Id.*

¹⁰⁷ 40 C.F.R. § 1508, subd. (b).

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Merced and San Jose to as little as 45 minutes. Such a commute would be short by Bay Area standards.

Nonetheless, the DEIR/S concludes that the HST would minimize the impacts associated with growth due to its inherent incentives for directing urban growth:

"In short, either HST Network Alternative provides a strong incentive for directing urban growth and minimizing a variety of impacts that are frequently associated with growth. This outcome would be seen in results for resource topics such as farmland, hydrology, and wetlands, where the indirect effects of either HST Network Alternative are in some cases less than the No Project Alternative, even with more population and employment expected with the HST Network Alternative." DEIR/S page 5-32.

The DEIR/S' suggestion that this growth would be less than significant simply lacks credibility and is contrary to historic growth patterns in California. Historic growth patterns in California clearly demonstrate that accessibility to major employment centers triggers tremendous new growth from commuters.¹⁰⁸ Examples include: (1) the Auburn corridor as major new employers moved to the Sacramento region and north; (2) the Truckee area, which is approximately 1 hour from the major new job growth in the Auburn Corridor; and (3) Reno.¹⁰⁹ Numerous studies have also shown that the introduction of transportation facilities redirects growth.¹¹⁰

The introduction of the HST will dramatically shorten commute times between the Merced County area and the urban employment centers in the Bay Area, making the areas surrounding any proposed HST stations in the Merced area more attractive to commuters. The substantially lower cost of homes and property in the area would be a tremendous draw for Bay Area workers to move to the area.¹¹¹

¹⁰⁸ Appendix 17, *Watt Comments*.

¹⁰⁹ *Id.*

¹¹⁰ *Id.*

¹¹¹ Appendix 17, *Watt Comments*, Attachment A, *California Real Estate Statistics for Merced and Santa Clara Counties*. As of the 2nd quarter of 2004, a median priced home in Merced County costs \$228,000 and in Los Banos costs \$265,500. By comparison, during the same quarter a median priced home in San Jose costs \$507,750, nearly twice the cost of median priced home in the area near the

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In her attached comments, Ms. Watt concludes that locating a train station adjacent to the GEA, in a largely rural agricultural area of Merced County, would result in significant localized urban encroachment and development pressures on this area that are either understated or simply ignored in the DEIR/S.¹¹² Ms. Watt also concludes that this growth will occur in suburban and rural sprawl patterns most harmful to habitat areas and farmland.¹¹³

Moreover, the pattern of growth may vary significantly depending on the alignment selected. Most worrisome is the proposed Henry Miller Road alignment, which is the only alignment that would not direct growth in Merced County in and around the urban boundaries of the City of Merced. Instead, the Henry Miller Road alignment would likely induce growth along the more rural areas around Los Banos. Even without a station in Los Banos, land speculation is likely to occur all along the Henry Miller Road corridor in anticipation that a Merced County station would eventually be permitted.

The studies reviewed by Ms. Watt have found that if alignments and stations are located in rural areas, growth and development in California could actually be redirected away from existing denser urban areas and into more remote rural areas where high value agricultural and habitat lands occur and where lower density requirements apply.¹¹⁴ This would be far from a "smart growth" or beneficial effect of the HST. The DEIR/S must be revised to analyze the potential localized rural growth impacts that may arise from the Henry Miller Road alignment. The DEIR/S must also evaluate the impacts of land speculation along the Henry Miller Road alignment on the ability to obtain conservation easements on the portions of the GEA that have not yet been protected from development.

proposed Los Banos station. In Gilroy during the same period, a median priced home costs \$550,000.

¹¹² *Id.*

¹¹³ *Id.*

¹¹⁴ *Id.*

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X. THE DEIR/S FAILS TO DISCLOSE WHERE A MERCED COUNTY STATION WOULD BE LOCATED IF THE HENRY MILLER ROAD ALIGNMENT IS SELECTED

The DEIR/S is further inadequate because it fails to disclose where a Merced County station would be located if the Henry Miller Road Alignment is selected. The Henry Miller Road alignment is the only proposed alignment that does not pass through the City of Merced prior to heading to the Bay Area. As a result, the Henry Miller Road alignment would skip Merced completely during the initial Los Angeles to San Jose phase of this project.

The HST Statewide Program EIR/S initially assumed that a Henry Miller Road alignment would serve Merced County via a Los Banos station. As a result of the concerns we and other commentators raised during the HST Statewide Program EIR/S proceedings over the substantial impacts a Los Banos stations would have on the GEA, the HSRA voted not to pursue a station option at Los Banos.¹¹⁵

The DEIR/S, however, fails to identify where else a Merced County station would be located. Without a Merced County station, there would be no HST access between Fresno and Gilroy.

Moreover, numerous sections of the DEIR/S suggest that a Los Banos station is still likely if the Henry Miller Road alignment is selected. For example, Figure 2.5-15 of the DEIR/S still shows a potential station near Los Banos. In addition, the ridership estimates relied upon in the DEIR/S and in the recent MTC ridership study assume significant ridership to and from Merced County. Without such ridership, the Henry Miller Road alignment will likely have significantly less revenue than the other alignments. No explanation is provided for how such ridership can be assumed for the Henry Miller Road alignment without a Los Banos station.

In addition the DEIR states that a Fleet Storage/Service and Inspection/Light Maintenance Facility *will be* located along Henry Miller Avenue, immediately west of where SR-165 intersects Henry Miller Avenue, also parallel with Henry Miller Avenue.¹¹⁶ The DEIR/S states directly that it will “[l]ocate HST maintenance and

¹¹⁵ See Notice of Preparation for DEIR/S (Nov. 14, 2005) at p. 2.
¹¹⁶ DEIR/S at p. 2-45.
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storage facilities within proximity to major stations/termini.”¹¹⁷ Such a facility would thus require a nearby or adjacent Los Banos area station stop.

A Fleet Storage/Service and Inspection/Light Maintenance Facility includes tracks for “lay-up” (parking) for trainsets, a service and inspection facility for inspection and light maintenance, and a train washer located on the yard approach track for exterior cleaning prior to daily train storage. In addition, adjacent to the service and inspection facility, on a separate track, would be a wheel truing facility capable of accommodating two cars at a time. Without a stop in Los Banos, this facility would be unable to operate.

In summary, all indications are that a station will be located in Los Banos if the Henry Miller Road alignment is selected, notwithstanding the statements to the contrary by the HSRA. Even if the HSRA agrees not to initially locate a station stop near Los Banos, commuter growth impacts and land speculation related to the Henry Miller Road alignment will create tremendous pressure to eventually locate a station stop in or near Los Banos.

As we have explained in our prior comments on this issue, a Los Banos station would create disastrous growth pressures in and around the GEA. The Merced County General Plan and Los Banos General Plan lend themselves to a pattern of suburban and rural sprawl due to the predominance of low density general plans and zoning ordinances.¹¹⁸ The typical development density in the limited High Density development areas in Los Banos is only 15 units per acre. Most of the residentially designated vacant land in the City is in the Low Density and Very Low Density designations ranging from 1 to 7 units per acre.¹¹⁹ If the HST service is introduced to the area, this would create significant pressures for growth of housing and new services in the area, and that pressure would extend to the privately held lands in and around the GEA that are not permanently protected.

¹¹⁷ DEIR/S at p. 3.5-17.
¹¹⁸ While the DEIR/S states that the Cambridge Systematics study considered county general plans and policies, there is no evidence of this in the report. DEIR/S page 5-8. Moreover, the section identifies for subsequent analysis “Land use studies for specific alignment and station areas potentially impacted, including evaluation of potential land use conversion, potential growth, and potential community benefits.” DEIR/S page 3.2-27. These are all analyses that must be included in a revised DEIR/S prior to any action on the project. See *Stanislaus Nat’l Heritage Project v. County of Stanislaus* (1996) 48 Cal.App.4th 182, 199.
¹¹⁹ Los Banos General Plan, pp. LU-3 – LU5.
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The low-density housing patterns in this area also lend themselves to the “ranchette phenomenon” of multiple acres per dwelling, which is the worst type of sprawl, since it accelerates development of agricultural lands.¹²⁰ If a HST station near Los Banos removes the barrier of accessibility to jobs, the conversion of agricultural and rural lands to urban and “ranchette” development will likely dramatically accelerate around the GEA. The DEIR/S simply fails to consider the tremendous demand for this type of low-density development. The DEIR/S also fails to identify and analyze the additional significant impacts related to that growth including increased traffic, increased pollution, increased demand for services and infrastructure, accelerated and increased loss of open space, agricultural and habitat land.

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The DEIR/S must be revised to address where a Merced area central valley station would be located if the Henry Miller Road alignment is selected and to evaluate the potential impacts of such a station on the GEA. If a Henry Miller Road alignment is selected, we urge the HSRA to formalize its commitment not to place a station in the Los Banos area with the adoption of enforceable restrictions.

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The DEIR/S must also be revised to address the impacts of locating a Fleet Storage/Service and Inspection/Light Maintenance Facility in Los Banos. We urge the HSRA to reconsider the placement of such a facility in Los Banos. Such a facility would either require an existing station stop in Los Banos or would induce the future placement of a station stop in Los Banos. If a Henry Miller Road alignment is selected, this facility should instead be located in Gilroy or Fresno.

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XI. THE DEIR/S IS DEFICIENT BECAUSE IT FAILS TO IDENTIFY AND EVALUATE THE IMPACTS THAT INDUCED GROWTH MAY HAVE ON THE GEA

The discussion of growth-inducing impacts in the DEIR/S is further deficient because it neglects not only to address the potential for significant localized growth around the Los Banos and Merced area, but it also fails to identify and analyze the impacts that this growth may have on the GEA. The DEIR/S must examine both the possibility that a project may induce growth and the impact that this induced

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¹²⁰ Appendix 17, *Watt Comments*, 1124-550a

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growth may have on the environment.¹²¹ The lead agency must never assume that growth in an area is necessarily beneficial or of little significance environmentally, but must make its judgment in this regard only after open-minded analysis.¹²²

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Impacts of urban encroachment on the wetlands complex of the GEA have been documented in numerous studies including the 1995 Land Planning and Guidance Study and the supporting 1994 study by Reed F. Noss, “Translating Conservation Principles to Landscape Design for the Grassland Water District.” These studies have shown that impacts of urban development adjacent to the GEA may include: (1) fragmentation of the North Grasslands from the South Grasslands; (2) a reduction in habitat value of the entire interior of the wetlands complex; (3) chemical disruption including the introduction of fertilizers and toxic chemicals in drainage water; (4) introduction of non-native species of both plants and animals; (5) noise disruption; (6) visual disruption caused by removal of trees and shrubs around the wetlands; (7) interruption of water deliveries for wildlife uses; and (8) the competition for the water supply that supports the wetland habitat.¹²³ Despite the fact that we provided the HSRA with these studies, the DEIR/S fails to include any discussion, whatsoever, on these potential impacts.

XII. THE DEIR/S IS DEFICIENT BECAUSE IT FAILS TO EVALUATE THE POTENTIAL CONFLICT BETWEEN GROWTH INDUCED BY THE PROJECT AND THE DOCUMENTED NEED FOR ADDITIONAL ACQUISITION OF CONSERVATION AND BUFFER ZONE EASEMENTS TO ENSURE THE GEA'S CONTINUED VIABILITY

Induced growth and land speculation along the HST route may make it difficult or economically unfeasible to continue purchasing conservation easements in the GEA or to purchase buffer zone easements. The GEA encompasses approximately 180,000 acres. While many of these acres are protected by conservation easements or as state and federal wildlife areas, critical sections of the GEA remain privately owned, unencumbered by easements or other protection from development pressures. The location of a HST route through the GEA may create a

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¹²¹ CEQA Guidelines § 15126.2, subd. (d)

¹²² *Id.*

¹²³ Appendix 9, Thomas Reid Associates, *Grassland Water District Land Planning Guidance Study* (1995), Appendix A (Noss, R.F., *Translating Conservation Principles to Landscape Design for the Grassland Water District* (1994)), 1124-550a



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tipping point where the productive economy of the wetlands can no longer compete with the economic pressures of development.

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In addition to providing high biological value, the Grassland wetlands provide substantial direct economic contributions to the local and regional economies. Unfortunately, the productive economy of the wetlands is threatened by population growth and urban encroachment.¹²⁴

Preservation of the GEA requires that fragmentation around the ecosystem stop and the area not decrease in size. A 2001 Land Use and Economics Study prepared for the GWD evaluated the impacts of a compact growth scenario, characterized by development within existing cities, and a "sprawl" scenario, characterized by low density residential development in rural areas and facilitated by subdivisions of agricultural land. According to the study, sprawl development has a significant cumulative adverse effect on the cost to local government of providing services and on revenue and employment in the GEA.¹²⁵ In addition, if non-compatible urban development encroaches on the wetlands so as to reduce its utilization by wildlife, then recreational usage could be expected to decline, and public and private funds for habitat management may be more difficult to obtain.¹²⁶

The DEIR/S must evaluate the Project's potential impact on the continued economic viability of the wetlands economy and how this impact may affect the continued private/public partnership that has preserved the GEA wetlands all these years. A revised DEIR/S must not just acknowledge the potential impacts of the HST on future conservation efforts, but must also identify and evaluate measures to mitigate these impacts.

Despite ongoing conservation efforts, significant portions of the Grasslands still lack permanent protection from development pressures.¹²⁷ In addition, the

¹²⁴ Appendix 8, *Grassland Land Use and Economics Study*. According to the 2001 Land Use and Economics Study, Grassland Ecological Area, Merced County, CA, jointly funded by the Grassland Water District, the Packard Foundation and the Great Valley Center, recreational and other activities related to habitat values within the GEA contributes \$41 million per year to the Merced County economy, and accounts for approximately 800 jobs. Agricultural lands within the GEA also account for approximately five percent (5%) of Merced County's \$1.45 billion agricultural economy.

¹²⁵ *Id.*

¹²⁶ *Id.*

¹²⁷ See Exhibit 3, Ducks Unlimited, Map of Grasslands Ecological Area. 1124-550a

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U.S. Fish and Wildlife Service recently proposed significantly expanding the Grasslands boundary to the east by an additional 45,000 acres.¹²⁸ Acquiring conservation easements over both the existing unprotected areas of the GEA and the additional areas targeted for expansion will require significant additional private-public cooperation and expenditures.

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Several studies have concluded that the best way to protect this investment in the GEA is to prevent any incompatible development from occurring within a two-mile buffer zone around the GEA.¹²⁹ These studies have been previously provided to the HSRA along with a map showing the proposed buffer zone areas. Nonetheless, the DEIR/S fails to describe or evaluate the proposed buffer zone areas. The DEIR/S must be revised to evaluate the Project's impact on the ability to create this buffer zone.

The concept of a buffer or band of appropriate land uses around the GEA was comprehensively addressed in the 1995 *Land Planning Guidance Study* prepared for the GWD. The study showed that a two-mile buffer was substantially more effective than a one-mile buffer in protecting the core, or interior of the refuge.¹³⁰

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The 2001 *Land Use and Economics Study* examined the proposed two-mile buffer zone around the GEA and identified "zones of conflict" where the impacts of urbanization on the GEA would likely occur.¹³¹ In particular, of the six cities in Merced County, Los Banos, Gustine and Dos Palos have city spheres that include a portion of the two-mile GEA band. The study also identified growth in unincorporated areas as impacting the two-mile GEA band. According to the study, in the long term, it is essential that this band contain only resource beneficial or resource neutral uses to protect the integrity of the interior of the refuge complex as a whole.¹³²

¹²⁸ Appendix 16, U.S. Fish and Wildlife Service, Grasslands Wildlife Management Area Proposed Expansion.

¹²⁹ Appendix 8, *Grassland Land Use and Economics Study*, at pp. 11-12; Appendix 9, Thomas Reid Associates, *Grassland Water District Land Planning Guidance Study* (1995), Appendix A (Noss, R.F., *Translating Conservation Principles to Landscape Design for the Grassland Water District* (1994)).

¹³⁰ Appendix 9, Thomas Reid Associates, *Grassland Water District Land Planning Guidance Study* (January 23, 1995).

¹³¹ Appendix 8, *Grassland Land Use and Economics Study*; Appendix 14, Grassland GEA Buffer Zones & Spheres of Conflict Map.

¹³² Appendix 8, *Grassland Land Use and Economics Study*. 1124-550a



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A key point of the 2001 land use study is that agriculture and wetlands are compatible uses to each other. Agriculture is a productive use within the wetlands complex and especially in the two-mile band around the wetlands to protect the core area from the effects of urban encroachment.¹³³ The study found that protection of a two-mile band around the core area with only compatible uses (agriculture and open space) inside the band would best protect wetland uses and their infrastructure.¹³⁴ The study concluded that General Plan policies and case-by-case local land use planning decisions should be directed away from any further encroachment on the GEA.¹³⁵

The proposed Pacheco routes, however, would place the High Speed Rail directly within the zone of conflict where the impacts of growth would negatively affect the GEA. The GWD has already heard reports of land speculation in the Los Banos area. This suggests that even the potential for a Los Banos Station has already endangered plans to limit incompatible development.

As urbanization progresses, fragmentation of agriculture and open space increases, the value of agricultural habitats for wildlife declines, transportation corridors expand, threats to eliminate recreational hunting increase, air and water pollution increase, and local hydrology is modified.¹³⁶ Thus, disruption and degradation of the functions, values and economic benefits of the Grassland ecosystem would be imminent.

Not only is the GEA a unique, diminishing resource in the Central Valley and the State of California, but these wetlands are also critical to the survival of migratory waterfowl, shorebirds and other wildlife. Further loss and degradation of this largest remnant wetland habitat in the Central Valley will not only have a negative impact on local resident wildlife and plant communities, but would also have a negative impact on migratory species that move across the North American continent and among continents during their annual cycle. For these reasons, protection of this unique ecosystem is essential to the preservation and maintenance of the productivity of this important natural heritage.

¹³³ Appendix 8, *Grassland Land Use and Economics Study*.
¹³⁴ *Id.*
¹³⁵ *Id.*
¹³⁶ *Id.*
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The DEIR/S, however, fails to identify the need for the acquisition of additional conservation and buffer zone easements and fails to identify the impact that a Pacheco alignment would have on the ability to protect the agricultural lands surrounding the GEA from conversion to uses incompatible with the long-term protection of the GEA. Such an analysis must be an integral part of any evaluation of the impacts of the proposed Pacheco routes.

XIII. THE DEIR/S IS DEFICIENT BECAUSE IT FAILS TO IDENTIFY SPECIFIC, ENFORCEABLE MITIGATION STRATEGIES TO ADDRESS THE POTENTIAL IMPACTS TO THE GEA FROM INDUCED GROWTH

The DEIR/S is also deficient because it fails to identify mitigation strategies to address these potential growth-inducing impacts. While increased concentration of development around HST stations in downtown locations has the potential to avoid or to minimize some impacts, the opposite is likely to be the case where stations are located in rural areas.¹³⁷ The Cambridge Systematic study suggests that “regulatory style efforts to encourage increased density and a mix of land uses near rail stations have been effective.” However, they also acknowledge that an exception to this would be the stations located outside the downtown areas of the major cities in the Central Valley. Moreover, specific mitigation measures, such as urban growth boundaries, conservation easements, transit-oriented development district planning and zoning, housing density and affordability requirements and the like, directed at avoiding sprawl must be in place *prior* to the HST development.

Studies that have evaluated the relationship of new transit stations and development have concluded that:

...land use benefits from investments in rail transit are not automatic. Rail transit can contribute to positive change, but rarely creates change by itself. The hardware needs software – supportive land use policies such as density bonuses and ancillary infrastructure improvements – if it is to reap significant dividends.¹³⁸

¹³⁷ Appendix 17, *Watt Comments*.
¹³⁸ Appendix 17, *Watt Comments*, Attachment D, p. 15.
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L029-56



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These studies demonstrate that enhanced land use planning and management is essential to securing “smart growth” outcomes.¹³⁹ The DEIR/S, however, fails to identify either the likely growth-inducing impacts from the HST or appropriate mitigation measures to address these impacts. Mitigation measures or criteria directed at avoiding sprawl and protecting the GEA must be identified prior to the selection of a HST alignment through the GEA.

In particular, we support American Farmland Trust’s suggestion that the DEIR/S should adopt mitigation that conditions HST alignments on a regional compact, to which the state would be a partner, that would require local governments to adopt effective growth management measures of their own choosing to minimize conversion of farmland and habitat before any land or interest therein may be acquired for rights of way, stations or other HST facilities.

XIV. THE DEIR/S FAILS TO CONDUCT AN ADEQUATE 4(F) ASSESSMENT OF THE PROJECT’S IMPACT ON THE GEA

The failure to adequately take into account the public investment that has been made to protect this critically important ecological resource also violates Section 4(f) of the Department of Transportation Act. Section 4(f) states that the transportation secretary may not approve a transportation project “on publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State or local significance,” unless “(1) there is no prudent and feasible alternative to using that land; and (2) such program includes all possible planning to minimize harm to such park, recreational area, wildlife and waterfowl refuge, or historic site resulting from the use.”¹⁴⁰

Section 4(f) requires federal agencies to consider alternatives and creates a presumption that public parks and natural resource areas protected by this section may not be used for transportation projects unless truly compelling reasons indicate that no alternative route is possible.¹⁴¹ This requirement applies even if the land

¹³⁹ Appendix 17, *Watt Comments*, Attachment B.
¹⁴⁰ 49 U.S.C.A. § 303, subd. (c).
¹⁴¹ *Citizens to Preserve Overton Park, Inc. v. Volpe* (1971) 401 U.S. 402, 412, 1124-550a

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from the wildlife and waterfowl refuge is not directly taken for the project, if the project will nonetheless impact the wildlife area.¹⁴²

Section 4(f) applies to any lands in which a governmental body has a proprietary interest in the land for public recreation or wildlife and waterfowl conservation purposes, including conservation easements obtained for the purpose of wildlife and waterfowl habitat protection.¹⁴³ Accordingly, it would apply to the more than 64,000 acres of privately managed wetlands in the GEA that are subject to federal conservation easements as well as to the federal wildlife refuges, state wildlife areas and state park within the GEA that would be impacted by this project.

In the case at hand, however, the DEIR/S fails to include privately managed lands subject to federal conservation easements as part of its Section 4(f) analysis. Without even an identification of the federal conservation easement lands in the GEA, there can be no showing made that the DEIR/S complies with 4(f) requirements.

The DEIR/S also fails to meet the “special effort” or assessment of “prudent and feasible alternatives” mandated under Section 4(f). Section 4(f) creates a “specific and explicit bar” to the sacrifice of these public resources for transportation projects; “only the most unusual situations are exempted.”¹⁴⁴ Under Section 4(f), the protection of state and federal natural resource areas and conservation easements take precedence over other Project considerations including cost and directness of route.¹⁴⁵ The DEIR/S must conduct this 4(f) assessment prior to the selection of an alignment that would impact the public GEA lands, even if other alignments may be more costly or less direct. The DEIR/S, however, fails to evaluate any Pacheco Pass alternatives that avoid the public GEA lands.

