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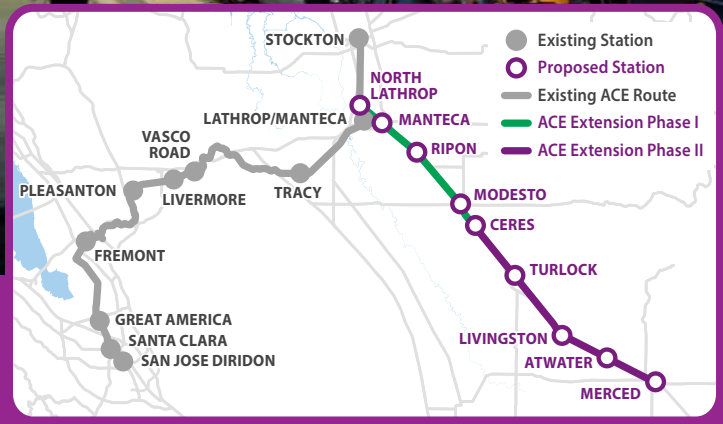
ALTAMONT CORRIDOR EXPRESS

ACE Extension Lathrop to Ceres/Merced

Final Environmental Impact Report • Volume I

SCH #2018012014



July 2018

FINAL ENVIRONMENTAL IMPACT REPORT

SAN JOAQUIN REGIONAL RAIL COMMISSION
ACE EXTENSION LATHROP TO CERES/MERCED

STATE CLEARINGHOUSE #2018012014

PREPARED FOR:

San Joaquin Regional Rail Commission
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July 2018

ICF. 2018. *San Joaquin Regional Rail Commission ACE Extension Lathrop to Ceres/Merced Environmental Impact Report*. Final. July. (ICF 00509.17.) San Francisco, CA. Prepared for San Joaquin Regional Rail Commission, Stockton, CA.

Contents

Tables

Figures

Acronyms and Abbreviations

AAQA	ambient air quality analysis
ACE	Altamont Corridor Express
ACE Extension	Extension Lathrop to Ceres/Merced
ACTC	Alameda County Transportation Commission
AIA	Airport's Airport Influence Area
Alameda CTC	Alameda County Transportation Commission
BAAQMD	Bay Area Air Quality Management District
Board	Central Valley Flood Protection Board
$C0_2e$	carbon dioxide equivalent
CAAQS	California ambient air quality standards
Caltrans	California Department of Transportation
CCIC	Central Coast Information Center
CDFW	California Department of Fish and Wildlife
Central Valley RWQCB	Regional Water Quality Control Board
CEQA	California Environmental Quality Act
CH_4	methane
CO	carbon monoxide
CO_2	carbon dioxide
CRMP	construction risk management plan
CVFPB	Central Valley Flood Protection Board
DCTA	Denton County Transit Authority
DTSC	Department of Toxic Substance Control
EIR	environmental impact report
FHWG	Fisheries Hydroacoustic Working Group
HCP	Habitat Conservation Plan
HSR	High-Speed Rail
MCAG	Merced County Association of Governments
MCFB	Merced County Farm Bureau
MOW	Maintenance of way
MP	mile-post
N_2O	nitrous oxide
NO_X	nitrogen oxide
OPR	Office of Planning and Research
PM10	particulate matter that is 10 microns in diameter and smaller
PM2.5	particulate matter that is 2.5 microns in diameter and smaller
PTC	Positive Train Control
RC	reinforced concrete
ROG	reactive organic gases
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SEL	sound exposure level
SFBAAB	San Francisco Bay Area Air Basin
SJCOG	San Joaquin Council of Governments