The DEIR/S also improperly defers analysis of the location, extent and characteristics of impacts to 4(f) resources.¹⁴⁶ The DEIR/S lists numerous additional research and information that would be necessary to provide a complete inventory and description of the 4(f) resources that may be impacted by the

¹⁴² Mandelker, *NEPA Law and Litigation* (2nd Ed. 2001) § 2:19, fn. 1, p. 2-44.
¹⁴³ Mandelker, *NEPA Law and Litigation* (2nd Ed. 2001) § 2:19, p. 2-45.
¹⁴⁴ *Id.*
¹⁴⁵ *Id.*
¹⁴⁶ DEIR/S at p. 3.16-19, 1124-550a

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L029-58

L029-59

L029-60



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Project.¹⁴⁷ The DEIR/S admits that it has failed to describe and evaluate the uses, functions and significance of the 4(f) resources and has failed to describe the potential uses and potential adverse impacts on each resource.¹⁴⁸ L029-60 cont'd

The DEIR/S also improperly defers evaluation of mitigation measures. Instead, the DEIR/S lists "mitigation strategies" which are vague, unenforceable and lack performance criteria. Moreover, the DEIR/S merely lists these strategies and fails to evaluate whether impacts to particular 4(f) resources could be reduced substantially or to a level of insignificance. L029-61

Deferral of this analysis until the project-level EIR is improper because it prevents an informed assessment of alignment alternatives. Prior to selecting a Bay Area to Central Valley alignment, the DEIR/S must: (1) identify all 4(f) resources and evaluate their relative uses, functions and significance; (2) evaluate the Project's impact on the uses, function and significance of each 4(f) resource; (3) identify enforceable mitigation measures to address these impacts; and (4) identify the relative impacts to 4(f) resources after implementation of mitigation measures. Deferring this four-step analysis to the project level precludes an informed assessment of "prudent and feasible alternatives." L029-62

XV. THE DEIR/S FAILS TO ADEQUATELY EVALUATE AND MINIMIZE IMPACTS ON WETLANDS

The DEIR/S fails to comply with the executive wetlands order issued by President Carter, which provides that federal agencies "shall avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds: (1) that there is no practicable alternative to such construction, and (2) that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use."¹⁴⁹ This executive order has been held judicially enforceable.¹⁵⁰ L029-63

¹⁴⁷ DEIR/S at p. 3.16-20.
¹⁴⁸ DEIR/S at p. 3.16-20 – 3.16-21.
¹⁴⁹ Executive Order 11,990, 42 Fed. Reg. 26,961 (1977).
¹⁵⁰ *City of Carmel-by-the-Sea v. United States Dept. of Transportation* (9th Cir. 1997) 123 F.3d 1142, 1124-550a

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Here, the DEIR/S fails to demonstrate that there is no practicable alternative to avoiding new construction in wetlands. Despite assurances from HSRA staff, the DEIR/S fails to evaluate any Pacheco Pass alignment alternative that avoids impacting the public GEA lands. The Altamont Pass alignment, on the other hand, includes several options for substantially avoiding new construction in wetlands, including avoiding a transbay crossing altogether. In addition, an Altamont Pass alignment could also substantially avoid new construction in wetlands by tunneling under the Bay or utilizing the existing Dumbarton Bridge. Pursuant to Executive Order 11,990, these Altamont Pass alignment options must be utilized unless demonstrated impracticable. L029-64

The evaluation of wetland impacts in the DEIR/S is also inadequate because it merely lists the acreage of wetlands within 50 feet of the proposed alignments. The DEIR/S fails to provide any qualitative evaluation of the wetlands. A meaningful analysis requires an examination of the relative uses, functions and significance of the affected wetlands. The DEIR/S also fails to take the analytic step of evaluating what impacts the Project may have on the uses, functions and significance of the affected wetlands both before and after mitigation. L029-65

XVI. DEIR/S FAILS TO EVALUATE THE PROJECT'S IMPACT ON MIGRATING BIRDS

The DEIR/S is also deficient because it fails to evaluate the Project's impact on migrating waterfowl and shorebirds. Despite our extensive comments submitted on this issue during the NOP comment period, the DEIR/S contains absolutely no analysis of potential impacts on migrating birds. The failure to consider the effect of the proposed action on migratory birds is a violation of both CEQA and U.S. Executive Order 13186 L029-66

U.S. Executive Order 13186 requires federal agencies to avoid or minimize the effects of their actions on migratory birds.¹⁵¹ This executive order requires that evaluation of agency projects under NEPA consider the effects of the proposed action on migratory birds.¹⁵² The DEIR/S fails to make this required evaluation with regard to the effect of the Project on the GEA, despite the fact that the GEA

¹⁵¹ Executive Order 13186, 66 Fed. Reg. 3853 (2001).
¹⁵² *Id.*
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provides a nationally and internationally important wintering ground for migratory waterfowl and shorebirds of the Pacific Flyway.

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XVII. THE DEIR/S FAILS TO ADEQUATELY EVALUATE CUMULATIVE IMPACTS

CEQA and NEPA require that the Project's cumulative impacts be evaluated in addition to its direct impacts. The CEQA Guidelines define cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts."¹⁵³ "[I]ndividual effects may be changes resulting from a single project or a number of separate projects."¹⁵⁴ Federal Regulations implementing NEPA also require that the cumulative impacts of the proposed action be assessed. Cumulative impact is defined by the Council on Environmental Quality as an "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions."¹⁵⁵

L029-67

A legally adequate "cumulative impacts analysis" views a particular project over time and in conjunction with other related past, present and reasonably foreseeable probable future projects whose impacts might compound or interrelate with those of the project at hand. "Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time."¹⁵⁶ As the court recently stated in *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 114:

Cumulative impact analysis is necessary because the full environmental impact of a proposed project cannot be gauged in a vacuum. One of the most important environmental lessons that has been learned is that environmental damage often occurs incrementally from a variety of small sources. These sources appear insignificant when considered individually, but assume threatening dimensions

¹⁵³ CEQA Guidelines Section 15355, subd. (a).

¹⁵⁴ *Id.*

¹⁵⁵ 40 C.F.R. § 1508.7.

¹⁵⁶ CEQA Guidelines § 15355, subd. (b).
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when considered collectively with other sources with which they interact.

L029-67
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Here, the DEIR/S fails to assess the cumulative loss of wetlands and biological habitat in light of the threat from the current rate of urbanization of this area. The studies submitted in support of this comment demonstrate that strong land use policies, including the creation of two-mile wide buffer zones, will have to be taken to protect the GEA from projected growth in and around Los Banos. The DEIR/S fails to recognize or analyze the significant cumulative impact the Pacheco Pass alignments may have on the effort to stem urban encroachment and protect the critical habitat in the GEA.

L029-68

In addition, the DEIR/S fails to assess the cumulative fragmentation impacts of aligning the rail project along Henry Miller Road. Henry Miller Road and State Route 152, along with increasing development in the City of Los Banos, already dangerously fragment the GEA. As a result, the portion of the GEA south of Henry Miller Road is considered the most threatened area of this ecosystem. The proposed HST would further fragment this area by adding a barrier fence along this route and by the passing of high-speed trains every five minutes.

The DEIR/S must assess the fragmentation impacts of the HST collectively with the fragmentation impacts of existing and reasonably foreseeable future projects in the Henry Miller Road area. Among the reasonable foreseeable future projects that must be assessed in any cumulative analysis is the proposed SR 152 bypass project, which will further contribute to the continued fragmentation of this area.¹⁵⁷

L029-69

The DEIR/S must be revised to take into account existing and reasonably foreseeable future fragmentation impacts as required under CEQA.

¹⁵⁷ See Appendix 16.
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XVIII. THE DEIR/S FAILS TO SELECT AN ENVIRONMENTALLY SUPERIOR ALTERNATIVE

L029-70

The DEIR/S is legally deficient because it fails to select an environmentally superior alternative.¹⁵⁸ CEQA Guidelines section 15126.6 requires the selection of an environmentally superior alternative to the proposed Project. If the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. Generally, the environmentally superior alternative is that which is considered to result in the generation of the least significant environmental impacts.

Similarly, NEPA requires the identification of an “Environmentally Preferable” alternative. The Council on Environmental Quality (“CEQ”) states that the Environmentally Preferable Alternative is usually “. . . the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources.”¹⁵⁹ Identifying and studying alternatives to a proposal is the key to the NEPA objective preserving and protecting the value of environmental and community resources.

CEQA requires that an EIR provide a discussion of project alternatives that allows meaningful analysis and informed public participation.¹⁶⁰ Evaluation of alternatives should present the proposed action and all the alternatives in comparative form, clearly define the issues and provide a clear basis for choice among the options. In its regulations implementing NEPA, CEQ calls the alternatives analysis section the “heart of the EIS.”¹⁶¹

The DEIR/S improperly defers selection of the environmentally superior alternative to the Final DEIR/S. An EIR is legally inadequate where the draft released for public consumption “hedges on important environmental issues while deferring a more detailed analysis to the final [environmental document] that is

¹⁵⁸ DEIR/S at p. S-17 (selection of the least environmentally damaging practicable alternative “will be identified in the Final Program EIR/EIS”); see also DEIR/S at Ch. 8.

¹⁵⁹ CEQ, NEPA 40 Questions, number 6(a).

¹⁶⁰ *Laurel Heights Improvement Assns. v. Regents of University of California* (1988), 47 Cal.3d 376, 403-404.

¹⁶¹ 40 C.F.R. § 1502.14.
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insulated from public review.”¹⁶² The DEIR/S’ deferral of selection of the environmentally superior alternative deprives the public of the opportunity to evaluate and comment on the selection’s factual and analytical basis. As a result, the very analysis that is at the “heart” of the EIR/S is unlawfully insulated from public review.

L029-70
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The DEIR/S is also deficient because it fails to compare the Altamont Pass alternative in any meaningful way with the Pacheco Pass alternative. The comparison that is provided is muddled and made incomprehensible by the inclusion of multiple Altamont sub-alignment options without any clear indication as to which Altamont sub-alignment options should be compared to which Pacheco Pass alignments. Instead the DEIR/S appears to compare the possible impacts from any and all of the Altamont alignments with the possible impacts from any and all of the Pacheco alignments.

Such a comparison lacks meaning because the impact of the Altamont Pass alignment varies wildly depending upon the proposed sub-alignment decisions. For example, the wetland impacts associated with the Altamont Pass alignment can be substantially avoided by avoiding a transbay crossing or utilizing a transbay tunnel or the existing Dumbarton Bridge crossing.

L029-71

The only way to meaningfully compare the Altamont alignment with the Pacheco alignment is to clearly identify an environmentally superior Altamont alignment and an environmentally superior Pacheco alignment and then compare those two alignments. Without clearly identifying which sub-alignments will be selected, any comparison between the Altamont alignment and the Pacheco alignment is meaningless. The DEIR/S must be revised to clearly identify the environmentally superior Altamont alignment and the environmentally superior Pacheco alignment in order to provide the public a clear basis for the choice between these options.

¹⁶² *Mountain Lion Coalition v. Fish and Game Commission* (1989) 224 Cal.App.3d 1043, 1052.
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XIX. THE ALTAMONT PASS ALIGNMENT IS THE ENVIRONMENTALLY PREFERABLE ALTERNATIVE

L029-72

Even with the numerous flaws and omission in the DEIR/S that appear weighted toward selecting an alignment along Pacheco Pass, the DEIR/S and its appendices show that Altamont is the environmentally superior alignment. The Altamont Pass alignment would have: (1) significantly higher ridership when regional commuter ridership is taken into consideration; (2) lower operational costs; (3) faster travel times; (4) fewer farmland, floodplain and special status species impacts; and (4) fewer *unavoidable* wetland impacts.

The Altamont Pass is the only alternative that would substantially reduce the Project's impact by locating the HST along an already developed corridor. The Pacheco Pass alignment, on the other hand, would create new, intense development pressures in largely undeveloped or sparsely developed areas. The environmentally preferable Altamont Pass alignment would serve more people, cost less to operate, result in less growth-inducing impacts and would avoid massive construction and development in rural areas and wetlands habit. When the flaws and omissions of this document are corrected, we believe that there is no question that the Altamont alignment is environmentally and economically preferable to the Pacheco Pass alignment.

If the Authority is nonetheless determined to push through a Pacheco Pass alignment, alternative routes must be evaluated which would avoid the GEA altogether. Because of the fragility of the already fragmented north-south corridor of the GEA, the Henry Miller Road alignment would be the most environmentally damaging alignment and must be avoided at all costs.

XX. THE DEIR/S MUST BE RECIRCULATED FOR PUBLIC REVIEW

L029-73

An EIR must be recirculated for public comment whenever "significant new information" is added after the public review period or where "substantial changes" are made to the draft EIR.¹⁶³ The Guidelines clarify that new information is significant if "the EIR is changed in a way that deprives the public of a meaningful

¹⁶³ Pub. Resources Code § 21092.1; *Sutter Sensible Planning v. Sutter County Board* (1981) 122 Cal.App.3d 813, 823. 1124-550a

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opportunity to comment upon a substantial adverse environmental effect of the project" including, for example, "a disclosure showing that . . . [a] new significant environmental impact would result from the project."¹⁶⁴ The courts have also held that a deficient analysis in a draft EIR cannot be bolstered by a final EIR unless the final EIR has been circulated for public review.¹⁶⁵

L029-73
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The comments presented above identify numerous issues that have not been addressed at all in the DEIR/S. Indeed, the DEIR/S utterly fails to even acknowledge the existence of the GEA, much less to examine the potential impacts of the Pacheco alignment on this resource of international importance. The response to these comments will, thus, necessarily constitute "significant new information" within the meaning of CEQA, and the public must be provided an opportunity to review the revised DEIR/S.

XXI. CONCLUSION

The Grassland Ecological Area is an irreplaceable, internationally significant, ecological resource. The proposed Pacheco Pass Alignments would bisect this area causing fragmentation and other direct impacts. Furthermore, the growth-inducing impacts of locating a train station in rural Merced County could result in urban encroachment and development pressures that could destroy this ecological treasure.

Prior to choosing the Pacheco Pass as a preferred alignment, the High Speed Rail Authority is required to ensure that it is fully informed about: (1) the project setting as it passes through the Grassland Ecological Area; (2) the potential direct and indirect impacts the Pacheco alignment may have on the biological resources of the GEA and the continued viability of the GEA; (3) whether these impacts can be mitigated and, if so, what mitigation measures to protect this area will be imposed as a condition of choosing the Pacheco alignment as the preferred alignment; and (4) whether other feasible alternatives, such as the Altamont Pass alignment, exist which would substantially or entirely avoid impacting the GEA.

L029-74

¹⁶⁴ CEQA Guidelines § 15088.5.

¹⁶⁵ *Mountain Lion Coalition v. Fish & Game Com.* (1989) 214 Cal.App.3d 1043, 1052. 1124-550a



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The current DEIR/S has failed to make these legally required analyses and thus may not be relied upon to support a selection of the Pacheco Pass alignment as the preferred alignment. The DEIR/S should be revised to address the shortcomings described above and in the attached documents, and it should be re-circulated for public review.

L029-74
cont'd

Sincerely,



Thomas A. Enslow

TAE:bh
Attachments

EXHIBIT A

1124-550a



U.S. Department
of Transportation
**Federal Railroad
Administration**

Comment Letter L029 - continued (Letter 2: Rich Wright, Grassland Water District, October 25, 2007)

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October, 25, 2007

Thomas Enslow
Adams Broadwell Joseph & Cardozo
520 Capitol Mall, Suite 350
Sacramento, CA 95814

RE: Potential Impact of High Speed Train Project on the Grasslands

Dear Mr. Enslow:

Pursuant to your request, I have reviewed the proposed High Speed Train project for its potential impact on the Grassland Ecological Area (Grasslands).

L029-75

I am the Associate Biologist for the Grassland Water District. I have personal knowledge and professional experience concerning the maintenance and protection of the Grasslands ecosystem for wildlife habitat. Encompassing approximately 180,000 acres, the Grasslands is the largest wetland complex in California and contains the largest block of contiguous wetlands remaining in the Central Valley.

The Grassland Ecological Area is of considerable importance because it preserves a variety of habitats critical to the maintenance of biodiversity on a local, regional, national and international scale. The Grasslands constitutes one of the most important migratory waterfowl wintering areas on the Pacific Flyway, and international treaties have recognized the habitat as a resource of international significance.

L029-76

The complex of wetland habitats within the Grasslands is of special significance because the size, juxtaposition, and connectivity of the different wetland types provide a unique opportunity to sustain native migratory and resident wildlife populations. The associated grasslands surrounding the semi-permanent wetlands are also of special importance, because they provide nesting areas for waterbirds, important food sources for grazers such as geese, and essential habitat for endangered species and numerous upland wildlife species. Over one million waterfowl winter in the Grasslands each year and the Grasslands provides

critical habitat for over 550 species of plants and animals, including 47 plant and animal species that are endangered, threatened or candidate species under state or federal law. Species dependent on Grasslands Ecological Area habitat include San Joaquin kit fox, Aleutian Canada [cackling] geese, sandhill cranes, California tiger salamander, vernal pool fairy shrimp, tadpole shrimp, California red-legged frog, the giant garter snake, Swainson's hawks and tri-colored blackbirds.

L029-76
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The Grasslands Ecological Area boundary is a non-jurisdictional boundary designated by the U.S. Fish and Wildlife Service in order to identify an area for priority purchase of public easements for wetland preservation and enhancement. The protection of this area has been the result of private and public investments and partnerships. The Grasslands includes federal wildlife refuges, a state park, state wildlife management areas and the largest block of privately managed wetlands in the state. The Grasslands also includes a large and growing portfolio of federal and state conservation easements.

Despite these ongoing conservation efforts, significant portions of the Grasslands still lack permanent protection from development pressures. In addition, the U.S. Fish and Wildlife Service recently proposed significantly expanding the Grasslands boundary to the east by an additional 45,000 acres. This proposed expansion would require significant additional private-public cooperation and expenditures.

It is my understanding that the Draft Bay Area to Central Valley High Speed Train Program EIR/EIS proposes two Pacheco Pass alignments that would bisect the Grasslands: a Henry Miller Road alignment and a GEA North alignment.

The proposed Henry Miller Road alignment runs directly through the Grasslands Ecological Area, fragmenting a critical southern spur of the Grasslands from the rest of the contiguous wetlands and isolating another small section of wetlands as well. This route cuts across the southern part of the Volta State Wildlife Management Area and the Los Banos State Wildlife Management Area (the oldest Wildlife Management Area in the state - created in 1929) and would obstruct the important wildlife corridor connecting the North and South grasslands.

L029-77

The proposed GEA North alignment would also fragment the Grasslands. The GEA North alignment bisect the southern half of the China Island Unit of the North Grasslands Wildlife Area along State Highway 140.

The selection of a High Speed Train alignment through the Grasslands may pose a substantial threat to the Grasslands' important ecological resources. The proposed Pacheco alignments would both create physical barriers bisecting the Grasslands and would likely result in significant fragmentation impacts on the wetland habitat and wildlife. Bisection of the Grasslands by a high speed rail may



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interfere with critical wildlife corridors, disrupt canals and waterways, degrade water quality, interfere with waterfowl nesting and breeding, induce inconsistent growth in and adjacent to the Grasslands, and increase wildlife mortality rates due to noise, shock and collision impacts.

L029-77
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These impacts could be dire. A 2001 Land Use and Economics Study of the Grasslands Ecological Area commissioned by the Grassland Water District found that "if growth of Los Banos toward the east were to fragment and isolate the North from the South Grasslands, this could have a profound effect on the movement of waterfowl between different parts of the refuges they now utilize on a daily basis." An earlier study entitled "Translating Conservation Principles to Landscape Design for the Grassland Water District" by noted conservation biologist Reed Noss found that "[a]ny further fragmentation of this vulnerable linkage between the north and south units of the Grassland Management Area could well provide the 'final blow' in fragmenting the wetland ecosystem."

I have reviewed the proposed placement of the Henry Miller Road alignment and believe that this alignment option could very well be the "final blow" to the vulnerable linkage between the north and south units. Construction of a few wildlife underpasses alone would likely be insufficient to address this impact, especially along Henry Miller Road. Fragmentation does not require complete separation. Rather, it is a relative and cumulative problem. After some threshold of fragmentation is exceeded, movement of individuals will no longer occur regularly enough to maintain the population of a fragmentation-sensitive species. As discussed above, the area along Henry Miller Road is already dangerously fragmented.

In addition to creating physical barriers, the High Speed Train system may significantly disturb wildlife in the Grasslands as a result of noise and vibration impacts. Studies have shown that noise and vibration disturbances may displace waterfowl from feeding grounds, may cause desertion of nests, may increase energetic costs associated with flight, and may lower productivity of nesting or brooding waterfowl, among other impacts. The potential impacts of High Speed Train noise and vibration on the sensitive wildlife species in the Grasslands should be studied before the Authority commits to an alignment that would run through this area. Because such impacts are directly related to train speed, the speed of the High Speed Train should be restricted as it passes through the Grasslands.

L029-78

The High Speed Train Project also has the potential to cause significant impacts to the complex of natural and man-made channels, which move water through the region's wetlands, establish the waterfowl habitat and support nearly all the Grasslands ecological functions. The Grassland Water District has spent much time and money managing the application of water in the Grasslands. Historically, water quality problems in the Grasslands have had a tremendous

L029-79

impact on wildlife. Imposition of a complete or partial hydraulic barrier across the Grasslands will materially impact the south-to-north water management in the Grasslands, which is essential to maintaining water quality.

L029-79
cont'd

Construction of the High Speed Train and maintenance activities may also alter the present water flow patterns, introduce sediment and create stagnant sections of the wetlands producing essentially permanent water quality degradation. Water quality degradation may significantly impact the Grasslands migratory bird population by altering growth of feed and increasing the risk of avian botulism. At a minimum, construction and maintenance activities should be limited seasonally to avoid interference with migration, nesting and breeding habits.

L029-80

Because of the unique impacts that may be posed by a High Speed Train system, further study is needed to assess whether feasible mitigation measures are even available to mitigate impacts to the Grasslands ecological resources to a level of insignificance. If impacts will be significant and unavoidable even with mitigation, the proposed Pacheco Pass alignments should be avoided altogether.

L029-81

Thank you for the opportunity to comment on this matter.

Sincerely



Rich Wright, Associate Biologist



Responses to Letter L029 (Letter 1: Thomas Enslow, Adams Broadwell Joseph & Cardoza, October 25, 2007; and Letter 2: Rich Wright, Grassland Water District, October 25, 2007)

L029-1

The Authority and FRA acknowledge receipt of the comments on the Draft Program EIR/EIS from Adams Broadwell Joseph & Cardoza, representing the Grassland Water District, the Grassland Resource Conservation District, Grassland Conservation, Education and Legal Defense Fund.

L029-2

Comment acknowledged.

L029-3

Comment acknowledged.

L029-4

Comment acknowledged. The proposed Henry Miller alignment alternative would not run through the Los Banos Wildlife Area Interpretive Marsh but would be adjacent to Henry Miller Road. The preferred alignment alternative and station location options are identified in Chapter 8 of this Final Program EIR/EIS, including avoidance and minimization alternatives. After the completion of this environmental review process, site specific locations and design variations for the selected alignment alternative and station locations will be fully investigated during the Tier 2, project-level environmental review. This will include evaluating design alternatives to the north and south of the current proposed Henry Miller alignment alternative (between the Central Valley and the Pacheco Pass), if this is the selected or approved alternative. See also Section 3.15.5 regarding the Authority's commitment to acquire agricultural, conservation, and/or open space easements for potential impacts in and around the GEA.

L029-5

The Authority and FRA acknowledge the GWD's, CRDC's, and GCELD's opposition to the Pacheco Pass alignment alternatives. As shown in various comment letters in this Final Program EIR/EIS, there is opposition and support from numerous organizations and individuals for the Pacheco Pass and Altamont Pass alternatives. See Response to Comment L001-3 regarding supporters of Altamont Pass and Pacheco Pass network alternatives. See also Standard Response 3 and Chapter 8 regarding identification of Pacheco Pass as the Preferred Alternative.

There are a number of reasons supporters give for preferring the Altamont Pass including: 1) has quicker travel times between Sacramento/northern San Joaquin Valley and the Bay Area, 2) best serves the Central Valley, 3) serves more Northern San Joaquin markets on the Authority's adopted first phase of construction between the Bay Area and Anaheim, 4) has higher ridership potential, 5) has less potential for environmental impacts, 6) avoids impacts on wildlife and sensitive habitat through Pacheco Pass and the GEA, 7) serves a greater population/more population along the alignment, 8) best serves ACE corridor and reduces traffic along I-580, 9) provides better service between the Bay Area and southern California (either reduced frequency is needed on shared Caltrain alignment or HST trains can be split), 10) best serves San Jose because it would be a terminus station and with much faster travel times to commuter markets in the northern San Joaquin Valley, and 11) is less sprawl inducing.

There are a considerable number of organizations, agencies, and individuals who have expressed concern regarding potential impacts on the San Francisco Bay and Don Edwards San Francisco Bay National Wildlife Refuge by HST alternatives via the Altamont Pass using a Dumbarton Crossing. These include the MTC; BCDC; USEPA; USFWS; Don Edwards San Francisco Bay National Wildlife Refuge; Congress members Zoe Lofgren, Michael Honda, Anna Eshoo, and



Tom Lantos; State Senators Elaine Alquist and Abel Maldonado; Assembly member Jim Beale; Santa Clara County; SamTrans; TA; Caltrain JPB; San Francisco Bay Trail Project; San Jose Chamber of Commerce; the City of San Jose; the City of Oakland; and Don Edwards (Member of Congress, 1963–1995). The East Bay Regional Park District has raised concerns in regards to potential impacts on nine regional parks, in particular the Pleasanton Ridge and Vargas Plateau regional parks, and the Alameda Creek Regional Train between Pleasanton and Niles Junction for Altamont Pass alternatives. In addition, the City of Fremont opposes the Altamont Pass, and the City of Pleasanton does not support the Altamont Pass but remains “open” to terminating Altamont alternatives in Livermore. The MTC and Alameda County Supervisor Scott Haggerty also support the investigation of Altamont Pass alternatives terminating in Livermore.

There are a number of reasons supporters give for preferring the Pacheco Pass, including: 1) provides quicker travel times between San Jose/Silicon Valley and Southern California, 2) has more frequent/better service between Bay Area and southern California, 3) has higher ridership potential, 4) has fewer potential environmental impacts, 5) avoids impacts on wildlife and sensitive habitat through Don Edwards San Francisco Bay National Wildlife Refuge, 6) best serves the Caltrain Corridor (San Francisco to Gilroy), 7) provides good HST access for the three-county Monterey Bay area with a south Santa Clara HST station, 8) can serve San Francisco, Oakland, and San Jose without a new crossing of the Bay, 9) provides all service through San Jose/best serves south Bay, and 10) costs less for first phase of system between the Bay Area and Anaheim.

The Preferred Alternative identified in this Final Program EIR/EIS is the Pacheco Pass, Henry Miller alignment alternative. The Authority and FRA note that this alignment has been located next to an existing transportation facility to minimize impacts of the HST system.

The Authority and FRA note that the portion of the HST alignment that would pass through existing wetland areas would be placed on a structure to allow for the continued flow of water in these areas,

and that the system would be designed to avoid or minimize impacts on canals or waterways.

Please see Standard Response 4 regarding growth.

Analysis at the program level determined that the Pacheco Pass network alternatives would potentially result in significant environmental impacts, even with mitigation strategies incorporated. The Pacheco Pass network alternatives, including the alignment along Henry Miller Road, are within areas that have undergone human change, either through the development of buildings and transportation facilities or through ranching, farming, or other agricultural activities. The alignments were located to minimize impacts on both the built and natural environments. The alignment would be adjacent to and along Henry Miller Road.

The use of tunnels and elevated sections of the HST system have been included to minimize impacts on the Diablo Range and through the GEA. Mitigation strategies to minimize impacts on sensitive species and habitat and wildlife movement corridors, such as underpasses, bridges, large culverts, and aerial structures have been included in this Program EIR/EIS. The design of these features will be further delineated during the project-level environmental review and documentation to ensure that their designs and specifications would be sufficient to establish permeability and functional corridors to facilitate wildlife movement and habitat connectivity. These designs would be developed in consultation with the resource agencies.

The Henry Miller alignment alternative would extend through two southern portions of the broadly defined GEA and between, but not across, areas now managed by public agencies. This alignment alternative would be adjacent to the existing Henry Miller Road and would avoid or minimize potential impacts on biological resources. The western portion crossed by the alignment alternative closest to Los Banos would extend adjacent to Henry Miller Road and the San Luis Wasteway and cross Ingomar Road south of the Volta Wildlife Area. This area of the GEA is already bisected by transportation and infrastructure facilities including rail and roadways, and also includes housing development, farm operations, and land under active



agricultural production. The other area of the GEA crossed by the alignment is just south of the CDFG Los Banos Wildlife Area. The alignment would extend approximately 3.3 miles on elevated structure along Henry Miller Road. This area of the GEA is bisected by Henry Miller Avenue/Road, SR 165, Baker Road, Delta Road, Santa Fe Grade, Criswell Avenue, and a number of human-made canals and also includes housing development, farm operations, and land under active agricultural production.

Use of the Henry Miller alignment alternative would not be expected to result in further fragmentation within the GEA because the alignment would be adjacent to Henry Miller Road, an existing facility, and would be elevated for almost half the distance through the GEA. The general area designation of the GEA occurred well after roads, utilities, farms, and residences were already well established, and the HST alignment would follow the existing layout of Henry Miller Road.

The Authority and FRA have not determined the number of wildlife underpasses that would be included as part of this alignment. This will be reviewed in more detail during the preliminary engineering and project-level EIR/EIS phase, if this alignment is selected. The Authority and FRA note, however, that it is premature to conclude that there would only "a few" of these underpasses or that they would be "insufficient." Future project-level analyses would include focused surveys for state and federal threatened and endangered species and detailed identification of habitat, wildlife movement/migration corridors, potential for noise and collision impacts, and wetlands and water resources (including water quality) to further identify impacts and develop site specific mitigation measures for the selected alignment. In addition, engineering design refinements would be undertaken to avoid and/or minimize environmental impacts. This would include evaluating design alternatives to the north and south of the proposed Henry Miller alignment alternative (between the Central Valley and the Pacheco Pass), if the Pacheco alignment is selected. See Section 3.15.5 regarding the Authority's commitment to acquire agricultural, conservation, and/or open space easements for potential impacts in and around the GEA.

The proposed HST system would not be expected to induce growth in the GEA or the Los Banos area because no station or maintenance facility would be located in this area. The closest proposed stations would be in Merced and Gilroy.

L029-6

Contrary to the comments in this letter, the Authority and FRA consider the Draft Program EIR/EIS to be adequate to meet the requirements of NEPA and CEQA and find that recirculation is not warranted. Please see Standard Responses 1 and 2.

L029-7

Comments contained in the attachments are responded to in this Final Program EIR/EIS.

L029-8

Comment acknowledged.

L029-9

Analysis of the GEA was conducted at the program level and will continue in the future Tier 2 analysis, if the Pacheco alignment is selected. See Response to Comment L029-5.

L029-10

The Draft Program EIR/EIS was prepared and circulated to inform the public and public agencies about potential significant environmental effects before decisions were to be made. The Authority and FRA are aware of the CEQA requirements concerning the consideration of alternatives and mitigation measures to reduce significant effects, as well as requirements for findings and a statement of overriding considerations for remaining unavoidable adverse impacts, where appropriate.

L029-11

The Authority and FRA do not agree with the assertion that the Draft Program EIR/EIS is inadequate. The GEA is identified in the Draft Program EIR/EIS in Section 3.15. Additional information regarding



the GEA is provided in this Final Program EIR/EIS in response to the extensive comments provided in this letter. Construction methods and impacts are provided in Section 3.18. Conceptual engineering drawings are provided in the appendices, and the project alternatives are described Chapter 2. Operational aspects of the project are described in Chapter 4, including train frequencies (Section 4.3, page 4-20). Fleet storage/service and inspection/light maintenance facility location options are provided in Chapter 2, Section 2.5.3, of this Final Program EIR/EIS. In the Final Program EIR/EIS, there are no potential maintenance facilities located in the vicinity of Los Banos or the GEA along the Henry Miller alignment alternative. The Merced County Station is clearly identified in Chapter 2 of the Draft Program EIR/EIS as Castle Air Force Base or Merced Downtown. This Final Program EIR/EIS identifies the Merced Downtown station site as the preferred station site to serve the Merced area.

As shown in the Draft Program EIR/EIS Summary, the Authority and FRA provided a carefully organized and intelligent comparison of the 21 network alternatives summarizing an extensive list of HST impact and operational subject areas. Consistent with NEPA and CEQA, this Final Program EIR/EIS identifies the Environmentally Preferred Alternative.

Rather than defer mitigation, the Draft Program EIR/EIS provides an extensive list of mitigation strategies to be approved at the conclusion of this environmental review process and to be reviewed and applied in future project-level environmental documents. This approach is consistent with the program-level environmental review. This approach would commit the Authority and FRA to overall mitigation strategies, with more detailed mitigation measures to be defined during the preliminary engineering and project-level EIR/EIS phases of the project. These detailed measures can be more fully defined only following the more detailed engineering and field reviews that will accompany project-level environmental analyses focused on the Selected Alternative, i.e., the alternative approved at the conclusion of this program environmental review process. Please see Standard Response 5 regarding mitigation strategies.

See Response to Comment S006-15 regarding noise. Identification of the Preferred Alternative is supported by this Final Program EIR/EIS and recirculation of the Draft Program EIR/EIS is not warranted. Please see Standard Responses 1 and 2.

L029-12

The Authority and FRA do not agree with the assertion that the description of the project setting in the Draft Program EIR/EIS is inaccurate and incomplete or that the impact analysis is “tainted.” Extensive data and information were collected and analyzed and are presented in a comprehensive and systematic manner in the Draft Program EIR/EIS for numerous subject areas for all of the Bay Area to Central Valley alignment alternatives and station location options.

As noted in this comment letter, areas of the GEA “currently lack formal protection and, thus, are particularly vulnerable to growth impacts and to purchase by land speculators.” The Authority and FRA understand that protection of these unprotected areas is a goal of the agencies supporting the GEA. While acknowledging this goal, the Authority and FRA note that land use decisions for these areas are largely within the purview of local government agencies. The Authority and the FRA are not able to restrict purchase transactions affecting these lands. The Authority and the FRA have, however, evaluated in this Program EIR/EIS the growth-inducing potential of the proposed HST alignment alternatives and station location options affecting this area and found that very little growth would be expected in this area due to the HST system, since the closest proposed HST station would be in Downtown Merced or Castle Air Force Base (Chapter 2).

The Authority and FRA have not conducted field reviews for biological resources in the GEA or other areas. To do so for all proposed alignment alternatives and station locations under review in this Program EIR/EIS for the Bay Area to Central Valley would have been prohibitively costly and time consuming for this program-level review. Rather, program-level information was applied and consistently analyzed for all alignment alternatives and station location options. Please see Standard Responses 1 and 2.



Section 3.16 categorizes the proximity of 4(f) and 6(f) resources, with the category 0–150 ft receiving a “high” ranking (Table 3.16-1). The publicly owned portions of the GEA (i.e., those portions of the GEA that are designated as 4(f) and 6(f) resources) are appropriately identified as within this first category. Please also see Response to Comment L029-57.

L029-13

The Summary provides a concise description of the multiple alignment alternatives and station location options that are reviewed in the Bay Area to Central Valley environmental document. It compares the environmental impacts among 21 network alternatives, focusing on those impact areas that help differentiate among these alternatives. Key information therefore is not “buried” but rather is included and is brought forward into the Summary to enable a reasoned review and comparison of these alternatives.

L029-14

The Summary of the Draft Program EIS/EIR clearly states the number of trains and the hours of operation assumed for the Bay Area to Central Valley alignments.

Most passenger service is assumed to run between 6:00 a.m. and 8:00 p.m. By 2030, the proposed service would include approximately 124–139 weekday trains in each direction to serve the study region and the statewide intercity travel market, with 91–96 of the trains running between northern and southern California and the remaining 33–43 trains serving shorter distance markets. (page S-5)

For 139 trains over a 14-hour period, the overall average train frequency on a given alignment segment would be approximately 10 trains per hour per direction. The frequency of these trains would vary over the period of the day, with more frequent long-distance trains departing in the peak hours from the major urban origins. These statements have been added to the Summary.

L029-15

Proposed station locations are identified and analyzed in the Program EIR/EIS. Other facility locations are speculative at this level of analysis and will be analyzed as part of the Tier 2 project-level environmental analysis. However, no station or maintenance facility is proposed between Gilroy and Merced. The study area for indirect analysis conducted for wetlands and biological resources is wide enough to capture the associated facilities.

L029-16

The HST system would include intrusion-control features appropriate to each section of the system, taking into account whether the sections are at-grade, elevated, below-grade, or in tunnel, to ensure the safe operation of the train. Details and specifications for intrusion-control features, which may include fencing and noise barriers, would be considered during Tier 2 project-level environmental reviews for each section of the HST system. Wildlife corridors would be of a design, shape, and size to be sufficiently attractive to encourage wildlife use. Overcrossing and undercrossings for wildlife would be appropriately vegetated to afford cover and other species requirements. Functional corridors would be established to provide connectivity to protected land zoned for habitat or for uses that allow and provide for wildlife movement.

L029-17

The preferred Pacheco Pass network alternative would require a crossing of the San Joaquin River on a bridge, but this crossing would be expected to occur 2 miles downstream from the GEA. Therefore, impacts on the GEA from this crossing would be minimal. However, during the project-level reviews, when more information will be known about the HST configuration and bridge designs, potential impacts on water resources and habitats will be addressed in detail for the selected alternative and appropriate mitigation measures will be included as necessary.



L029-18

The Draft Program EIR/EIS notes in the Summary, Chapter 2, and Chapter 7 that the Merced station would either be at Castle Air Force Base or Downtown Merced for the Pacheco Pass (and Altamont Pass) alternatives, depending on the alignment selected in the Central Valley (BNSF vs. UPRR). This Final Program EIR/EIS identifies the Downtown Merced station option as the preferred location for serving the Merced area. Consistent with the current statewide bond measure for 2008, the Authority Board has selected as its first phase the line from Anaheim to the Bay Area, and has stated its intent to subsequently add service to both Sacramento and San Diego. The first phase of the Board-adopted phasing plan includes development of a test track between Bakersfield and Merced. Thus, regardless of whether the Altamont or Pacheco Alignment is selected, the initial phase of the proposed HST system would include service between Bakersfield and Merced in the Central Valley.

L029-19

Assertions regarding the project description being inadequate are addressed in the responses to comments above.

L029-20

The Draft Program EIR/EIS notes that the Highway 140 alignment would not be adjacent to a highway/roadway through much of the GEA boundary, while the Henry Miller alignment alternative would be. The Authority and FRA have found that placement of the HST alignment adjacent to or within an existing transportation right-of-way results in a reduction of impacts, and the majority of the alignments, including the Preferred Alternative identified in this Final EIS/EIR, follow this approach. While cumulative fragmentation effects remain a concern of the commenter, the Authority and the FRA consider fragmentation impacts to be more prevalent and more of a concern for alignment alternatives that do not adjoin an existing transportation corridor. Such a finding is not arbitrary or capricious.

Although the Henry Miller alignment alternative was identified early in the HST Program, this early identification did not, however, place

this alignment in a more or less favorable position, compared to the other alternatives. Contrary to the comment's assertion of an impression of impropriety, the Draft Program EIR/EIS for the Bay Area to Central Valley reflects an objective evaluation of alignment alternatives for the proposed HST system.

The Draft Program EIR/EIS analyzed the potential impacts of the proposed HST system on numerous resources at a program level, regardless of jurisdictional boundaries. While the GEA is not always mentioned specifically, the resources in and around it were analyzed. See Response to Comment L029-5 regarding fragmentation issues.

The discussion in Section 3.15 of this Final Program EIR/EIS (page 3.15-46 of the Draft Program EIR/EIS) has been corrected to indicate that the Henry Miller alignment alternatives would not impact the San Luis National Wildlife Refuge (including the Kesterson unit) in the GEA.

L029-21

As discussed in the previous response, the conclusion that the proposed alignment along Henry Miller Road would not have any impact on the GEA was a misstatement and has been revised. This statement was intended to address only the comparison of alternatives with regard to impacts on the San Luis National Wildlife Refuge (including the Kesterson unit) in the GEA.

L029-22

A review of this entire Final Program EIR/EIS shows that numerous agencies, jurisdictions, organizations, and citizens commenting on this document found the alignment selection was important. Opposition and support for either Altamont or Pacheco alignments were strongly voiced, and evidence was provided to bolster the opposition or support. A recital of impacts on urban communities or on natural resources, ridership, traffic, cost, travel times, or other HST operating differences were offered by each of these jurisdictions, agencies, organizations, or citizen as reasons for selection or rejection of a given alignment. As might be expected, organizations with jurisdiction over natural resource areas near a



proposed HST alignment expressed concerns regarding potential impacts on those resources.

The Final Program EIR/EIS identifies the Pacheco Pass alignment as the Preferred Alternative and identifies the GEA as an area of controversy. Please see Standard Response 3 and Chapter 8.

L029-23

The Authority and FRA disagree that the analysis regarding the GEA is inadequate. The Draft Program EIR/EIS recognized the importance of the GEA (including the San Luis National Wildlife Refuge Complex and other publicly managed lands in the GEA). The Draft Program EIR/EIS analyzed the potential environmental impacts, including construction and operation, of the HST alignment alternatives and stations regardless of land designation. Impacts on resources in and outside of the area designated as the GEA were analyzed and are documented in the Draft and Final Program EIR/EIS. Growth is discussed in Chapter 5.

See Standard Responses 1, 2, and 5 regarding the programmatic decision, nature of a programmatic analysis, and the role of mitigation strategies.

L029-24

Contrary to the assertions in this letter, the Authority and FRA have complied with the requisite program-level analyses and disclosures. The HST Program is related geographically, consists of logical parts in a chain of contemplated action, and will be carried out under the same authorizing statutory and regulatory authority, with similar environmental effects that can be mitigated in similar ways.

This Program EIR/EIS, and the statewide program EIR/EIS, allowed the Authority and FRA to consider broad policy alternatives and program-wide mitigation measures at an early state of the HST statewide and Bay Area to Central Valley HST Program. The Authority and FRA will examine subsequent activities in light of these Program EIR/EIS documents.

The Draft Program EIR/EIS provides an analysis of the potential environmental impacts of the proposed alignment alternatives and

station location options at a level of detail sufficient to compare key differences among the potential environmental effects for the alignment alternatives and station location options. Please see Standard Responses 1 and 2. The Draft Program EIR/EIS identifies potentially significant impacts that may result from both the construction and operation of an HST system in the Bay Area to Central Valley as part of a statewide HST system. The project description and the impact analysis are neither vague nor tentative. Impact analyses were performed comprehensively and systematically for all of the alignment alternatives and station location options and make use of relevant, available information regarding the particular impact area. Mitigation strategies and measures, along with project design elements, lay out actions that will be taken to avoid or reduce the identified impacts. Please see Standard Response 5 regarding mitigation strategies.

The Authority and FRA have sufficiently applied the principles and adequately met the requirements for preparing a program-level document enabling the identification of a Preferred Alternative and allowing for the HST Program to move into the preliminary engineering and project-level environmental review following certification of this document and completion of the environmental review process by the Authority Board and issuance of a Record of Decision by FRA.

L029-25

Please see Responses to Comments L029-23 and L029-24. The Authority and FRA note that each section of Chapter 3 defines criteria for determining CEQA significance, defines those impacts deemed to be significant, and provides the rationale and methodology for that determination. Unavoidable adverse impacts following application of mitigation strategies and measures are described in Chapter 9.

L029-26

A comparative analysis of potential impacts was conducted across all alignment alternatives and station location options. The studies relied on program-level information that was applied consistently



across all alignment alternatives and station location options. This is the appropriate analysis to support the identification of a preferred network alternative alignment. Please see Standard Response 1. During project-level environmental analysis additional information will be available concerning horizontal and vertical alignments and other project feature designs in order to carry out the location-specific field studies identified in the comment. These studies will be conducted at the Tier 2 project level. See Responses to Comment L029-5 regarding potential impacts on the GEA, and to Comment L029-11. Section 3.15 of the Final Program EIR/EIS has been updated with regard to the California tiger salamander.

L029-27

The Henry Miller alignment alternative is more than ½ mile from the Volta Wildlife Area and does not cut across the southern part of this wildlife management area.

For comments related to fragmentation, wildlife corridors, and mitigation strategies, see Response to Comment L029-5.

The GEA North alignment alternative was not identified as the preferred alignment and is not part of the preferred Pacheco Pass network alternative. Please see Standard Response 3 and Chapter 8.

The HST would restore drainage and irrigation facilities to ensure their functionality is similar to or better than the existing condition.

Access routes will either be preserved or rerouted to provide full access.

The Henry Miller alignment alternative was developed so as not to result in a new transportation corridor, which would provide additional barriers to wildlife movement and fragmentation of habitat. By colocating with an existing transportation facility (Henry Miller Road), potential habitat fragmentation impacts and wildlife movement impacts are reduced.

The mitigation strategies identified in the Program EIR/EIS are appropriate for a program-level document. Please see Standard Response 5. More detailed wetland and wildlife movement

mitigation will be provided as necessary in the Tier 2 project-level documents commensurate with the detail of design.

L029-28

The Henry Miller alignment alternative would not bisect any significant water resource. The Draft Program EIR/EIS states that aerial structures would be used to avoid impacts on the flow and maintenance of water in streams, channels, canals, and sloughs, and impacts on waterway habitats. Impacts of specific crossings will be addressed in more detail in the Tier 2 project-level environmental analysis when additional design details for proposed HST facilities would be available. Surface waters potentially affected are listed in Appendix 3.14.A.

L029-29

As noted in the Draft Program EIR/EIS, the HST project would be fully grade separated. The HST system would provide for appropriate grade-separate vehicular access points along the selected alignment alternative, and project-level environmental analysis will consider these access issues in greater detail, when additional design and engineering information is available for the features of the HST system.

L029-30

Concerns regarding potential for noise impacts from the HST system to disturb wildlife along an alignment crossing the designated GEA are acknowledged. More detailed analysis of potential noise impacts will be provided during project-level environmental review, when more detailed information will be available concerning system design and placement, and alignment variations will also be further considered, should the Pacheco Pass alignment alternative be selected. There will be very limited train horn noise because the train will not be crossing at-grade crossings. Most of the noise will be wind noise from the train and the catenary. More detailed analysis of impacts and mitigation will be provided in project-level documents.



L029-31

The analysis of the “shock wave effect” would require detailed train and alignment design and placement information, and will be provided at the Tier 2 project-level phase.

L029-32

Both wildlife protection features and potential mortality impacts for wildlife species will be analyzed in more detail in project-level environmental studies. The comment makes reference to “subterranean tunnels to allow wildlife passage,” cited to be on page 3.15-31 of the Draft Program EIR/EIS. This wording does not appear on that page or any part of this section. Instead, the program-level wildlife movement/migration corridors mitigation states that wildlife crossing features would be of a design, shape, and size sufficient to encourage wildlife use. Functional corridors would be established to provide connectivity and allow wildlife permeability. The process that would be used for the design of these wildlife movement corridors would include identification of habitat areas the corridor would connect, identification of species present and likely to use these corridors, evaluation of relevant needs of each selected species and along with a monitoring program. This mitigation strategy provides direction for the future development of specific mitigation measures in the Tier 2 project-level document.

Effects on specific species at risk will be addressed in the Tier 2 project-level document and appropriate mitigation measures defined based on the mitigation strategy identified above. Mitigation measures for species barriers, where appropriate, will also be detailed.

As noted in Section 2.3.2:

the HST system would be a fully grade-separated and fully access-controlled guideway with intrusion monitoring systems. This means that the HST infrastructure (e.g., mainline tracks and maintenance and storage facilities) would be designed to prevent access by unauthorized vehicles, persons, animals, and objects. The capital cost estimates include allowances for appropriate barriers (fences and walls), state-of-the-art communication, access-control, and monitoring and detection systems.

L029-33

Typical construction worksite characteristics and sequences are reviewed in Sections 3.18.4 and 3.18.5. More detailed analyses will be performed during the project-level EIR/EIS analysis, when more detailed design and location information will be available for the selected HST alignment, and the construction, operation and maintenance of the HST system will be addressed.

L029-34

This comment assumes construction techniques for the HST system that go beyond the current level of information for the project. The Draft Program EIR/EIS acknowledged the potential for significant impacts on wetlands and other waters, including alteration of water flow patterns, introduction of sediments, and water quality degradation. After the selection of the Preferred Alternative and once the project design has advanced to the appropriate level, the Tier 2 project-level document will analyze these impacts in more detail appropriate to each section of the HST system, whether at or below grade or on aerial structure, and will provide more detailed mitigation to avoid or minimize such impacts.

For example, in-line construction (i.e., use of new rail infrastructure as it is built) would be used in various areas to transport equipment to/from the construction site and to transport excavated material away from the construction to appropriate reuse or disposal sites.

L029-35

Rather than defer mitigation, the Draft Program EIR/EIS provides an extensive list of mitigation strategies that will be reviewed and applied at the project-level. These strategies were identified to avoid or minimize significant adverse environmental effects. The identified strategies have been successfully applied to other projects in the state. They will be enforceable and capable of being accomplished in a successful manner within a reasonable period of time. See also Standard Response 5 concerning mitigation.

This mitigation strategies approach is consistent with the program-level environmental review. This approach would commit the



Authority and FRA to overall mitigation strategies at the conclusion of this environmental review process, with more detailed mitigation measures to be defined and applied during the preliminary engineering and project-level EIR/EIS phases of the project. These detailed measures can be defined only following more detailed engineering and field reviews focused on the selected Preferred Alternative.

L029-36

In addition to the reference cited in the comment, Sections 3.18.4 and 3.18.5 provide a more detailed description of typical construction worksite characteristics and sequences.

L029-37

Section 3.4.5 (subsection A) on page 3.4-22 gives some specific examples of potential mitigations for noise and the assumed length for the barrier for the Bay Area segments (Table 3.4-7). Subsection B gives some specific examples of how vibration can be mitigated during construction. More specific mitigation will be presented during the project-level environmental analysis.

L029-38

The overall energy impacts of the overall HST system were determined to be beneficial; the mitigation strategy cited provides direction for additional energy benefits to be identified at the Tier 2 project level when more design and operational details are known.

L029-39

As is common in the project planning phase, conceptual engineering (i.e., alignment and station locations) will be refined during the preliminary engineering phase of the project, allowing for a more detailed environmental review in project-level documents. Local land use plans will clearly play a role in the alignment and station location refinements during this phase of the program.

As shown in the public comments, local jurisdictions have already proposed and agreed to work with the Authority and FRA during this engineering refinement and project-level environmental review

phase. Please see Comment Letter L027 from the City of Gilroy for example.

L029-40

While the comment expresses dissatisfaction with the program-level analysis, it is not possible to provide a more detailed analysis until the project is designed. Therefore, the document provides mitigation strategies, which will be further refined in the Tier 2 project-level document. Please See Standard Responses 1 and 2.

It cannot be determined why the comment expresses dissatisfaction with the proposed mitigation strategy that requires consultation with resource agencies.

The development of a biological resource management plan according to the specific guidelines provided in the mitigation strategies listed in Section 3.15 is the appropriate vehicle for directing future mitigation measures at the project level.

L029-41

At a program level, it is not possible to be more specific about mitigation for construction methods and facility designs. This will be appropriately addressed in the Tier 2 project-level document.

L029-42

The mitigation for groundwater cited in this comment is a good example of program-level mitigation strategy.

L029-43

As part of the preliminary engineering and project-level environmental review process, detailed mitigation measures will be developed for specific impacts on 4(f) and 6(f) resources, particularly those within 150 ft of the alignment as identified in this Program EIR/EIS. Please see Response to Comment L029-57.

Avoidance or minimization of impacts thorough alignment refinements will first be investigated. Remaining impacts will be evaluated on a case-by-case basis to determine which of the overall strategies can and should be applied. Design practices could include



refinements to the physical features of the alignment in proximity to the resource to better blend into the overall environment. Any impacts on access/egress will be addressed by replacing or enhancing access to ensure that adverse impacts on facility access will be minimized.

L029-44

See Response to Comment L029-35, and Standard Response 5.

L029-45

The comment suggests a series of mitigation measures to be considered to address potential impacts on resources in the GEA. No Los Banos station is included in the Preferred Alternative identified in the Final Program EIR/EIS. Additionally, no HST maintenance station in the Los Banos area is included in the identified Preferred Alternative. To the extent the listed measures are within the authority of the Authority and the FRA and have not been previously addressed, they will be considered, along with the mitigation strategies set forth in the Final Program EIR/EIS that are approved by the Authority and the FRA, during future project-level environmental studies, when further design information is available, should the Pacheco Pass be selected and approved as the Preferred Alternative. See also Response to Comment L029-35, Standard Response 5, and the discussion concerning the Los Banos area in Chapter 8, Section 8.6.2, of this Final Program EIR/EIS.

L029-46

The Authority and FRA disagree that the growth-inducement analysis is inadequate. Refer to Standard Response 4 regarding growth. This Final Program EIR/EIS identifies the Merced Downtown location as the preferred station location option for the Merced area. As noted in the letter, an HST station is not included in Los Banos. The potential to induce growth in the GEA or the Los Banos area would be very limited because no station or maintenance facility would be located in this area. See Chapter 8, Section 8.6.2, regarding mitigation measures for potential HST impacts through the GEA.

See also Standard Response 3 regarding the identification of the Pacheco Pass as the Preferred Alternative.

L029-47

The Merced County station is clearly identified in Chapter 2 of the Draft Program EIR/EIS as Castle Air Force Base or Merced Downtown. This Final Program EIR/EIS identifies the Merced Downtown location as the preferred station location option for the Merced area. As noted in the letter, an HST station is not included in Los Banos.

L029-48

As noted in the Draft Program EIR/EIS, a station is not included for Los Banos. See Chapter 8, Section 8.6.2, regarding mitigation measures of potential HST impacts through the GEA. Therefore, the HST ridership projections did not include a Los Banos station, and ridership was projected using the identified Merced station.

L029-49

As noted in the Draft Program EIR/EIS, a station is not included for Los Banos. See Response to Comment L029-46.

L029-50

As noted in the Draft Program EIR/EIS, a station is not included for Los Banos. See Response to Comment L029-46.

L029-51

See Response to Comment L029-47.

L029-52

A fleet storage/service and inspection/light maintenance facility is not proposed in or near Los Banos or the GEA. See Response to Comment L029-11.

L029-53

Please see Standard Response 4 regarding growth.

L029-54

See Response to Comment L029-53 regarding growth inducement.

L029-55

The placement of the proposed HST alignment adjacent to an existing roadway (along Henry Miller Road) is intended to reduce potential fragmentation impacts and impacts on resources within the designated GEA. As discussed in Response to Comment L029-53, the HST would not induce growth in or around the GEA because no station or maintenance facility is proposed. See also Response to Comments L029-12 and L029-45.

L029-56

The Authority and FRA disagree that the growth-inducement analysis is inadequate. Please see Standard Response 5 regarding mitigation measures. Also see Chapter 5 regarding growth inducement and Standard Response 4.

L029-57

As part of the development of all alignments, the Authority and FRA have pursued ways to avoid 4(f) and 6(f) resources. Federal wildlife refuges, state wildlife areas, and state parks along the alternative alignments, including in the GEA boundary, are reviewed and identified in the Draft Program EIR/EIS 4(f) and 6(f), Section 3-16. Please note that, for some alignments, these resources cannot be avoided (e.g., the Don Edwards Wildlife Preserve for the Dumbarton San Francisco Bay crossing).

The Authority and FRA are aware of the Section 4(f) and 6(f) regulatory requirements, which are identified in Section 3.16. In addition, as noted in Section 3.16 of this Final Program EIR/EIS:

Implementing regulations recently issued by the FHWA and FTA describe the appropriate documentation of Section 4(f) in a programmatic (Tier I) EIS: "When the first-tier, broad-scale EIS is prepared, the detailed information necessary to complete the Section 4(f) approval may not be available at that stage in the development of the action. In such cases, the documentation should address the potential impacts that a proposed action will

have on Section 4(f) property and whether those impacts could have a bearing on the decision to be made." [23 CFR 774.7(e)(1)]

The methodology used for the 4(f) and 6(f) evaluation in Section 3.16 of the Draft Program EIR/EIS is consistent with these implementing regulations and is appropriate for a program-level review of the multiple alignment alternatives evaluated. The Draft Program EIR/EIS identifies the proximity of the HST alignments to the identified 4(f) and 6(f) resources, providing an indication of the likelihood that the alignment would affect (use) the resource. Section 3.16 identifies 4(f) and 6(f) resources within 900 ft of an alignment, and resources within 150 ft of the alignment are identified as a potential high impact with direct effects on the resource.

As noted in Section 3.16 of this Final Program EIR/EIS:

The goal at this tier of environmental analysis is to identify Section 4(f) and 6(f) resources on or close to the proposed HST Alignment Alternatives and to assess the relative differences in potential impacts of the alignment alternatives on these resources. At this stage of environmental review, it is not practical to study or measure the severity of each potential impact identified. No fieldwork was conducted as part of this analysis and no Section 4(f) determination is practical or required for this Program EIR/EIS. At the conclusion of this programmatic environmental process, corridor alignments and station locations will be selected for further design and environmental review, however no construction and therefore no uses of Section 4(f) and 6(f) resources will be approved. In subsequent project-level analysis, Section 4(f) and 6(f) resources, potential uses and impacts, and appropriate mitigation measures would be evaluated in detail and determinations made. Subsequent project-level analysis of Section 4(f) and Section 6(f) resources will include consideration of publicly owned and managed lands, as well as lands subject to conservation easements acquired by public agencies along the selected Preferred Alignment.

With respect to Federal conservation easements, Federal Highway Administration guidance (FHWA Section 4(f) Policy Paper, March 1, 2005), provides that easements acquired by the United States are



subject to Section 4(f) as wildlife and waterfowl refuges when they are part of the National Wildlife Refuge System. As FHWA notes for the purposes of Section 4(f), a wildlife and waterfowl refuge is publicly owned land (including waters) where the major purpose of such land is the conservation, restoration, or management of endangered species, their habitat, and other wildlife and waterfowl resources. In determining the major purpose of the land, consideration must be given to (1) the authority under which the land was acquired, (2) land with special national or international designations, (3) the management plan for the land, and/or (4) whether the land has been officially designated by a federal, state or local agency having jurisdiction over the land, as an area for which its major purpose and function is the conservation, restoration, or management of endangered species, their habitat, or wildlife and waterfowl resources. Thus, other lands subject to conservation easements may be subject to Section 4(f) to the extent they meet this standard. Should conservation easement lands along the Preferred Alternative Alignment be determined to be resources under Section 4(f) or 6(f), the actual “use” of these resources will be determined, consistent with Section 4(f) and 6(f) requirements. The Authority and the FRA will consider the ownership, significance and major purpose of these properties in determining if Section 4(f) should apply and will review existing management plans and consult with the Federal, State, or local officials having jurisdiction over the property. Additional avoidance options (e.g., alignment refinements) will be reviewed as part of the preliminary engineering process.

In the event that “use” of lands identified as 4(f) or 6(f) resources cannot be avoided, the Authority and FRA will ensure that “all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use” has occurred.

L029-58

Please see Response to Comment L0029-57.

L029-59

Impacts on and use of 4(f) and 6(f) properties were clearly a consideration in the identification of the Preferred Alternative (e.g., use of the federally owned Don Edwards Wildlife Preserve would be required for a San Francisco Bay Crossing at Dumbarton). The program-level analysis of impacts to 4(f)/6(f) resources generally supports the selection of the preferred Pacheco Pass (San Francisco and San Jose Termini) network alternative, although all network alternatives have potential to impact 4(f)/6(f) resources.

As part of the preliminary engineering and project-level environmental review, the Authority and FRA are prepared to review alternative routes for Pacheco Pass that would avoid the GEA altogether, provided that such alternatives would still meet the project’s purpose and need and would not introduce new substantial unavoidable adverse impacts. The Authority and FRA note that few alignment alternatives adjacent to an existing transportation right-of-way appear to be available south of Henry Miller Road; and in the experience of the Authority and FRA, alignments that are not adjacent to or within an existing right-of-way have proven to introduce new and difficult adverse environmental impacts.

L029-60

Please see Response to Comment L029-57.

L029-61

Please see Response to Comment L029-57 and Standard Response 5. The information provided in Section 3.16, “Section 4(f) and 6(f) Resources,” of the Draft Program EIR/EIS allows for an informed identification of a Preferred Alternative. It allows for an overall comparison among the alternatives of the likelihood that these resources will be used. In fact, avoidance of 4(f) and 6(f) resources played a role in the identification of the Preferred Alternative, which would not pass through the Don Edwards Wildlife Refuge.



L029-62

The information provided in Section 3.16, Section 4(f) and 6(f) Resources, of the Draft Program EIR/EIS allows for an informed identification of a Preferred Alternative. It allows for an overall comparison among the alternatives of the likelihood that these resources would be used. In fact, avoidance of 4(f) and 6(f) resources played a role in the identification of the Preferred Alternative, which would not pass through the Don Edwards Wildlife Refuge.

L029-63

The EPA and USACE concurred that the Pacheco Pass Network Alternative, San Francisco and San Jose Termini, would most likely yield the LEDPA. As noted in Chapter 8 of this Final Program EIR/EIS, Pacheco Pass is the Preferred Alternative and the Environmentally Superior Alternative identified in this Final EIS/EIR. The rationale for the Preferred Alternative and Environmentally Superior Alternative is provided in this chapter. Please also see Standard Response 3 regarding the identification of the Pacheco Pass as the Preferred Alternative.

L029-64

See Response to Comment L029-63 regarding concurrence that the Pacheco Pass Network Alternative that is identified as the Preferred Alternative in the Final Program EIR/EIS is also likely to yield the least environmentally damaging practicable alternative for purposes of protecting and avoiding impacts on wetlands.

L029-65

The Program EIR/EIS evaluated the potential direct (50 ft each side of centerline) and indirect (1,000 ft each side of centerline) wetlands impacts. This is an appropriate analysis methodology for a program document as approved by the EPA. Once a more specific horizontal and vertical alignment and project feature footprints are established during project design, the project-level environmental review documents will analyze potential impacts on wetlands in further

detail, including considering uses, functions, qualitative values and significance.

L029-66

Mitigation strategies were developed based on the broad provisions in the Migratory Bird Treaty Act. These mitigation strategies will be refined and considered in greater detail during the Tier 2 project-level environmental analyses.

L029-67

Comment acknowledged.

L029-68

See Response to Comment L029-53 regarding growth inducement.

L029-69

By collocating the HST with Henry Miller Road, the project would minimize potential habitat fragmentation and would reduce or avoid contributions to cumulative impacts related to habitat fragmentation in the Los Banos area. The SR-152 bypass project has been added to the cumulative impacts discussion in Section 3.17 of this Final Program EIR/EIS. See also Response to Comment L029-5 regarding fragmentation.

L029-70

The Environmentally Superior Alternative is identified in the Summary and Chapter 8 of this Final Program EIR/EIS.

L029-71

The Authority Board directed staff to compare alignment and station locations options identified in the Bay Area to Central Valley study area. The EIR/EIS complies with this directive and evaluates not one but multiple alignment alternatives for Altamont Pass and Pacheco Pass. Rather than muddy the waters, this approach provided for the full disclosure and comparison of the environmental impacts and project benefits for multiple alternatives, consistent with the Authority Board directive.



As noted in the letter, impacts do vary among the Altamont and the Pacheco alternatives, and the differences among these alternatives are described in the Draft Program EIR/EIS. The alternatives were not screened in advance but rather included throughout the entire analysis. This is not a document deficiency but rather a public disclosure of the environmental effects associated with a range of reasonable alternatives in the Bay Area to Central Valley.

Costs and impacts for the tunnel alignments across the San Francisco Bay are provided in the Draft Program EIR/EIS. As noted in the Draft Program EIR/EIS, the existing Dumbarton Bridge crossing cannot be used as part of the HST system.

This approach provided for an objective review of the range of alternatives to provide HST service to the Bay Area to Central Valley. Please see Standard Response 1.

L029-72

As noted in Chapter 8 of this Final Program EIR/EIS, Pacheco Pass is the Preferred Alternative and Environmentally Superior Alternative identified in this Final EIS/EIR. The rationale for the Preferred Alternative and Environmentally Superior Alternative are provided in this chapter. Please also see Standard Response 3 regarding identification of Pacheco Pass as the Preferred Alternative. Overall, the Pacheco Pass alternative serving San Francisco and San Jose termini best meets the purpose and need for the proposed HST system.

As part of the preliminary engineering and project-level environmental review, the Authority and FRA are prepared to review alternative routes for Pacheco Pass that would avoid the GEA altogether, provided that such alternatives would still meet the project's purpose and need and would not introduce new substantial unavoidable adverse impacts. The Authority and FRA note that few alignment alternatives adjacent to an existing transportation right-of-way appear to be available south of Henry Miller Road; and in the experience of the Authority and FRA, alignments that are not adjacent to or within an existing right-of-way have proven to introduce new and difficult adverse environmental impacts.

L029-73

The Authority and FRA are aware of the legal requirements for document recirculation and have determined that recirculation of the Draft Program EIR/EIS is not necessary. The document does identify the existence of the GEA in Section 3.16, pages 3.16-11 and 3.16-12. See Standard Responses 1 and 2 regarding the programmatic decision and nature of a programmatic-level of analysis and tiering under NEPA and CEQA.

L029-74

Please see Response to Comment L029-73 regarding recirculation.

As noted above, no station is proposed for rural Merced County. The Pacheco Pass is identified in this Final EIS/EIR as the Preferred Alternative, and the Authority and FRA have proposed mitigation measures for the alignment along Henry Miller Road; but the Authority and FRA are prepared to review with representative of the GEA additional mitigation measures that may be appropriate to further mitigate potential adverse environmental impacts.

Please see Response to Comment L029-72 regarding the willingness of the Authority and FRA to review alignments that would avoid the GEA altogether.

L029-75

The Authority and FRA acknowledge receipt of Mr. Enslow's letter regarding potential HST impacts on the GEA.

L029-76

Comment acknowledged.

L029-77

The Henry Miller alignment alternative is more than ½ mile from the Volta Wildlife Area and does not cut across the southern part of this wildlife management area.

For comments related to fragmentation, wildlife corridors, and mitigation strategies see Response to Comment L029-5.



The GEA North alignment alternative was removed from consideration and is not part of the preferred Pacheco Pass network alternative.

The HST would restore drainage and irrigation facilities to ensure their functionality is similar to or better than the existing condition.

The Henry Miller alignment alternative was developed so as not to result in a new transportation corridor, which would provide additional barriers to wildlife movement and increased fragmentation of habitat. By collocating the proposed HST alignment with an existing transportation facility (Henry Miller Road), a new fragmentation and wildlife movement impact would not result.

L029-78

Detailed noise and vibration studies related to biological resources will be required and conducted as part of the Tier 2 project-level environmental analysis.

L029-79

The Draft Program EIR/EIS acknowledged the potential for significant impacts on wetlands and other waters, including alteration of water flow patterns, introduction of sediments, and water quality degradation. Once the project design has advanced to the appropriate level, the Tier 2 project-level document will analyze these impacts in greater detail and also will provide more detailed mitigation to avoid or minimize such impacts.

L029-80

See Response to Comment L029-79.

L029-81

This comment provides a summary of previous comments, which are addressed above.



Comment Letter L029 - continued (Letter 3: Karen G. Weissman, Thomas Reid Associates; August 27, 2004)

EXHIBIT 4

Dr. Karen Weissman Comments



August 27, 2004
TRA File: LGWD

Mr. Thomas Enslow
Adams Broadwell Joseph & Cardozo
651 Gateway Boulevard, Suite 900
South San Francisco, CA 94080

RE: California High-Speed Train Program EIR/EIS

Dear Mr. Enslow:

I have reviewed the subject EIR/EIS on the proposed high speed rail project, specifically in regard to the biological impacts to the Grassland Ecological Area (GEA) and Grassland Water District (GWD) of Merced County.

L029-82

I. Introduction - The Draft EIR/S Fails to Analyze Its Impact on the Grassland Ecological Area (GEA)

Draft EIR/S contains no mention of the unique resources of the GEA or GWD.

The Draft EIR/S fails to mention or analyze the project impact specifically on the Grassland Ecological Area (GEA). In its discussion of the environmental setting, the Draft EIR/S mentions in general terms the number of acres of wetland in the Merced County area and lists plant and animal species of concern based on the California Natural Diversity Data Base (CNDDDB) that are within the pre-defined impact zone of 1/4 mile on either side of the track or a train station.

L029-83

Importance of the GEA

The Draft EIR/S has vastly underestimated the project impacts in Merced County because it fails to recognize the special importance of the Grassland Ecological Area (GEA) and Grassland Water District (GWD). The Draft EIR/S does not even mention the existence of the GEA or GWD.

The GEA includes a total area of 179,474 acres, which encompasses two federal wildlife refuges, three state wildlife areas and privately owned wetlands, including duck clubs. The Grassland Water District supplies water to the 5 public refuges and 159 duck clubs in on 51,537 acres within the greater GEA area. This area of year-round and seasonal wetlands, riparian corridors and native grasslands provides habitat for more than 550 species of plants and animals, including 47 species that have been federally listed as threatened, endangered or sensitive (GWD, 1997). Over a million waterfowl regularly are found in the GEA during the winter months.

L029-84

Conservation Planning and Implementation Environmental Impact Analysis
Geographic Information Systems Wetland Delineation Biological Surveys



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The GEA is of considerable importance because it preserves a variety of habitats important to the maintenance of biodiversity on a local, regional, national and international scale. It has been estimated that 30 percent of the Central Valley migratory population of waterfowl use this area for winter foraging. (U.S. Bureau of Reclamation, Final NEPA EA, Refuge Water Supply Long-Term Water Supply Agreements (January 2002).) The GEA is a major wintering ground for migratory waterfowl and shorebirds of the Pacific Flyway and the Western Hemisphere Shorebird Reserve Network has designated the GEA as one of only 22 international shorebird reserves in the world. (Fredrickson, Leigh H. and Laubhan, Murray K, Land Use Impacts and Habitat Preservation in the Grasslands of Western Merced County, CA (February 1995), p.3.)

In addition to providing critical biological habitat, the Grassland wetlands provide substantial direct economic contributions to the local and regional economies. The GEA receives over 300,000 user visits per year for hunting, fishing and non-consumptive wildlife recreation. (Id. at p. 14). Recreational and other activities related to habitat values within the GEA contributes \$41 million per year to the Merced County economy, and accounts for approximately 800 jobs. (Id. at p. 21.)

The GEA also includes a large and growing portfolio of federal, state and private conservation easements. (Grasslands Water District, Land Use and Economics Study: Grasslands Ecological Area (July 2001), pp. 11-12.) Through 1998, conservation easements had been acquired on over 64,000 acres at a total cost of over \$28 million. (Id.)

The omission of the GEA as a major zone of biological concern is a major flaw in the Draft EIR/S since it results in the incomplete assessment and an underestimation of the direct and indirect impacts of the high-speed rail project on this key resource area. The entire assessment of biological impacts to the Merced County area in the EIR/S is limited to just the following paragraphs:

“The southern route across the Pacheco Pass, which follows SR-152, would impact approximately 100,000 more linear ft (30,480 m) of jurisdictional waters than the northern tunnel option (Diablo Range direct). The HST segment using the northern tunnel under Henry Coe option would involve the fewest wetland impacts. (Page 3-15-22)”

“Segments that would be placed at grade (cut and fill) would require fencing the HST alignment for the safety of humans, as well as protection from train-wildlife collisions, and would have the potential to interfere with wildlife movement. Placement of overpasses, underpasses, and tunnels along these alignments could provide for movement of wide-ranging and migratory species. The proposed HST Alternative would potentially impact a relatively small percentage of wetlands compared to the Modal Alternative (from approximately 2.8% for the Bay Area to Merced segment with the Oakland to San Jose East plus tunnel under Henry Coe State Park. (P. 3-15-22).”

The foregoing is an extremely cursory and incomplete assessment of the project’s potential effects on the sensitive biological resources of the GEA. A complete assessment must include construction, operations, and induced growth impacts on wildlife species, notably the

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many species of resident and migratory waterfowl, as well as other sensitive mammalian wildlife such as the federally endangered San Joaquin kit fox, as well as badger, and tule elk.

L029-85
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II. Construction impacts of the HST on the GEA must be addressed in the EIR/S (truck traffic, equipment storage and laydown areas, noise of pile-driving and other heavy equipment operation , disruption of water supply deliveries)

L029-86

The Draft EIR/S needs to consider construction impacts on the wetlands complex including the impacts of truck and other vehicular traffic, equipment storage and laydown areas, blasting, and pile-driving, as well as temporary disruption of water supply deliveries.

Impacts of vehicular traffic include collisions with animals, noise and dust. The Draft EIR/S should consider the amount of time the project will be under construction within the GEA and estimate the likely number of animals that could be killed in collisions with construction vehicles. This is an impact that is largely unmitigatable. The impact is exacerbated because the construction vehicles must travel on roads in the wetlands that normally receive very little traffic of any kind.

L029-87

Equipment storage and laydown areas may be located in sensitive habitat areas containing rare plants, mammal dens or bird’s nests. These areas will destroy habitat and disrupt the activities of animals using the habitat.

L029-88

Noise

Noise sources include blasting, pile driving, and trucks traveling, loading and unloading, motors, compressors etc. or other heavy equipment that will operate out in the open for construction of the rail bed and support structures for the train. These noise sources will impact wildlife in the vicinity of the construction zones for a considerable period of time as construction progresses.

Noise impact on wildlife is an area of active study at present. For example, noise disturbances displace waterfowl from feeding grounds, cause desertion of nests, increase energetic costs associated with flight, and lower productivity of nesting or brooding waterfowl, among other impacts. (Human Disturbances of Waterfowl: Causes, Effects, and Management, URL:http://www.nwrc.usgs.gov/wdb/pub/wmh/13_2_15.pdf.) (e.g. Carl E. Korschgen, U.S. Fish and Wildlife Service, Northern Prairie Wildlife Research Center, (1992).

L029-89

Direct physiological effects of noise on wildlife, if present, are difficult to measure in the field; telemetric measurement of physiological variables such as heart rate has met with more success technically than as an indicator of health and survival. Behavioral effects that might decrease chances surviving and reproducing include retreat from favorable habitat near noise sources and reduction of time spent feeding with resulting energy depletion. Serious effects such as decreased reproductive success have been documented in some studies and documented to be lacking in other studies on other species. Decreased responsiveness after repeated noises is frequently observed and usually attributed to habituation. Vehicle noise can interfere with animal communication essential for reproduction. (Ronald P. Larkin, Center for Wildlife and Plant Ecology, USACERL Technical Report 96/21, January 1996)

In a comprehensive 1998 report (U. S. Department of Transportation, Federal Railroad Administration, December 1998, *High-Speed Ground Transportation Noise and Vibration*



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Impact Assessment (URL: <http://www.fra.dot.gov/downloads/RRDev/nvman.pdf>), the following was the government's assessment of noise impacts on animals:

"A wide range of studies have been conducted concerning noise effects on animals. For humans, annoyance is considered to be the primary environmental noise effect; thresholds for annoyance in terms of sound exposure have been determined by surveys as described in Section A.3. However, for animals, the effects are not easily determined. Usually the studies require introduction of a specific noise event like an aircraft overflight and a subsequent observation of animal response. Observations of response to noise range from no reaction or mild responses such as slight changes in body position to extreme responses such as panic and attempts to escape. Long-term effects that might change behavior tend to be affected by factors other than short term noise exposure, such as weather, predation, disease and other disturbances to animal populations. Conclusions from research conducted to date provide only preliminary indications of the appropriate descriptor, rough estimates of threshold levels for observed animal disturbance, and habituation characteristics of only a few species. Long-term effects continue to be a matter of speculation."

Moreover, most of the noise events used in prior studies are related to aircraft overflights. Consequently, any criteria adopted for effects on animals by high-speed rail noise must be considered interim until further specific research results are known.

The FRA report gives the following synopsis of noise impacts observed in the literature:

Species	Noise Source	Sound Level (dB)	Behavioral Response
Reindeer	Sonic booms	Not stated	Startle
Caribou	Aircraft	Not stated	panic running
Pronghorn antelope	helicopter	77 dBA	Running
Domestic chicken		100 dB	Blood composition
		115 dB	interrupt brooding
Ouail		80 dB	accelerated hatching
seabirds (general)	Sonic boom	Not stated	startle, flush from nest
California condor	Blasting, drilling	Not stated	Flush from nest
Raptors	Sonic booms	Not stated	Alarm

Project construction will cross the wetlands complex where the noise environment is usually exceptionally quiet (except for gunshots in the duck clubs). The Draft EIR/S must describe as fully as possible what are the expected construction noise and vibration impacts to wildlife species.

Water Flow and Water Quality

The DEIR/S does not acknowledge the potential construction impact on water flow and water quality. The GEA wetlands are a complex of natural and man made channels which move

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water through the wetlands, establishing the waterfowl habitat and supporting nearly all the GEA ecological functions. The HST would probably be constructed on an earthen berm through most of the GEA, elevated above the flood level, in the same manner as rail road lines of the 19th century (see the Santa Fe Grade as an example). The berm would need to be wide enough for two tracks.

Construction of the berm would entail tremendous wetland fill and the importation of possibly a million cubic yards of fill, depending on the actual route taken. It is unlikely that the earth for the berm could be excavated from along the route due to soil weight bearing limitations. The berm would need to be keyed in to the substrate, meaning that the organic top layer would be removed and drainage ditches and water pumps would be installed to allow engineered placement of fill. Even where trestle construction crossed water channels, there would be disturbance from clearing and pile driving.

All that construction will alter the present water flow patterns, introduce sediment and create stagnant sections of the wetlands producing essentially permanent water quality degradation. Water quality impacts on wildlife range from altered growth of feed to increased risk of avian botulism.

The Grassland Water District has spent much time and money managing the application of water in the Grasslands. Historically, water quality problems in the Grasslands have had tremendous impact on wildlife (e.g. the Kesterson Wildlife Refuge). Imposition of a hydraulic barrier across the GEA will materially impact the south-to-north water management in the GEA which is essential to maintaining water quality. The EIR/S needs to take in to account the phenomenal complexity of the hydrology of the Grasslands.

III. Operations Impacts of the HST Must be Addressed in the EIR/S

Operations impacts that need to be explicitly addressed include train noise and vibration, shock wave, train collisions with large animals, and interruption of habitat connectivity.

Noise and Vibration

The Draft EIR/S noise analysis compares the various routes for noise sensitivity and compares the HST alternative with the other alternatives. However, the Draft EIR/S never actually states anything about what the actual noise exposure will be in decibels, at varying distances from the track. I find this extraordinary.

The DEIR offers no quantitative analysis of actual impact. Indeed, the DEIR never actually tells the reader how much noise the trains produce. Information relevant to assessment of high-speed train noise on wildlife contained in the EIR is includes:

"Similarly, "quiet suburban" and "rural" or "natural open-space" areas are grouped as areas where ambient noise levels are less than 55 dBA Ldn." (DEIR p. 3.4-4)

"While high-speed trains have some similar noise and vibration characteristics to conventional trains, they also have several unique features resulting from the reduced size and weight, the electrical power, and the higher speed of travel. The proposed HST would be a steel-wheel, steel-rail electrically-powered train operating in an exclusive

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right-of-way. Because there would be no roadway grade crossings, the annoying sounds of the train horn and warning bells would be eliminated. The use of electrical power cars would eliminate the engine rumble associated with diesel-powered locomotives.” (DEIR p. 3.4-9)

“For the proposed HST system higher operating speeds of 150 to 220 mph (241 to 354 kph) would be planned for the less constrained areas, in terms of alignment (i.e., flat and straight).” (DEIR p. 3.4-9)

“In the speed range from 60 mph to about 150 mph (98 kph to 241 kph), mechanical noise resulting from wheel/rail interactions and structural vibrations dominate the noise emission from trains.” (DEIR p. 3.4-9)

“Noise from HST also depends on the type and configuration of its track structure. Typical noise levels are expressed for HST at grade on ballast and tie track, the most commonly found track system. For trains on elevated structure, HST noise is increased, partially due to the loss of sound absorption by the ground and partially due to extra sound radiation from the bridge structure. Moreover, the sound from trains on elevated structures spreads about twice as far as it does from at-grade operations of the same train, due to raising the sound source higher above ground.” (DEIR p. 3.4-10)

“Vibration of the ground caused by the pass-by of the HST is similar to that caused by conventional steel wheel/steel rail trains. However, vibration levels associated with the HST are relatively lower than conventional passenger and freight trains.” (DEIR p. 3.4-10)

An indicative measure of actual noise exposure can be found in the Federal Railroad Administration (FRA) assessment: an electric locomotive train passby (2 engines, 10 passenger coaches) at a maximum speed of 150 mph in a flat area with no shielding will produce an Lmax sound level of 99 dBA at 50 feet from the train. That study also rated as “severe impact” any case where the project noise exceeded 60 dBA where the ambient noise level was near 50 or 55 dBA Ldn, as would be the case in the study area, according to the EIR criterion below. The FRA report also stated as a threshold for significant noise impacts on wild birds and mammals a sound level of 100 dB SEL – definitely the same range as the sound level of the train passbys. The SEL is a measure of all sound energy during an event expressed as the equivalent sound level with a duration of one second.

Figure 2.6-1 of the EIR shows that the trains will be operating at speeds in excess of 200 mph in the Stockton to Bakersfield and Merced to Gilroy segments so the noise impact would actually be greater than that estimated in the sample case analyzed in the FRA report. The sound energy radiated from a source is proportional to its power input. As a rough rule, the power input increases as the square of velocity, so a train at 200 mph will need 1.8 times the power as a train at 150 mph. Sound is measured on the logarithmic decibel scale; the logarithm of the power ratio is 2.5 dB, meaning that the Lmax noise from the train at 200 mph is expected to be around 101.5 dB.

Even at high speed, the train will take three to four seconds to pass a point receptor. This means the SEL at 50 feet distance is probably around 105 to 110 dB. With 3 dB drop-off per

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cont'd

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doubling distance for a line source, the high speed train will likely exceed the FRA significance threshold for wild birds and mammals out to a distance of 500 feet.

Train frequency determines the overall impact of the project. The EIR (Summary p. S-4) states that there would be 86 weekday intercity trains envisioned by the project by 2020. A chart in Appendix E to a technical report on operations that lays out the proposed schedule of trains for the Pacheco route, 134 total daily trains will pass through Los Banos (not all stopping). This is an average of a train every 11 minutes, but as much as a train every 5 minutes during the busy portion of the business day.

The high frequency means that startle effects will be frequent and that the overall sound level will rise substantially. It is difficult to estimate the impact of this project due to the absence of quantitative information in the DEIR. A rough calculation based on the FRA data shows that a 200 mph train every 5 minutes would produce an average sound level (Leq) of 75 dB at 500 feet from the line. That is more noise than is produced by most busy freeways.

There is a high probability of significant impacts to wildlife. The EIR must evaluate the actual likely impacts of the train noise and vibration on the sensitive wildlife species who will be exposed to these noise levels on a daily basis.

Shock Wave

High speed trains will produce a significant shock wave each time they pass. The shock wave can be felt at varying distances from the train, depending upon its speed. The shock wave has been likened to the impact of a supersonic plane breaking the sound barrier. Howe M. S. “The compression wave produced by a high-speed train entering a tunnel.” *Proceedings: Mathematical, Physical & Engineering Sciences* 1 June 1998, vol. 454, no. 1974, pp. 1523-1534 (12). URL: <http://www.ingenta.com/isis/searching/ExpandTOC/ingenta?issue=pubinfobike://rsl/rpa/1998/00000454/00001974&index=2> It can produce a startle response in wildlife or if birds are flying within the immediate area of the train passes can possibly interrupt their flight. The EIR/S should quantify the shock wave that emanates from the train moving at over 200 mph, and determine all of its potential effects on wildlife.

Collisions with trains (large animals)

Animals that may be crossing the tracks in the GEA can be hit by one of some 100 plus trains per day. Although a likely mitigation for the project will be subterranean tunnels to allow wildlife passage (EIR/S p. 3.15-31) there may still be substantial numbers of wildlife who attempt to cross the track at grade level and may be hit by trains. Species at risk include San Joaquin kit fox, tule elk and bobcat. The EIR/S should estimate the mortality to each wildlife species that is vulnerable to train collisions and the effect of this mortality on the respective populations. For special status species such as the San Joaquin kit fox the EIR/S should also discuss whether these train impacts are substantial enough to cause further decline in the status of the species, or will interfere with the recovery of the species.

Interruption of Habitat Connectivity

The EIR/S states (p. 3.15-) “Segments that would be placed at grade (cut and fill) would require fencing the HST alignment for the safety of humans, as well as protection from train-wildlife collisions, and would have the potential to interfere with wildlife movement.” On p.

L029-92
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L029-93

L029-94

L029-95



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3.15-31 the EIR/S mentions that construction of wildlife underpasses, bridges, and/or large culverts, could be considered to facilitate known provide these wildlife movement corridors. The EIR/S should provide evidence for the success of this type of mitigation in a wetland environment like the GEA and provide more detail on the number and location of such structures to facilitate wildlife movement across the railroad right-of-way.

L029-95
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The EIR/S incorrectly limits the zone of impact to 0.25 miles away on either side of the tracks in rural areas and 0.5 miles away in sensitive areas (p. 3.15-4). In reality, large mammalian species such as San Joaquin kit fox, elk and bobcat have individual territories that may cover tens or hundreds of miles. So while an animal will only be impacted if it comes in contact with the train corridor, in a population sense the zone of impact is much larger since it encompasses the entire habitat of the animals which are killed or otherwise impacted by the train.

IV. Induced Growth Effects of the HST on the GEA Must be Fully and Correctly Assessed in the EIR/S

The Draft EIR/S stated "For Merced County, analysis results suggest that about 88 percent of population and employment growth experienced with the HST Alternative would have occurred anyway under the No-Project Alternative". (P. 4-23 of the Cambridge Systematics Economic Growth Effects report). I believe this is an underestimate of the growth inducing effects of the proposed project, and their impacts on the wetlands complex, for several reasons:

L029-96

1. Induced growth is related to the station at Los Banos and commute trips to Bay Area and Sacramento. If the existence of the train line effectively shortens commute times between the Merced County area and the urban employment centers in the San Francisco Bay Area and the Sacramento area then more people will perceive of these areas as a bedroom community option, especially if the cost of housing there is substantially lower than closer in to the big cities, as it has been historically. The effect can be greater than assumed in the EIR/S – in other words, the assumption that only 12% more growth will result from the HST alternative than from the No Project Alternative is probably false.

L029-97

2. As stated above, the EIR/S assumption was that impacts were limited to a zone 1/4 mile on either side of tracks or the station in rural areas and .5 miles on either side in sensitive areas. This is not a valid assumption. Induced growth can take place virtually anywhere in Merced County and is not related to the corridor around the train tracks, although it is likely to occur near the train station location.

L029-98

The EIR provides no information to analyze the likely future pattern of growth. It is a numerical, tabular population analysis rather than a map-based analysis. There is no way to independently determine where the excess growth will go.

In the absence of strict land use controls by the local cities and the County, developers will build housing throughout the greater Los Banos area including in areas east of the Santa Fe Grade that will degrade the value of the wetlands. People will be willing to buy housing throughout this area and will not consider a local commute between Santa Nella where the proposed train station is, and their home housing tracts to be onerous, since it will be a short commute compared to the long-distance commute afforded by the train.

L029-99

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3. Impacts of urban encroachment on the wetlands complex of the GEA have been documented in numerous studies including the 1995 Land Planning and Guidance Study (for example the supporting study by Reed F. Noss, "Translating Conservation Principles to Landscape Design for the Grassland Water District"). Impacts include fragmentation of the North Grasslands from the South Grasslands and a reduction in habitat value of the entire interior of the wetlands complex.

L029-100

4. The "Los Banos" station is shown as being in the vicinity of Santa Nella, a rural center about 6 miles north of Los Banos that is adjacent to the Los Banos wildlife area. The sprawl growth that will occur around this station will have detrimental effects on this wildlife area. Adverse effects of urban development near wetlands that were reported by Reed Noss in his supporting study to the 1995 *Land Planning Guidance Study* include:

Edge effects where predators, competitors and parasites of sensitive wildlife species may thrive in the disturbed habitat in and adjacent to various types of urban development. Noss reported that remnant wetlands are especially susceptible to exotic species invasion in fragmented landscapes. For example, crows and ravens are highly destructive predators on bird eggs and small mammals. These birds have become serious pests in many areas since their populations have surged in response to the huge amount of food in solid waste in urban areas, as well as agricultural waste at dairies and feedlots. Deleterious edge effects commonly extend 50 to 200 meters into a habitat from an edge, and in some cases much farther.

L029-101

Impacts of urban development adjacent to wetlands include (1) physical disruption, such as mowing and digging (2) chemical disruption including the introduction of fertilizers and toxic chemicals in drainage water (3) introduction of non-native species of both plants and animals (4) noise disruption and (5) visual disruption caused by removal of trees and shrubs around the wetlands.

Another key impact of urban development is the interruption of water deliveries for wildlife uses and the competition for the water supply that supports the wetland habitat.

In fact, a station anywhere in the vicinity of Los Banos will contribute incrementally to excessive and sprawl growth in the Los Banos area that will impact the GEA, as described below.

L029-102

Conflict of Urban Growth and Buffer to Protect the Wetlands

The 1995 *Land Planning Guidance Study* prepared for the Grassland Water District recommended a buffer zone of 2 miles around the entire perimeter of the GEA to protect the interior from the effects of urban encroachment. The train corridor within the GEA habitat areas, and the induced development that is likely to occur closer than two miles from the boundary of the GEA will degrade the quality of the habitat in the wildlife refuge.

L029-103

The 2001 *Land Use and Economic Study* published by the Grassland Water District contains information relevant to the issue of encroachment of urban development on the 2-mile wide buffer zone that was recommended to protect the interior of the wetlands complex. Only



Comment Letter L029 – continued (Letter 3)

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land uses compatible with wildlife uses, such as agriculture, were recommended to occur inside the buffer zone.

According to the 2001 study, if growth occurs according to the sprawl growth scenario, which is the conventional mode of growth in California, the added population of 421,934 by the year 2040 will require a total of 94,127 new acres of urbanized land. The intersection of the growth zone around cities with the two-mile band around the GEA (and in the case of Los Banos, the GEA interior as well), corresponds to a potential "zone of conflict". Within the 160,000-acre area that corresponds to a two-mile band around the GEA, the present 2187 acres of urban land (1.4% of total area) could grow to as much as 16,400 acres (10% urban) under the low-density "sprawl" scenario. Correspondingly, of the 167,600 acres that form a two-mile ring around the six cities, the percentage of land that is urban is expected to grow from the present 7% up to as much as 45% (from 12,341 to 75,973 acres) under the low-density sprawl scenario.

Of the six cities in Merced County, Los Banos, Gustine and Dos Palos have city spheres that include a portion of the two-mile GEA band. Growth in unincorporated areas such as Volta or Santa Nella could also have adverse consequences on the wildlife refuge areas. Los Banos presents the greatest problem with lands within both its current city boundary and its sphere that are either directly within the GEA area or its two-mile band. The current Los Banos General Plan prohibits growth east of the Santa Fe Grade and discourages non-compatible uses east of the San Luis Canal, both of which are intended to slow down encroachment on the nearby wetlands complex. However, the policy protection afforded by General Plans is far from permanent as General Plans are re-written on a 5 or 10-year cycle.

In summary, the Draft EIR/S failed to mention the identity or the special values of the GEA or GWD, or to discuss their importance as a wetland and wildlife resource of local, regional and national scale importance. As a result of this omission, the Draft EIR/S also failed to address the construction, operations and induced growth impacts on the proposed high-speed rail project on this highly valuable and vulnerable resource area. The Draft EIR/S must be greatly expanded and re-circulated to include all of these issues.

The DEIR/S failure to acknowledge the values and unique importance of the Grassland Ecological Area has artificially raised the attractiveness of the southern (Pacheco Pass) alternative for the HST project compared to the other alternatives. If the impacts on the GEA are fully described, it will become clear that a more northerly alternative, possibly even the summarily rejected Altamont Pass alternative, may be environmentally superior to the Pacheco Pass alternative.

Thank you for the opportunity to provide these comments.

Sincerely yours,



Karen G. Weissman, Ph.D.
Principal

L029-103
cont'd

L029-104

To view entire contents of Part 2 and Part 3
see electronic files: [L 029_Part-2.pdf](#) and [L 029__Part-3.pdf](#)



U.S. Department
of Transportation
**Federal Railroad
Administration**

Response to Letter L029 (Letter 3: Karen G. Weissman, Thomas Reid Associates; August 27, 2004)

L029-82

Comment acknowledged.

L029-83

The GEA is discussed and described in Section 3.15. Additional discussion of the USFWS conservation easements has been included in this Final Program EIR/EIS.

L029-84

Comment acknowledged.

L029-85

The Draft Program EIR/EIS analyzed the potential impacts of resources at a program level, regardless of jurisdictional boundaries. While the GEA is not always mentioned specifically, the resources in and around it were analyzed.

This program-level document discussed construction and operation of the HST at the level of detail available at this time. See Response to Comment L029-53 regarding growth inducement.

L029-86

The Program EIR/EIS considers these potential impacts in Sections 3.18.4 and 3.18.5

L029-87

At the alignment decision level, there is not enough information available on when and for how long construction would occur. This analysis will be conducted as part of the Tier 2 project-level environmental analysis. In sensitive areas (as defined at the project level), in-line construction (i.e., use of new rail infrastructure as it is built) would be used to transport equipment to and from the construction site and to transport excavated material away from the construction to appropriate re-use or disposal sites.

L029-88

Efforts will be made to not use sensitive areas as set down areas. In sensitive areas (as defined at the project level), the movement of supplies from less sensitive set down areas can be accomplished using the established right-of-way corridor, with delivery of the material via the constructed rail line because in-line construction techniques are proposed. In areas where clearing would be necessary, the construction contractor would use silt fences, hay bales, and other measures to control runoff and erosion.

Further analysis will be performed during the project-level reviews, when construction lay-down areas can be identified.

L029-89

See also Response to Comments L029-29, L029-30, and L029-31. Some heavy civil construction activities, notably pile driving and rock excavations with explosives, would be inherently noisy. Further analysis of potential noise mitigation strategies will be provided during project-level environmental reviews. Potential mitigation strategies for construction noise impacts are listed below.

- Using enclosures or walls to surround noisy equipment, installing mufflers on engines, substituting quieter equipment or construction methods, minimizing time of operation, and locating equipment farther from sensitive receptors.
- Suspending construction operations between 7:00 p.m. and 7:00 a.m. and/or on weekends and holidays in residential areas.
- Requiring contractors to comply with all local sound control and noise-level rules, regulations, and ordinances.
- Equipping each internal combustion engine with a muffler of a type recommended by the manufacturer.
- Specifying the quietest equipment available (would reduce noise by 5-10dBA).



- Turning off construction equipment during prolonged periods of nonuse (to eliminate noise from construction equipment during those periods).
- Requiring contractors to maintain all equipment and train their equipment operators (to reduce noise levels and increased efficiency of operation).
- Locating stationary equipment away from noise-sensitive receptors (to decrease noise impact from that equipment in proportion to the increased distance).

L029-90

See Response to Comment L029-79 regarding water quality.

See Response to Comment L029-34 regarding construction techniques.

L029-91

See Response to Comment L029-5 regarding connectivity and collision impacts.

See Response to Comment L029-31 regarding shock wave impacts.

See Response to Comment L029-78 regarding noise and vibration.

L029-92

See Response to Comment L029-78 regarding noise and vibration.

The noise exposure of the HST depends on the location of the receiver relative to the train alignment, train speed, and intervening topography. The program-level environmental document analyzes the potential noise and vibration impacts and broadly compares the relative differences of potential impacts among the alternatives. The analysis also identifies key differences among the potential noise impacts associated with the various HST alignment alternatives and station location options, to support the selection of preferred alignments and station location options in the Bay Area to Central Valley study region. The next phase of study, the project-level environmental document, will address the impacts on human and

wildlife receivers and noise sensitive land uses along the Preferred Alternative alignment by predicting the wayside noise levels from HST passbys and comparing them to the existing background noise at each location. The same procedure will be conducted for vibration with the exception that the predicted ground-borne vibration levels from train passbys will be compared to the FRA Vibration Impact Criteria and not the ambient levels to determine impact.

L029-93

See Response to Comment L029-31 regarding shock wave impacts.

As part of the project-level environmental document, a shock wave analysis will be conducted to study the effect of sound overpressure at tunnel portals generated by HST operating at 220 mph. Potential effects on both human and wildlife receivers will be assessed.

L029-94

See Response to Comment L029-32 regarding collisions with trains.

L029-95

Study areas for individual species habitat will be established as part of the Tier 2 project-level environmental analysis.

L029-96

See Standard Response 4 regarding growth.

L029-97

See Standard Response 4 regarding growth. Also see Response to Comment L029-46.

L029-98

See Standard Response 4 regarding growth. Also see Response to Comment L029-46.

L029-99

See Standard Response 4 regarding growth. Also see Response to Comment L029-46.

L029-100

Comment acknowledged.

L029-101

See Standard Response 4 regarding growth. Also see Response to Comment L029-46.

L029-102

See Standard Response 4 regarding growth. Also see Response to Comment L029-46.

L029-103

See L029-55 regarding growth inducement. See Standard Response 4 regarding growth. Also see Response to Comment L029-46.

L029-104

This comment provides a summary of previous comments, which are addressed above.

Comment Letter L029 – continued (Letter 4: Terrell Watt, AICP, Terrell Watt Planning Consultants)

EXHIBIT 17

Terry Watt Comments and Attachments A-E

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GROWTH INDUCING IMPACTS OF THE HIGH SPEED TRAIN PROJECT ON THE GRASSLAND ECOLOGICAL AREA

The DEIR/S fails to analyze the growth inducing impacts of the HST project on the Grassland Ecological Area in Merced County.¹ The Grassland Ecological Area is an irreplaceable, internationally significant ecological resource located just north and east of Los Banos. The proposed Pacheco Pass Alignment would bisect this area causing fragmentation and other direct impacts. More ominously, the growth-inducing impacts of locating a train station, the Los Banos Station, in Santa Nella would most likely result in urban encroachment and development pressures that could doom this area. The protection of this area has been the result of private and public partnerships. Much of the area is privately owned managed wetlands used for duck hunting clubs. The DEIR/S makes no mention of this area and fails to address the significant growth inducing impacts of HST alternative on this area.

L029-105

CEQA requires that an EIR contain an analysis of a project's growth inducing impacts. Growth-inducing impacts are those that encourage or facilitate other activities or projects that could significantly affect the environment. The "detailed statement" setting forth the growth inducing aspects of a project must "[d]iscuss the ways in which the proposed project could foster economic growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." CEQA Guidelines Section 15126.2(d). It must also discuss how a project may "encourage or facilitate other activities that could significantly affect the environment, either individually or cumulatively" or remove obstacles to population growth. Population growth in turn may impose new burdens on existing or planned community services. Similarly, NEPA requires that agencies consider the indirect effects of a proposed action, such as growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate. 40 CFR 1508(b).

L029-106

The general analysis of growth inducement that is included in the DEIR/S fails to accurately analyze and document the likely growth that could be induced and erroneously concludes that growth induced by HST will be beneficial after mitigation strategies are imposed. Lead agencies

L029-107

¹ Ed Thompson, Esquire, President of American Farmland Trust California, contributed to this section. In preparing her comments, Terrell Watt reviewed the applicable general plans and zoning for the proposed Los Banos station and Pacheco alignment in the Grasslands area.



Comment Letter L029 – continued (Letter 4)

must not assume growth induced in an area is beneficial or of little consequence until it has completed open minded analysis. CEQA Guidelines section 15126.2, subd.(d). Here the DEIR/S conclusions concerning growth inducement are not supported by evidence. The exercise of analyzing growth inducement is technically feasible and must be included in a revised DEIR/S.

L029-107
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Major flaws in the DEIR/S approach to growth inducement include but are not limited to the following:

First, the DEIR/S fails to provide any analysis of the growth inducing potential of the proposed alternatives and in particular of the HST alignment and rail station in the Merced Grasslands area. In fact, this important ecological area is not mentioned in the DEIR/S discussions of land use, loss of agricultural land or economic growth and related impacts. The proposed Los Banos station is actually located in the small unincorporated community of Santa Nella in the County of Merced, near the small city of Los Banos. The station location is currently general planned for and zoned A-1, General Agricultural in the Merced County General Plan and is adjacent to the Grassland Ecological Area. The Merced County General Plan describes the uses in agricultural areas as follows:

L029-108

L029-109

The Agricultural Residential land use designation is generally applied to areas considered appropriate for the construction of single-family dwelling units on large lots in a semi-rural environment, with less than a full range of public services. General Plan Land Use Element page I-19.

L029-110

The General Plan land use map shows a range of large-lot rural parcel sizes in the A-1 areas. While the DEIR/S fails to analyze growth inducing impacts on this specific area, it does conclude that HST would make it possible for people living almost anywhere in the Central Valley to commute to employment centers in Sacramento, the Bay Area and Los Angeles. "Transportation investments can lead to reduced travel time or cost [and] improved accessibility to regions." DEIR/S page 5-1. With respect to the general growth inducing impacts on Merced County, the DEIR/S is clear that the most dramatic increases in employment and population will occur in that County:

- ... while under the HST Alternative, Merced, San Francisco, and Sacramento Counties are projected to exhibit the highest growth rate. DEIR/S page 5-14.
- Significant increases in both employment and population would occur with HST in Merced County over 2002 and No Project conditions. See Table 5.3-5 and Figures 5.3-2 to 5.3-4.
- ...the HST Alternative could be a strong influence in attracting higher-wage jobs to the Central Valley. DEIR/S page 5-18 and Tables 5.3-5 to 5.3-7.
- The largest increase in population and employment (4%) would occur in the Northern Central Valley region under the HST Alternative. DEIR/S page 5-23. For example, Merced County would exhibit the largest relative increase in both

L029-111

population and employment with implementation of the HST Alternative. DEIR/S page 5-25.

L029-111
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- Increased employment opportunities should lead to personal income growth in all regions of the state; this growth might be most pronounced in counties of the Northern Central Valley under the HST Alternative, since that region is projected to experience the largest employment gain. DEIR/S at 5-26.

Elsewhere, the DEIR/S concludes that HST will increase population by only 162,000 more than the 6.5 million new residents expected to be in the Central Valley by 2035, accounting for only 3% of the projected increase (above). The "blackbox" growth model by Cambridge Systematics, Inc., (CSI), which underlies the DEIR/S analysis, bases its conclusions concerning growth inducement on the number of jobs within a 90-mile radius. Notwithstanding the overwhelming evidence that this approach applied to remote areas like the Grasslands would result in tremendous growth pressure, the DEIR/S concludes that HST will make little difference in the future population of the Central Valley. This conclusion is simply wrong.

As recent growth patterns have indicated elsewhere in California, accessibility to major employment centers has triggered tremendous new growth.² The introduction of HST to the Grasslands area will make it possible for Bay Area residents to easily commute to and from their affordable suburban and rural housing in and around the Grasslands area and create significant pressure for growth of housing and new services in the area. That pressure will extend to the privately held lands in and around the Grasslands that are not permanently protected. Additional growth in the area also poses significant indirect threats as a result of increased population and pressure on farmlands and open space. The Merced County General Plan and Los Banos General Plan's lend themselves to a pattern of suburban and rural sprawl due to the predominance of low density general plan and zoning. The relative affordability of homes and property in the area will be a tremendous draw for Bay Area workers to move to the area.³ A revised DEIR/S must disclose and analyze the likely growth inducing impact of HST on the area including how introduction of the station is likely to accelerate growth and increase demand for subdivisions and development.

Second, the DEIR/S conclusions that HST will lead to more efficient use of the land and higher densities are simply not supported by the general plans or by evidence in the DEIR/S. Incredibly, the DEIR/S concludes that the HST Alternative will result in significant land use efficiencies over both the No Project and Modal Alternatives:

L029-112

² Examples include the Auburn corridor as major new employers moved to the Sacramento region and north; the Truckee area which is approximately 1 hour from the major new job growth in the Auburn Corridor and Reno. Historical growth patterns in California clearly demonstrate that the close proximity of a major job center inevitably leads to growth inducement for housing within commute range. HST will render the Grasslands area within close commute range to major job centers in the Bay Area.

³ As of the 2nd quarter of 2004, a median priced home in Merced County cost \$228,000 and in Los Banos cost \$265,500. By comparison, during the same quarter a median priced home in San Jose cost \$07,750, nearly twice the cost of median priced home in the area near the proposed Los Banos station. In Gilroy during the same period, a median priced home cost \$550,000. See Attachment A hereto, California Real Estate Statistics for Merced and Santa Clara counties.



Comment Letter L029 – continued (Letter 4)

- “The efficiency for the HST Alternative is achieved in conjunction with the highest population and employment growth rates of all alternatives and would be 6.3% more efficient than the Modal Alternative.” DEIR/S page 5-22.
- The HST Alternative provides an increments development density that is 4% more efficient than the No Project Alternative, while the Modal Alternative is 2.3% less efficient than the No Project Alternative. DEIR/S page 5-22 and Table 5.3-7.

This result is not likely in areas planned and zoned for very low densities. General Plans and zoning for both the County and Los Banos in the Grassland area call for very low density development.⁴ The typical development density in the limited High Density development areas in Los Banos is only 15 units per acre. Most of the residentially designated vacant land in the City is in the Low Density and Very Low Density designations ranging from 1 to 7 units per acre. Hundreds of acres of land are in these low density categories would experience high development pressures if HST is introduced to the area. Los Banos General Plan pages LU-3 – LU5. Merced County’s land use designations in unincorporated communities such as Santa Nella (population approximately 500 persons), also provide for low densities consistent with the agricultural surroundings and lack of a full range of services.

The DEIR/S fails altogether to analyze the HST’s role in inducing low density suburban and rural residential development. This is among the document’s major flaws. The DEIR/S ignores the “ranchette phenomenon,” which is the worst type of sprawl.⁵ Census figures make it possible to separate rural and urban populations. The DEIR/S simply fails to consider the tremendous demand for this type of development and therefore fails to identify and analyze the additional significant impacts related to that growth including increased traffic, increased pollution, increased demand for services and infrastructure, accelerated and increased loss of open space, agricultural and habitat land. The market forces set into motion by HST are likely to create pressure for dramatic changes to the County general plan and accelerate development in the area. In fact, new transportation facilities are classic for inducing and redirecting significant growth.⁶ In this case, the construction of the HST alignment and station in this relatively undeveloped and rural area will likely induce growth permitted by the general plan, prompt general plan and zoning amendments for additional growth and accelerate both urban and rural development.

⁴ While the DEIR/S states that the Cambridge Systematics study considered county general plans and policies, there is no evidence of this in the report. DEIR/S page 5-8. Moreover, the section identifies for subsequent analysis “Land use studies for specific alignment and station areas potentially impacted, including evaluation of potential land use conversion, potential growth, and potential community benefits.” DEIR/S page 3.2-27. These are all analyses that must be included in a revised DEIR/S prior to any action on the project.

⁵ The analysis completed by the American Farmland Trust (see comment letter submitted by AFT), suggests that between 300,000 and 700,00 additional acres of land could be converted to rural ranchettes based on population projections, current ranchette development trends and assuming an average of 5 acres per dwelling and 2.8 persons per household. This trend will accelerate the subdivision of open space lands for ranchette development where HST removes the barrier of accessibility to jobs.

⁶ There is significant academic research on the topic of transportation and growth. A literature search provided a number of key papers, which support the strong link between the introduction or expansion of transportation systems (including rail and roads) and redirected growth. A major study by Professor Robert Cervero of the UC Transportation Center concluded that: “...real estate investment has gravitated to improved freeway corridors...” (page ii) and that “The preponderance of empirical evidence to date suggests that induced effects [of new and expanded roadways] are substantial.” (page 1). See Attachment B.

L029-112
cont'd

L029-113

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Without analysis of facts the DEIR/S concludes that HST will minimize a variety of impacts normally associated with growth due to its inherent incentives for directing urban growth:

“In short, the HST Alternative provides a strong incentive for directing urban growth and minimizing a variety of impacts that are frequently associated with growth. This outcome would be seen in results for resource topics such as farmland, hydrology, and wetlands, where the indirect effects of the HST Alternative are less than the Modal Alternative, and in some cases less than the No Project Alternative, even with more population and employment expected with the HST Alternative.” DEIR/S page 5-34.

“Nonetheless, the results indicate that the HST Alternative would be able to accommodate more population and employment growth on less land than the other alternatives.” DEIR/S page 5-10.

The DEIR/S continues on to conclude that the growth potential with HST is “potentially beneficial” with mitigation strategies. DEIR/S Table 7.3-1. These conclusions are not supported by adequate and transparent analysis or substantial evidence. Review of the applicable general plans in the Merced Grasslands area suggests that the introduction of HST will not only induce significant new growth but that the growth will occur in suburban and rural sprawl patterns most harmful of habitat areas and farmland. Major studies have also shown that the introduction of transportation facilities redirects growth. In this case, if alignments and stations are located in rural areas, growth and development in California could actually be redirected away from existing urban areas and into more remote rural areas where high value agricultural and habitat lands occur. See Attachment B. This would be far from a “smart growth” or beneficial effect of HST. A revised DEIR/S must indicate the likely increase in subdivisions of rural land and map those privately owned lands that will be subject to growth and development pressures.

Third, the DEIR/S fails to disclose the likely increase in demand in areas served by HST for second homes. The spectacular open space setting in and around the Grasslands area is highly attractive for a second home market. The DEIR/S is silent on this potential growth inducing impact. The market for second homes has increased along with disposable income of the large baby boom segment of the population.⁷ A revised DEIR/S must include analysis of this potentially significant impact on rural areas proposed to be served by HST.

Fourth, the new Los Banos station is likely to require major new infrastructure and services. The DEIR/S fails to reveal the extent of these facilities nor does it analyze the growth inducing impact these new facilities will have in the immediate area of the station. A revised analysis must include information about the types of services and infrastructure needed for the station and how the extension of those facilities will remove an existing barrier to growth in the area. Specifically, the DEIR/S should describe the current general plan and zoning of the station site and surrounding areas; the existing status of services and infrastructure; services and infrastructure that will be provided to serve the station; and the likely growth inducing effect of the station and those facilities on adjacent lands.

⁷ See Attachment C, Baby Boomer Investors Fueling Second Home Market Sales.

L029-113
cont'd

L029-114

L029-115

5



Comment Letter L029 – continued (Letter 4)

Fifth, the DEIR/S discussion of economic and growth inducement suggests that the introduction of HST to the Central Valley will change the types of jobs in the region and lead to personal income growth:

- Increased employment opportunities should lead to personal income growth in all regions of the state; this growth might be most pronounced in counties of the Northern Central Valley under the HST Alternative, since that region is projected to experience the largest employment gain. DEIR/S at 5-26.

The DEIR/S fails to analyze the likely results of this dramatic change, including, but not limited to increased demand for larger, high end homes, increased demand for services and overall increased in growth and development to serve the very different demands of higher income individuals and families.

Finally, the mitigation strategies for growth inducement are not sufficient. While increased concentration of development around HST stations in downtown locations has the potential to avoid or minimize some impacts, the opposite is likely to be the case where stations are located in rural areas. The Cambridge Systematic study suggests that “regulatory style efforts to encourage increased density and a mix of land uses near rail stations have been effective.” However, they also acknowledge that an exception to this would be the stations located outside the downtown areas of cities in the Central Valley. Moreover, specific mitigation measures, such as urban growth boundaries, transit oriented development district planning and zoning, housing density and affordability requirements and the like directed at avoiding sprawl must be in place prior to HST development. Studies that have evaluated the relationship of new transit stations and development have largely concluded that: “...land use benefits from investments’ in rail transit are not automatic. Rail transit can contribute to positive change, but rarely creates change by itself. The hardware needs software – supportive land use policies such as density bonuses and ancillary infrastructure improvements – if it is to reap significant dividends.” Attachment D, page 15. Similarly, Professor Cervero’s studies have concluded that better land use planning and management is essential to securing “smart growth” outcomes. See Attachment B.

Mitigation measures that must be included in a revised DEIR/S include, but are not limited to the following:

- Requirements” for agreements with cities/counties the route traverses for “smart growth” policies (e.g. in downtowns around stations specific programming for higher densities, etc.; in rural areas specific policies for farmland protection, etc.). Such measures could include rewarding cities that adopt higher, mixed used densities with funding and other incentives. The Metropolitan Transportation Commission is currently studying the relationship between land use policies and transit ridership. Policy options under study include requiring supportive land use policies in return for transit funds. See Attachment E.
- Up-front purchase of conservation and agricultural easements to either side of the tracks and stations where located in undeveloped areas outside of cities and, within and around the boundaries of the GEA.

L029-116

L029-117

6

- Establishment of urban growth boundaries in communities traversed by HST and stations are located;
- Limits on new subdivisions outside of urban growth boundaries and the like.

Even with these measures identified in a revised DEIR/S, additional evidence must be provided that they would actually have the desired affect in rural areas.

If they are wrong, CSI concedes that the model would produce a very different result, presumably a much greater impact on the Central Valley.

“While the exact role of particular factors [shaping land development patterns] varies by region, several influences are consistently important, including proximity to freeways, access to jobs, site slope and site incorporation status. To the extent that these factors are less important in the future, or are important in different ways – or, as is even more likely, that other factors become important – the model results will vary widely than [sic] what is presented here.” CSI, at H-5

Based on empirical evidence, highly regarded academic studies of the relationship of transportation and growth and proximity of job centers to growth, the introduction of an HST alignment and station will have a substantial and adverse growth inducing impact on the Los Banos, Merced area. Stated in clear terms, the DEIR/S and CSI have incorrectly concluded that the growth inducing effects of HST will be insignificant and possibly even beneficial. A revised DEIR/S must include a completed revised and transparent analysis of the significant and likely adverse growth inducing impacts of HST where it is located in rural areas of California, including the Los Banos, Merced area. The new analysis must include effective mitigation measures capable of reducing or eliminating these significant effects, such as those listed above. The benefits of HST may be realized, but only if the project is redirected to serve existing urban corridors and strong land use policies are required in advance of its construction to ensure that HST does not lead to sprawling suburban and rural development and loss of high value California landscapes such as the irreplaceable Grassland Ecological Area in Merced County.

L029-117
cont'd

L029-118

7



Response to Letter L029 (Letter 4: Terrell Watt, AICP, Terrell Watt Planning Consultants)

L029-105

See Standard Response 4 regarding growth. Also see Response to Comment L029-46.

L029-106

See Standard Response 4 regarding growth. Also see Response to Comment L029-46.

L029-107

See Standard Response 4 regarding growth. Also see Response to Comment L029-46.

L029-108

See Standard Response 4 regarding growth. Also see Response to Comment L029-46.

L029-109

See Standard Response 4 regarding growth. Also see Response to Comment L029-46.

L029-110

See Standard Response 4 regarding growth. Also see Response to Comment L029-46.

L029-111

See Standard Response 4 regarding growth. Also see Response to Comment L029-46.

L029-112

See Standard Response 4 regarding growth. Also see Response to Comment L029-46.

L029-113

See Standard Response 4 regarding growth. Also see Response to Comment L029-46.

L029-114

See Standard Response 4 regarding growth. Also see Response to Comment L029-46.

The comment expresses concern about a potential increase in the demand for second homes as a result of the proposed HST system, particularly in the vicinity of the GEA. At a broad level, there would not be any travel time or cost benefit to using HST in accessing a second home in rural areas of the Central Valley due to the problems presented by station access/egress between a second home and a Central Valley HST station. For individuals to use HST as a primary access mode to second homes, individuals owning a second home would need to either keep an extra car at a Central Valley HST station (and incur long-term parking costs) or regularly rent a car at a Central Valley HST station. This combination of high egress cost and multiple mode shifts would be at odds with rational travel and economic behavior.

With specific regards to the GEA, the lack of a Los Banos HST station (please see Standard Response 4) results in faster door-to-door travel times for auto (compared to HST) for areas in and around the GEA. Therefore, HST will be unlikely to have any influence on the market for second homes near the GEA or other locations across California.

L029-115

See Standard Response 4 regarding growth. Also see Response to Comment L029-46.

Please see Standard Response 4 regarding the fact that an HST station is not being proposed for Los Banos. The accessibility



barriers that exist around Los Banos for the No Project Alternative remain in place for either HST alternative.

L029-116

The comment suggests that induced employment and population growth in the Central Valley will substantially increase personal income, which will in turn increase demand for larger, higher-end homes and supporting services. This assertion is incorrect for three reasons.

First, Table 5.3-5 in the Program EIR/EIS illustrated that the Pacheco Pass HST alternative is projected to induce 47,692 jobs compared to the No Project Alternative in the six-county Central Valley region, compared to a total No Project employment in 2030 of 2,740,867. The Altamont HST alternative is projected to induce 61,171 jobs compared to the No Project Alternative in this region. Hence, Pacheco HST is projected to have 1.7% more employment in the Central Valley region compared to No Project, while Altamont is projected to have 2.2% more employment compared to No Project. These differences are not “dramatic changes” as asserted in the comment.

Second, all system alternatives (No Project, Altamont HST, Pacheco HST) would have the same employment composition for the 2,740,867 jobs that are projected to exist in the Central Valley study region for the year 2030 No Project Alternative. The only difference in employment composition would be for the induced jobs, which, as pointed out in the prior paragraph, amounts to a 1.7% increase for Pacheco HST and a 2.2% increase for the Altamont HST alternative.

Third, the comment asserts that HST’s induced employment would be skewed toward occupations with substantially higher wages. This assertion is false. As noted on page 5-10 of the Draft Program EIR/EIS, “[b]oth HST Network Alternatives show a much greater propensity to job growth in the FIRE, services, TCU, wholesale trade, and retail trade categories.” As shown in Table 1 (below), average weekly wages in these growth industries bracket the “total private” average weekly wage of \$879. In particular, Table 5.3-3 in the Program EIR/EIS illustrated that the FIRE and services sectors are

projected to account for about two-thirds of this induced employment in the Central Valley. These sectors, which are highlighted in Table 1, clearly bracket the statewide average for all business sectors. Clearly, the HST alternatives would not lead to Central Valley job growth that is skewed toward higher income individuals and families. Given the similarity in average wages, there is no compelling evidence that the induced employment growth for either HST alternative would result in increased demand for larger, high-end homes and other support services that are typically associated with higher income households.

Table 1 Average Weekly Wage Rates by Industry for California (2007)

NAICS Code	Industry	Average Weekly Wage for California
10	Total private	\$879
101	Goods producing	\$966
1011	Natural resources and mining	\$483
11	Agriculture, forestry, fishing & hunting	\$411
21	Mining	\$1,718
23	Construction	\$878
1013	Manufacturing	\$1,149
102	Service producing [1]	\$854
42	Wholesale trade	\$1,087
44-45	Retail trade	\$565
48-49	Transportation and warehousing	\$800
22	Utilities	\$1,647
51	Information	\$1,621
52	Finance and insurance	\$1,620
53	Real estate and rental and leasing	\$868
54	Professional and technical services	\$1,417
55	Management of companies and enterprises	\$1,492
56	Administrative and waste services	\$586
61	Educational services	\$699
62	Health care and social assistance	\$842
1026	Leisure and hospitality	\$409
1027	Other services	\$456

Source: US Bureau of Labor Statistics.



L029-117

See Standard Response 5 regarding mitigation strategies.

Results presented in Section 5 of the Program EIR/EIS do not identify any significant impacts from the indirect effects of growth inducement at the program level of analysis. Therefore, it is not necessary to analyze or adopt specific mitigation strategies for indirect effects of growth inducement in the Final Program EIR/EIS for Merced, Madera or any other county.

Please also see Standard Response 4 (subsection titled “HST’s Influence on Station Areas and Local Jurisdiction’s Growth”) for further information on the Authority’s efforts in influencing station-area development patterns. Furthermore, the Authority has identified downtown areas in the Central Valley as the preferred locations for HST stations (Section 8.6.4 of this Program EIR/EIS and Chapter 6A of the statewide program EIR/EIS), which is consistent with the overall desire to avoid or minimize impacts.

L029-118

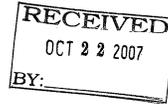
See Standard Response 4 regarding growth. Also see Response to Comment L029-46.



Comment Letter L030 (Robert Beck, Transbay Joint Powers Authority, October 19, 2007)



L 030



October 19, 2007

Mehdi Morshed, Executive Director
California High-Speed Rail Authority, EIR/EIS Comments
925 L Street, Suite 1425
Sacramento, CA 95814

Subject: Draft Bay Area to Central Valley High-Speed Train
Program Environmental Impact Report/Environmental Impact Statement

Dear Mr. Morshed:

On September 26, 2007, the Transbay Joint Powers Authority (TJPA) submitted comments on California High-Speed Rail Authority's (CHSRA) Draft Bay Area to Central Valley High-Speed Train (HST) Program Environmental Impact Report/ Environmental Impact Statement (EIR/EIS).

L030-1

In furthering our own analysis for the design of the Transbay Transit Center and Downtown Extension of the Caltrain right-of-way, we wish to verify some of the parameters used in the operations and ridership analyses presented in the EIR/EIS.

L030-2

- Section 4.3D (page 4-20) of the EIR/EIS describes a conceptual operating schedule of 124 trains per day. How many of these trains would operate from a San Francisco terminus?
- The Timetable presented in Appendix E of the January 2004 CHSRA Operations Report presents a peak-hour operation of a San Francisco station of 4 trains per hour. Has a new timetable been prepared for either the operations or ridership analyses performed by CHSRA and presented in the draft EIR/EIS? Are any figures available to establish the number of trains that would operate from a San Francisco terminus during the projected AM and PM peak operating periods?
- Table 4.3-1A on page 21 of the January 2004 CHSRA Engineering Criteria Report establishes the time required to turn a train in a stub-end or terminus station at 20 minutes. Has there been any change in this operating requirement?

L030-3

L030-4

Please include these questions and your responses amongst the comments to the Draft Bay Area to Central Valley High-Speed Train (HST) Program Environmental Impact Report/ Environmental Impact Statement (EIR/EIS). Should you have any questions related to these inquiries, please feel free to contact me at 415.597.4620.

L030-5

Sincerely,

Robert Beck
Senior Program Manger

201 Mission Street, Suite 1960, San Francisco, CA 94105 • 415.597.4620 • transbaycenter.org



U.S. Department of Transportation
Federal Railroad Administration

Response to Letter L030 (Robert Beck, Transbay Joint Powers Authority, October 19, 2007)

L030-1

The Authority and FRA acknowledge receipt of the Transbay Joint Powers Authority's (TJPA) letter dated September 26, 2007. Please see Response to Comment L012.

L030-2

A detailed analysis of the number of trains that would operate from a San Francisco terminus will be analyzed at the project level of environmental study. The 124 trains per day is a theoretical level of service necessary to meet the forecasted systemwide ridership demand.

L030-3

A revised timetable has not been prepared as part of this Program EIR/EIS. The 124 trains per day are based on a theoretical level of service necessary to meet the forecasted demand.

L030-4

There has not been a change in that assumption for this Program EIR/EIS. These assumptions could change at the project-level environmental document.

L030-5

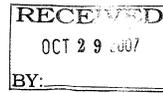
The questions provided in this letter are responded to above. The Authority and FRA appreciate receipt of comments from the TJPA on the Draft Program EIR/EIS and the contact information.



Comment Letter L031 (Rob Eastwood, County of Santa Clara, October 25, 2007)

L 031

County of Santa Clara
Department of Planning and Development
Planning Office
County Government Center, East Wing, 7th Floor
70 West Hedding Street
San Jose, California 95110-1705
(408) 299-5770 FAX (408) 288-9198
www.sccplanning.org



October 25, 2007

California High-Speed Rail Authority
EIR/EIS Comments
925 L Street, Suite 1425
Sacramento, CA 95814

Subject: Comments on the Draft Bay Area to Central Valley High-Speed Train (HST) Program EIR / EIS

To Whom it May Concern:

We have received and reviewed the Draft EIR / EIS dated July 2007. The County of Santa Clara appreciates the opportunity to provide comments on the EIR / EIS for this important transportation project.

L031-1

The Draft Program EIR / EIS for the Bay Area to Central Valley High Speed Train provides a broad overview of the potential environmental impacts from a variety of alternative alignments, including the Pacheco Alignment, which crosses Santa Clara County. Although the Draft EIR / EIS does not provide much detail regarding specific environmental impacts which could result from construction and operation of the high speed rail line, it is understood that this information will be included within a subsequent project level EIR / EIS.

L031-2

As such, we would appreciate the opportunity to receive and review the Project EIR / EIS for the proposed High Speed Train when it becomes available. Specific areas of environmental concern that are of interest to the County include aesthetics / visual impacts, impacts on farmland / agricultural operations, impacts on biological resources, and noise and vibration impacts. The County is also interested in the potential effects of the project on County roads and County parks identified within the vicinity of the proposed alignment for the HST program.

L031-3

We strongly suggest that the County General Plan and Noise Ordinance be referenced regarding thresholds of significance for noise and other applicable categories. We also suggest that the Habitat Conservation Plan that is being prepared is incorporated into the analysis.

L031-4

Again, thank you for providing this opportunity to review and provide comments on the Draft EIR / EIS. Should you have any questions, please feel free to contact me at (408) 299-5792.

L031-5

Sincerely,

Rob Eastwood, Senior Planner, AICP
County of Santa Clara, Department of Planning & Development

Cc: Peter Kutrus
Gary Graves
Sylvia Gallegos
Ann Ravel
Lizanne Reynolds
Lisa Killough
Mike Murdter

Board of Supervisors: Donald F. Gage, Blanca Alvarado, Pete McHugh, Ken Yeager, Liz Kniss
County Executive: Peter Kutrus, Jr.



U.S. Department of Transportation
Federal Railroad Administration

Response to Letter L031 (Rob Eastwood, County of Santa Clara, October 25, 2007)

L031-1

The Authority and FRA acknowledge receipt of the comment letter from the County of Santa Clara Department of Planning and Development.

L031-2

Comment acknowledged.

The Draft Program EIR/EIS provides a description of the general effects of the Bay Area to Central Valley alignment alternatives and station locations options. Please see Standard Responses 1 and 2. As noted in the letter, it is anticipated that preliminary engineering and project-level environmental review will be undertaken for the selected Preferred Alternative following certification of this Final Program EIR/EIS and completion of the environmental review process by the Authority Board and issuance of a Record of Decision by FRA.

L031-3

When the project-level draft EIR/EIS documents are prepared and publicly circulated, they will be made available to the Santa Clara Department of Planning and Development as requested. The project-level EIR/EIS documents will evaluate impacts on roadways and parks in the vicinity of the selected Preferred Alternative alignment, as well as other environmental impacts and mitigation measures.

L031-4

Please see Response to Comment L029-89, concerning potential noise mitigation measures to be considered further during project-level environmental reviews of the HST system. These measures as well as habitat conservation plans that have been developed can be included in project-level environmental review, when more detailed design and alignment information will be available.

L031-5

The Authority and FRA appreciate receipt of comments from the Santa Clara Department of Planning and Development and the contact information.



Comment Letter L032 (Lindy L. Lowe, San Francisco Bay Conservation and Development Commission, October 25, 2007)



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L 032

Dan Leavitt
October 25, 2007
Page 2

October 25, 2007

Dan Leavitt, Deputy Director
California High-Speed Rail Authority
925 L Street, Suite 1425
Sacramento, CA 95814

SUBJECT: Draft Bay Area to Central Valley High-Speed Train Program Environmental Impact Report/ Environmental Impact Statement (EIR/ EIS) (Inquiry File No. mc.mc.0706.1)

Dear Mr. Leavitt,

The San Francisco Bay Conservation and Development Commission (BCDC) appreciates the opportunity to review and comment on the California High-Speed Rail Authority's Draft Bay Area to Central Valley High-Speed Train Program Environmental Impact Report/Environmental Impact Statement (EIR/EIS). Although our Commission has not had the opportunity to review the draft EIR/ EIS and therefore these are staff comments, they are based on BCDC's law, the McAteer-Petris Act, and the provisions of its San Francisco Bay Plan (Bay Plan).

As a permitting authority along the San Francisco Bay shoreline, BCDC is responsible for granting or denying permits for all Bay filling, dredging or substantial change in use of land, water or structures within the Bay or on the shoreline, which is defined in the McAteer-Petris Act, as 100 feet landward of, and parallel to, the shoreline of the Bay. BCDC's regulations also require that proposed projects provide maximum feasible public access to the Bay and its shoreline consistent with the proposed project. In addition to the McAteer-Petris Act, an essential part of BCDC's regulatory framework is the Commission's San Francisco Bay Plan (Bay Plan). Projects approved by BCDC must be consistent with the McAteer-Petris Act and the provisions of the Bay Plan.

Given the potential adverse impacts that transportation projects can have on Bay resources when located along the Bay shoreline, or in the Bay, it is important that the planning and design of these facilities is done in a way that both protects and enhances the Bay as a regional resource, while ensuring the viability of a safe and efficient transportation system for the Bay Area. The draft EIR/ EIS for the High-Speed Rail service contains a number of different alignments, some that may have impacts on Bay resources and some that would largely avoid the Bay. Those alignments that would have the greatest impact on the Bay are those described within what the draft EIR/ EIS calls the San Francisco Bay Crossings Corridor. The alternatives described in this corridor include three alternative locations and seven design alternatives for crossing the Bay, including a new transbay tube connecting Oakland and San Francisco and either a bridge or a tube in the vicinity of the existing Dumbarton

Rail Bridge. While each of these alternatives would result in different types of impacts to the Bay, all of the alternatives would result in fill in the Bay and require the provision of maximum feasible public access.

If portions of the preferred alignment are located within BCDC's jurisdiction, then the accompanying environmental document should identify the amount of fill proposed, provide an analysis of why that fill is necessary and explain how the proposed fill is the minimum necessary to meet the objectives of the High-Speed Rail project. The project will need to be accompanied by a mitigation package designed to offset the fill in the Bay and by a public access component that would meet BCDC's requirement for maximum feasible public access. The mitigation and public access components should be identified in the environmental document for the selected alignment and should be included in any cost estimates for the Bay crossings alternatives. As was stated in BCDC's comment letter on the NOP, it is important for project proponents and sponsors to contact BCDC early in the project planning phase to allow staff to identify impacts to Bay resources and assist with the mitigation and public access components of the project in a timely fashion.

In addition to BCDC's fill and public access requirements, the environmental document for the preferred alternative should include a discussion of how the project is consistent with the findings, policies and priority land use area designations of the Bay Plan. In very general terms, the Bay Plan findings and policies direct that where new infrastructure must be developed or existing infrastructure must be expanded, the alignments chosen should be sited and designed to avoid adverse affects on Bay resources (e.g., tidal marshes, tidal flats, restored areas, habitats that support endangered species) and be consistent with BCDC's priority land use areas. The priority land use areas are an important component of the Bay Plan and were established to ensure that sufficient areas around the Bay are reserved for important water-oriented uses such as ports, water-related industry, wildlife refuges and parks. The draft EIR/ EIS includes several alternatives that would result in a new alignment through the Don Edwards National Wildlife Refuge which is designated by the Bay Plan as a wildlife refuge priority use area. The project should be designed to avoid an alignment that requires the placement of infrastructure in the wildlife refuge. If it is not possible to avoid the placement of infrastructure in the refuge, the design should minimize the impacts to the refuge and mitigate for those unavoidable impacts.

The transportation findings and policies of the Bay Plan provide support for public transit facilities, encouraging a reduction in the region's primary reliance on the single-occupant vehicle and the improvement and expansion of systems of transportation that can carry large volumes of people and goods. The High-Speed Rail project is consistent with this objective. Although not stated in the Bay Plan, the region will also be facing increased congestion at the three main commercial airports-San Francisco International Airport, San Jose International Airport and Oakland International Airport. It is possible that a new High-Speed Rail service could help alleviate this congestion, providing an alternative to flights coming from the Central Valley to make connections through Bay Area airports and providing the travelers in the busy Northern to Southern California route an alternative to air travel. Future environmental documents should include further contemplation how High-Speed Rail could complement the service provided at the three main commercial airports and the ways that the two modes could work together to relieve congestion and increase transportation alternatives, particularly during peak travel periods and during emergencies.

The Bay Plan also identifies the impacts that all transportation projects may have on Bay resources, including impacts to public access to the Bay, pedestrian and bicycle movement and important wildlife habitat areas. Historically, rail lines and roadway infrastructure along the Bay shoreline resulted in adverse impacts to non-motorized access, recreation and

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L032-3



Comment Letter L032 - Continued

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visual access in many communities near the Bay shoreline. To address these potential impacts, the Bay Plan contains a policy that states "[t]ransportation projects on the Bay shoreline or bridges over the Bay or certain waterways should include pedestrian and bicycle paths that will either be a part of the Bay Trail or connect the Bay Trail with other regional and community trails. Transportation projects should be designed to maintain and enhance visual and physical access to the Bay and along the Bay shoreline." The provision of non-motorized pathways, such as the Bay Trail, grade separated crossings and the support of non-motorized access to any proposed rail stations will help to ensure that the High-Speed Rail project is integrated fully into the existing communities and transportation systems.

The Bay Plan includes specific policies regarding additional bridges in the Bay, which state that "[i]f any additional bridge is proposed across the Bay, adequate research and testing should determine whether feasible alternative route, transportation mode or operational improvement could overcome the particular congestion problem without placing an additional route in the Bay." The Bay Plan also includes policy direction regarding the design of any additional bridge to be built over the Bay, including the provision that the route be placed in tunnel rather than a bridge if feasible, that toll plazas and service yards are not to be placed on fill in the Bay, that the bridge should be designed to accommodate non-motorized transportation and that the bridge facilities should provide adequate space and be designed so as not to interfere with pedestrian and bicycle access along the Bay shoreline. This policy is particularly relevant for the alternatives located in the vicinity of the Dumbarton Rail Bridge, which have the potential to impact existing public access where the Bay crossing infrastructure touches down at the Bay shoreline on the eastern and western shores of the Bay. The design of the crossing at this location should include all of the provisions listed above, including the provision of non-motorized public access on the bridge and the design should clearly demonstrate that the project enhances existing public access in the area, rather than degrading this existing access.

The transportation findings also identify impacts that are often associated with transportation projects sited in the Bay or along its shoreline, such as increased pollution from runoff and harm to marine mammals and fish from pile-driving for bridge construction. The EIR/EIS for the preferred alignment should include a discussion of these impacts if they are relevant.

For those alignments outside of the San Francisco Bay Crossings Corridor, it appears that the majority of the new High-Speed Rail service would be accommodated by sharing tracks that are currently in use by existing rail passenger and cargo service providers in the Bay Area. Using existing travel corridors should reduce many of the impacts that may be associated with a new train service, however the increase in service on the existing tracks may result in conflicts with the current cargo and passenger services that use the tracks and increase the noise, air quality and public access impacts associated with the service on the tracks.

In addition to the issues described above, the Commission has been collaborating with other regional agencies in the Bay Area to find ways to address climate change and associated sea-level rise. The California High-Speed Rail Authority should include provisions for dealing with sea-level rise in its planning for routes over the Bay and along its shoreline.

BCDC looks forward to working with the California High-Speed Rail Authority to determine the best possible route through the Bay Area, one that would increase travel efficiency and travel options, while minimizing impacts to Bay resources, including public access and wetland habitats. BCDC recognizes that a well-designed High-Speed Rail system serving the Bay Area could reduce congestion at the region's airports, reduce automobile

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L032-9

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L032-11

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October 25, 2007
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trips, improve air quality and contribute a cleaner way to connect the northern and southern regions of the state. Thank you again for the opportunity to review and comment on the draft EIR/EIS. If you have any questions please contact me at (415) 352-3642.

L032-11
Cont.

Sincerely,

LINDY L. LOWE
Senior Planner



Response to Letter L032 (Lindy L. Lowe, San Francisco Bay Conservation and Development Commission, October 25, 2007)

L032-1

The Authority and FRA acknowledge receipt of the comment letter from the BCDC, particularly related to the McAteer-Petris Act and the provisions of the San Francisco Bay Plan (Bay Plan).

L032-2

The Authority and FRA understand that BCDC is responsible for granting or denying permits for all Bay filling, dredging, or substantial change in use of land, water, or structures in the Bay or on the shoreline. The Authority and FRA acknowledge the requirements for maximum feasible public access to the Bay and consistency with the McAteer-Petris Act and the Bay Plan.

L032-3

The Preferred Alternative identified in this Final Program EIR/EIS does not involve a Bay crossing, in part due to the potential adverse effects associated with an HST Bay crossing. Please see Standard Response 3 regarding the identification of the Pacheco Pass as the Preferred Alternative.

L032-4

Please see Response to Comment L032-3.

L032-5

Please see Response to Comment L032-3. Avoidance of the Don Edwards Wildlife Refuge was one the reasons for identification of Pacheco Pass as the Preferred Alternative.

L032-6

Among the stated purposes of the HST program is to reduce the reliance on single-occupant vehicles, provide a facility that carries large volumes of people and goods, alleviate congestion at the region's airports, and provide transportation alternatives.

L032-7

The Authority and FRA are aware of the Bay Plan provision that a determination needs to be made if there is a feasible alternative to adding a bridge over the Bay. This provision played a role in the identification of Pacheco Pass as the Preferred Alternative because this alternative is a feasible alternative to a bridge over the Bay. The Preferred Alternative does not include a new transbay tube given that it would have high potential environmental impacts and considerable construction issues. These alternatives would have more than 36 acres of potential direct impacts on the San Francisco Bay. They would have 38.8 ac of potential impacts on water bodies (lakes + San Francisco Bay) whereas the Oakland and San Jose termini Altamont Pass network alternative would have only 2.3 acres of potential direct impacts. The cost of the additional 8.8-mile HST segment needed to implement a new transbay tube is estimated at about \$4.6 billion – more than \$500 million per mile. Moreover, there is only slightly higher ridership and revenue potential (less than 2% higher ridership or 1.0–1.6 million passengers per year by 2030) when comparing the transbay tube alternative via the East Bay versus the related Altamont Pass network alternative that terminates in Oakland.

L032-8

The Preferred Alternative identified in the Final Program EIR/EIS is not sited in the San Francisco Bay or along its shoreline.

L032-9

The Pacheco Pass Network Alternative is identified in this Final Program EIR/EIS as the Preferred Alternative in part due to the opportunity to share right-of-way and tracks along the Caltrain Corridor. Sharing this corridor provides for a reduction in impacts compared to a new HST alignment that is not in or adjacent to a transportation corridor.



The Preferred Pacheco Pass Alternative is strongly supported by Caltrain, which views the HST service as a major improvement to overall rail service in the Caltrain Corridor with the development of a fully grade-separated, electrified, four-track system. The HST system is viewed as an adjunct to the Caltrain service—a fully supportive and complementary service.

L032-10

Comment acknowledged. Section 3.3 of this Final Program EIS/EIR includes a discussion of global climate change. The issue of sea-level rise is addressed.

L032-11

The Authority and FRA note that the Preferred Alternative not only minimizes but actually avoids impacts on Bay resources. The Authority and FRA appreciate receipt of comments from BCDC and the contact information.



Comment Letter L033 (Jill Pirog, PMC, September 21, 2007)

Stockton public hearing.

Dan

L 033

Original Message

From: Jill Pirog [mailto:jpirog@PMCWorld.com]

Sent: Friday, September 21, 2007 3:48 PM

To: Dan Leavitt

Subject: HSR DEIR Comments due September 28, 2007

Dan,

I am helping prepare the City of Oakland's comments regarding the HSR DEIR/EIS. Is there any possibility that the deadline to submit comments will be extended? The City's Transportation Services Division is having a difficult time trying to meet this deadline. They are trying their hardest to get comments in to me by next week, but are uncertain that they will. I realize that these comment deadlines are typically firm, but I figured there was no harm in checking with you.

L033-1

Thank you for your time.

Best,

Jill Pirog
Associate Planner
PMC
1440 Broadway
Oakland, CA 94612



Response to Letter L033 (Jill Pirog, PMC, September 21, 2007)

L033-1

The Draft Program EIR/EIS was released for public review and comment on July 16, 2007, and noticed in the Federal Register on July 20, 2007. The initial public comment period was scheduled to end September 28, 2007, but, due to public requests, it was extended to October 26, 2007. During this period, the Authority held eight public hearings to present the Draft Program EIR/EIS and to receive public comments. Originally, six public hearings were scheduled, but, due to requests, two more public hearings were held. Comments were received from local, state, and federal elected officials; agency representatives; organizations and groups; and individuals.

In response to public requests such as this, the public comment period was extended from September 28 to October 26, 2007.



Comment Letter L034 (Connie Conway and Fritz Grupe, California Partnership for the San Joaquin Valley, October 18, 2007)



California Partnership for the San Joaquin Valley

RECEIVED
OCT 25 2007
BY:

L034

October 18, 2007

Quentin Kopp, Chairperson
California High-Speed Rail Authority
925 L Street, Suite 1425
Sacramento, CA 95814

RE: Comments on Draft EIR/EIS for the Central Valley to Bay Area Corridor

Dear Chairperson Kopp:

On behalf of the California Partnership for the San Joaquin Valley (Partnership), we thank you for this opportunity to submit comments for consideration by the California High-Speed Rail Authority and the Federal Railroad Administration regarding the draft EIR/EIS for the Central Valley to Bay Area Corridor. **In regard to alignment, the Partnership (a) supports connection for the whole Valley from Bakersfield to Sacramento; (b) recommends that the economic viability of developing both the Altamont and Pacheco Pass routes be evaluated; and (c) that if it turns out that only one route is economically viable, or if one route must be implemented before the other, recommends that the Altamont corridor be the preferred route.**

As you may know, the Partnership is a unique, public-private collaboration created by Governor Schwarzenegger to improve the economic vitality and quality of life for Valley residents. The Partnership was charged with developing a Strategic Action Proposal to provide actionable strategies for sustainable economic growth that will create jobs and improve environmental quality in the region. This plan was approved by the governor in November 2006. Work is well under way.

The Partnership held a special meeting of Valley stakeholders on August 9 on high-speed rail (HSR), obtaining comments from a large and diverse group of stakeholders. Following that meeting, the Partnership board approved its working position as follows:

- The HSR needs to serve the entire San Joaquin Valley (Bakersfield to Sacramento), and the region must stay together as it works toward implementation of this initiative. Amtrak should remain as a complementary service to HSR;
- \$15.5 million must stay in the 2007-08 budget as a minimum funding level;
- The HSR ballot measure must remain on the 2008 ballot;
- The federal government needs to contribute to the HSR project. Congress should seriously consider the establishment of a National High-Speed Rail Authority with powers similar to California's Authority;

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Fresno, California 93740

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559.294.6024 F

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L034-1

- Passenger rail also is a priority for the Valley and is meeting immediate demand, while the HSR initiative will address mid- and long-term demand;
- Land use patterns are a critical success factor for HSR. The Blueprint Regional Planning process needs to be tightly connected to the efforts to implement HSR in the Valley;
- The route between the San Joaquin Valley and the Bay Area will have a significant impact on the Valley being served as an entire region; and
- Submit a letter to the California High-Speed Rail Authority (a) supporting connection for the whole Valley from Bakersfield to Sacramento; (b) recommending that the economic viability of developing both the Altamont and Pacheco Pass routes be evaluated; and (c) that if it turns out that only one route is economically viable, or if one route must be implemented before the other, the Altamont corridor be the preferred route.

HSR is considered by the Partnership as foundational to the future prosperity of the San Joaquin Valley. For the past 20 years, while our population has increased by 60%, our vehicle-miles-traveled (VMT) increased by 150%, two-and-a-half times as much – this in a region that is now generally acknowledged to have the worst air quality in the nation, where 80% of our NOx emissions come from mobile sources. With the highest population growth rate in the state, this trend is expected to continue. California's Department of Finance expects the Valley's population to increase 104% between 2000 and 2040. Projected growth in passenger vehicle travel in the region will only exacerbate the Valley's air problem.

Significantly, 44% of the expected HSR ridership will involve people traveling within or in and out of the Valley. Those who choose to be transported by HSR rather than passenger vehicle will be part of the solution to our traffic congestion and air quality challenges. It is important that the train serve the *entire* Valley for this purpose and the reason why the Altamont corridor should be pursued.

We believe that HSR will have a positive impact on the Valley's economy. High unemployment rates have long been a challenge for the region, currently ranging anywhere from 7.3% in Madera County to 9.8% in Merced County, which has the second highest unemployment rate in the state. It is anticipated that HSR will create 450,000 permanent jobs by 2035 and 300,000 job-years of employment from construction. Additionally, core industry expansion and job creation efforts already under way could be significantly enhanced with a speedy commuter connection to northern and southern California.

We look forward to working with you to address these comments as you construct the final draft EIR/EIS for the Central Valley-Bay Area corridor. Please feel free to contact us or the Partnership's lead executive, Ashley Swearengin, at (559) 294-6021 or ashleys@csufresno.edu.

Sincerely,

Connie Conway, Chair

Fritz Grupe, Deputy Chair

L034-1
Cont.

PAGE 2 OF 2



U.S. Department of Transportation
Federal Railroad Administration

Response to Letter L034 (Connie Conway and Fritz Grupe, California Partnership for the San Joaquin Valley, October 18, 2007)

L034-1

Please see Standard Response 3 regarding identification of the Pacheco Pass as the Preferred Alternative. At this point, a bond measure to provide funding for the HST system is on the November 2008 ballot. The Authority is pursuing both federal and private sector funding to supplement the statewide bond funds, should they be approved by the voters of California.

The Authority and FRA acknowledge the importance of rail services in the Central Valley, in both the short and long term, and agree that the "Blueprint Regional Planning" process can and should be directly linked to the implementation of the HST system in the Central Valley. The Authority and FRA understand the important link between land use and transportation planning, with "smart growth" and infill development linked to major transportation multi-modal facilities, thus reducing our statewide dependence on oil-based energy, our sprawl patterns of development, and our emissions of greenhouse gases and other air pollutants. The Authority and FRA agree that improved mobility and access are critical to the Central Valley's and the State's economic vitality.

The Authority and FRA appreciate and stand willing to work with the California Partnership for the San Joaquin Valley and appreciate the contact information.

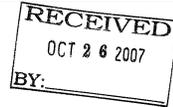


Comment Letter L035 (Mike McKeever, Sacramento Area Council of Governments, October 26, 2007)

Sacramento Area Council of Governments

1415 L Street, Suite 300 Sacramento, CA 95814

tel: 916.321.9000 fax: 916.321.9551 tdd: 916.321.9550 www.sacog.org



October 26, 2007

L035-1

Mr. Quentin Kopp October 26, 2007 Page 2

Mr. Quentin Kopp California High Speed Rail Authority 925 L Street, Suite 1425 Sacramento, CA 95814

Re: Comments by the Sacramento Area Council of Governments (SACOG) on the Draft Program EIR/EIS for the Bay Area to Central Valley High-Speed Train (HST) Program EIR/EIS.

Dear Chair Kopp:

Thank you for the opportunity to supplement our original comments provided on August 30, 2004, on the overall program level EIR/EIS for the overall HST system (attached for your convenience). Our comments today focus primarily on the Bay Area access issue (Pacheco vs. Altamont alignments), but also raise again an issue that we do not believe has received sufficient attention from the California High Speed Rail Authority (CHSRA).

First, with respect to the Bay Area access issue, we believe that draft document may be flawed in its projections of the Altamont ridership numbers. We would pose this question: How can ridership be greater via the Pacheco Pass alignment, which traverses areas of very low population densities, when compared to the Altamont alignment, which goes through Modesto, Stockton, Tracy, and Livermore? The Altamont alignment also lends itself much more readily to a future build out that would connect Sacramento and the Bay Area. It would seem that the CHSRA's consultant definitely needs to go back to the drawing boards in the ridership area before the document is finalized.

In addition to ridership, we would make the following observations: the travel times to Southern California are virtually the same (with the Altamont alignment slightly faster); the wetland/grassland and other environmental issues associated with the Pacheco alignment are highly problematic and will ultimately be more difficult to resolve than the Altamont environmental issues; and the costs to build a future Sacramento leg via the Altamont alignment are significantly less (i.e., a Sacramento-Stockton segment will be considerably cheaper to construct than a Sacramento-Chowchilla segment).

All of this, we believe, argues for the CHSRA to give very careful consideration to the Altamont alignment in its upcoming deliberations.

- Auburn Citrus Heights Colfax Davis El Dorado County Elk Grove Folsom Galt Isleton Lincoln Live Oak Loomis Marysville Placer County Placerville Rancho Cordova Rocklin Roseville Sacramento Sacramento County Sutter County West Sacramento Wheatland Winters Woodland Yolo County Yuba City Yuba County

L035-1

L035-2

L035-3

L035-4

L035-5

L035-6

There is another issue, however, which the Sacramento Area Council of Governments (SACOG) feels most strongly about and which we would like to reemphasize to the CHSRA regardless of which Bay Area alignment is selected. In our August 30, 2004, letter, SACOG pointed out our concerns about the potential for the High Speed Train (HST) to create sprawl, particularly in the San Joaquin Valley. We believe that the measures the CHSRA has developed to date to deal with sprawl are inadequate. While the intentions of the CHSRA in this area are admirable, SACOG believes that the Authority has not examined sufficiently the unintended consequences of the project with respect to sprawl.

There is virtually no difference between the freeway system and an HST system with the sprawling effect that such a project can create. One need look no further than New York City and Chicago after World War II to see the massive low density development that occurred in Connecticut and Northern Illinois by commuter trains. When a wage earner can buy a much less expensive home in Fresno and commute to work in the Bay Area in less than one hour, why would that individual not do so? Look what is happening in Tracy and Modesto, and the commutes are much greater than one hour. The CHSRA needs to address this issue in a much more in depth manner than it has to date.

The Europeans and the Japanese have dealt with this issue with very strict land use controls. We do not suggest that land use controls are the only to deal with this issue. While the Coastal Commission has been very effective, as an example, in preserving the California coastline, land use controls have not been generally very popular with the residents of this State. There may be incentives which the CHSRA could explore that would address the issue of sprawl in a more proactive way. The main point here is that the CHSRA has not really addressed in a thoroughgoing manner the issue of the potential of the project to create additional sprawl throughout the State. This unintended consequence of the project could very well defeat very problem the project was proposed to solve. We encourage the CHSRA to take up this issue immediately, and SACOG stands ready to offer its assistance in any way that would be helpful. We believe that our experience with the Blueprint project and the PLACE'S methodology could be very useful to the Authority.

Thank you and please feel free to call me if you have any comments or questions.

Sincerely,

Mike McKeever Executive Director

MM:OW:gg Attachment

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L035-7

L035-8



U.S. Department of Transportation Federal Railroad Administration

Response to Letter L035 (Mike McKeever, Sacramento Area Council of Governments, October 26, 2007)

L035-1

The Authority and FRA acknowledge receipt of comments from the Sacramento Area Council of Governments.

L035-2

All Altamont and Pacheco Pass network alternatives provide HST station location options in the same communities throughout the Central Valley and southern California. The only substantial difference outside of the Bay Area is that Altamont provides the opportunity for an additional HST station in Tracy, which is near other HST stations in Stockton and Modesto. Within the Bay Area, the only potential station differences are in southern Santa Clara County and eastern Alameda County. Therefore, statewide access to an HST station is relatively equal when similar Altamont and Pacheco network alternatives are compared.

Ridership differences arise due to differences in travel time, travel cost, and service frequency between individual station pairs for Altamont and Pacheco, as well as HST's competitive position relative to auto and air travel in certain markets. Most notably, the Altamont Pass alternative includes an HST service split in the East Bay, which greatly reduces HST frequency (compared to Pacheco Pass) to San Jose and San Francisco under the base network alternative. The ridership and revenue forecasts assumed about 50 trains per day per direction between Los Angeles and San Francisco/San Jose in the Pacheco Pass alternative. Due to the HST service split, the Altamont Pass alternative has 33 trains per day from Los Angeles to San Francisco and 17 trains per day from Los Angeles to San Jose (for the same total of 50 between Los Angeles and the Bay Area). This allocation of trains to the two destinations means that everyone traveling to these destinations has lower frequency of trains in the Altamont alternative compared to the Pacheco Pass alternative. This lower frequency leads to about 6 million fewer annual systemwide

passengers in the base Altamont Pass alternative compared to the base Pacheco Pass alternative.

Although the Altamont Pass alternative has the potential to achieve higher ridership between the Bay Area and northern Central Valley (Merced northward), Pacheco Pass alternative achieves higher ridership between the Bay Area and areas from Fresno southward (including Los Angeles and San Diego regions). Due to its proximity to the Central Coast region (through a potential Gilroy station), the Pacheco Pass alternative also creates a sizable HST market to/from the Monterrey Bay area; this market is virtually untapped with the Altamont Pass alternative.

L035-3

Comment acknowledged.

L035-4

Please see Response to Comment S009-8.

L035-5

Comment acknowledged.

L035-6

Identification of a Preferred Alternative for this Final Program EIR/EIS was a deliberative and difficult process. As noted throughout this Program EIS/EIR, each of the alternative alignments presents differing impacts and benefits, and a review of the public comments illustrates the strong positions that have been taken for Altamont Pass or for Pacheco Pass. Please see Standard Response 3 regarding the identification of the Pacheco Pass as the Preferred Alternative.

The underlying reasons for the identified Preferred Alternative are presented in Chapter 8 of this Final Program EIR/EIS.



L035-7

The Authority and FRA do not agree with the assertion that there is very little difference between the freeway system and a new HST system. Freeways have many interchanges and exacerbate sprawl, whereas HST systems, such as the proposed California HST system, have limited station stops. Please refer to Standard Response 4 regarding growth. Please also see Chapter 5 in regards to “Economic Growth and Related Impacts” and Chapter 6 in regards to “Station Area Development.” Chapter 6 includes the Authority’s adopted policies requiring transit-oriented development around stations and commitments toward developing smart growth principles in the vicinity of HST stations.

L035-8

The Authority and FRA appreciate receipt of the Sacramento Area Council of Government’s comments on the Draft Program EIR/EIS and the contact information.



Comment Letter L036 (Christopher Cabaldon, Sacramento Area Council of Governments, August 30, 2004)

Oct 26 07 01:13p 01in Woods
Sacramento, CA 95814
www.sacog.org

(530)753-4203



L036

August 30, 2004

Mr. Joseph E. Petrillo, Chair
California High Speed Rail Authority
925 L Street, Suite 1425
Sacramento, CA 95814

Re: Comments by the Sacramento Area Council of Governments (SACOG) on the Draft Program EIR/EIS for the Proposed California High-Speed Train System (January 2004)

Dear Chair Petrillo:

Heights

Thank you for the opportunity to comment on this project which is exciting in both its purpose and magnitude. The following comments are submitted by the SACOG Board regarding the Draft Program EIR/EIS for the proposed high-speed train system.

ido County

General Comments:

The SACOG Board strongly supports the concept contained in the document that calls for the elimination of unnecessary stations and for choosing alignments which allow for the quickest possible running times between Northern and Southern California, consistent with financial and environmental constraints.

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The SACOG Board joins those asking for a re-evaluation of the Altamont corridor because of its potential benefit of creating a quick and direct connection between the Sacramento and Bay Areas. The Altamont corridor would reduce Sacramento to San Francisco travel by 21 minutes compared to the Diablo Range Direct corridor and by 41 minutes compared to the Pacheco Pass corridor. We believe that the ridership potential in the Sacramento area may have been underestimated by CHRSAs consultants and the Board would urge that the ridership projections be re-evaluated.

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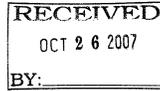
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Upon further study, if the Altamont option is unfeasible, the SACOG Board would urge adoption of the Diablo Range Direct alternative. This option adds only three minutes to the trip from Sacramento to San Jose and 21 minutes to San Francisco. The gain in ridership from the Sacramento area would more than offset the loss in ridership in the Gilroy area associated with the Pacheco Pass alternative.

Lastly, if neither the Altamont nor the Diablo Range Direct options prove feasible, it is imperative that significant improvements be made to the Capital Corridor to provide faster, more frequent and more reliable service between the Bay Area and the Sacramento Area, which is projected to double in population to 3.8 million by 2050. Improvements such as those identified in the document for the Lossan corridor between Los Angeles and San Diego would seem appropriate.



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(530)753-4203

p. 2

Mr. Joseph E. Petrillo
Page 2
August 30, 2004

There is significant potential, under current land use practices, of significant growth inducement and land consumption in the Central Valley, including the Sacramento area. The document assumes the project will result in an increase in population and jobs; it further assumes this will be done within a smaller urban footprint. The concern of the SACOG Board is that under current land use practices, the system could create a much larger footprint and foster sprawl on a large scale.

Since CHSRA does not have land use authority, the SACOG Board asks that the EIR/EIS evaluate a sub-alternative of the High-Speed Rail Alternative that assumes that additional growth consumes land as it does under current land use trends. The SACOG Board would further recommend that CHSRA provide recommendations for addressing the decentralized growth the system will almost certainly create. Along these lines, SACOG suggests that CHSRA make use of the PLACE'S software, which can estimate the effects of alternatives on travel demands.

The cost of the high speed system is \$33 billion to \$37 billion for full build out. It is important that decision makers be crystal clear on the costs and benefits of such a system. While it is understood that the project would be funded with private, State bond, and Federal "demonstration" dollars, it seems apparent that traditional State and Federal fund sources also will be tapped. The SACOG Board asks that the Program EIR/EIS carefully examine the extent to which this will occur and the tradeoffs involved in diverting existing State and Federal program dollars from their current uses.

Specific:

The SACOG Board strongly supports the Sacramento Valley Station/Railyards site as the location for the rail terminal for the SACOG region. Whether the Caltrans line or the UP line is selected, the Board endorses the downtown site over the Power Inn location.

The Board also wishes to indicate its preference for the Union Pacific (UP) alignment in the vicinity of Elk Grove and for the Caltrans alignment in the vicinity of Galt. The issue in both cities is noise and there appears to be sufficient spacing between the two locations to make the transition from one alignment to the other. Based on a review of current mapping, it looks feasible to utilize the Caltrans alignment from Stockton to north of Galt and then to turn northwest to connect with the U.P. alignment south of Elk Grove.

The SACOG Board further wishes to endorse the California High Speed Rail Authority's decision, reflected in the document, to grade separate all high-speed crossings. This is particularly important in the South Sacramento area, where development patterns lend themselves to the potential of unexpected vehicle and train conflicts, particularly in foggy, nighttime conditions.

The SACOG Board appreciates the opportunity to submit these comments and looks forward to working with CHSRA in its evaluation of a high speed train system for California.

Sincerely,

CHRISTOPHER CABALDON
Chair

CCMTOW:ts



U.S. Department of Transportation
Federal Railroad Administration

Response to Letter L036 (Christopher Cabaldon, Sacramento Area Council of Governments, August 30, 2004)

L036-1

Comment acknowledged. This comment letter was responded to as part of the Authority and FRA's certified statewide program EIR/EIS document (November 2005).



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