SJMSCP	San Joaquin County Multi-Species Habitat Conservation and Open Space Plan
SJRRC	San Joaquin Regional Rail Commission
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SLC	California State Lands Commission
SO_2	sulfur dioxide
SR	State Route
StanCOG	Stanislaus Council of Governments
SWPPP	stormwater pollution prevention plan
TIH	toxic inhalation hazard
TRAC	Train Riders Association of California
TRANSDEF	Transportation Solutions Defense and Education Fund
UPRR	Union Pacific Railroad
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
VTA	Valley Transportation Authority
WDR	Waste Discharge Requirement

1

Chapter 1
Introduction

This final environmental impact report (EIR) for the Altamont Corridor Express (ACE) Extension Lathrop to Ceres/Merced (ACE Extension) project has been prepared in compliance with the California Environmental Quality Act (CEQA). This final EIR consists of the draft EIR, appendices, comments, response to comments, revisions to the draft EIR and the mitigation monitoring plan. The San Joaquin Regional Rail Commission (SJRRC) is the CEQA lead agency for the ACE Extension. As required by CEQA, the draft EIR was made available to the public and regulatory agencies for review and comment during a 45-day period between April 13, 2018 and May 28, 2018. An open house was held on May 8, 2018, to receive comments on the draft EIR.

The CEQA Guidelines require that written responses be prepared for all comments regarding environmental issues received on a draft EIR during the public review period. Per Section 15132 of the CEQA Guidelines, a final EIR shall consist of:

1. The draft EIR or a revision of that draft.
2. Comments and recommendations received on the draft EIR either verbatim or in a summary.
3. A list of persons, organizations, and public agencies commenting on the draft EIR.
4. The response of the lead agency to significant environmental points raised in the review and consultation process.
5. Any other information added by the lead agency.

In compliance with CEQA, this document contains the following:

- Comments received on the April 2018 draft EIR (Chapter 2, *Comments Received on the Draft EIR*);
- Responses to those comments (Chapter 3, *Responses to Comments*);
- Revisions to the draft EIR in the form of an errata (Chapter 4, *Text Revisions to the Draft EIR*);
- An analysis of environmental impacts resulting from one change in the project description (Chapter 5, *Lathrop Wye Double Track Description and Impact Analysis*); and
- List of print references and personal communications cited in this final EIR (Chapter 6, *References*).
- Appendix A, *Updated ACE Extension Environmental Footprint*
- Appendix B, *Updated ACE Extension 15% Preliminary Engineering Plans*
- Appendix C, *Lathrop Wye Double Track 15% Preliminary Engineering Plans*
- Appendix D, *Updated ACE Extension Opinion of Probable Cost Report.*

The April 2018 draft EIR is incorporated by reference and is provided on a DVD inside the back cover of this document.

Under the CEQA Guidelines Section 15088.5, a lead agency is required to recirculate an EIR when significant new information is added to the EIR. As used in this section, the term "information" is not

"significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project. "Significant new information" requiring recirculation include, for example, a disclosure showing that:

1. A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
2. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.

During the preparation of the final EIR, SJRRC and UPRR identified the need for an additional track improvement in one location to support the ACE Extension to Ceres and Merced. Revisions to the EIR are described in Chapter 5, *Lathrop Wye Double Track Description and Impact Analysis*. The improvements associated with the **Lathrop Wye Double Track** have been reviewed and the environmental impacts of these changes are disclosed in Chapter 5, *Lathrop Wye Double Track Description and Impact Analysis*.

SJRCC, as the CEQA Lead Agency, has, supported by substantial evidence, determined that the changes associated with the **Lathrop Wye Double Track** would not result in any new significant impacts, nor any substantially more severe impacts than disclosed in the draft EIR and thus there is no need to recirculate the draft EIR. SJRCC, as the CEQA Lead Agency, has also determined that the revisions to the draft EIR made in response to comments would not result in any new significant impacts, nor any substantially more severe impacts than disclosed in the draft EIR and thus there is no need to recirculate the draft EIR.

Chapter 2
Comments Received on the Draft EIR

This chapter includes a list of the public agencies, organizations, private companies, and individuals who commented on the draft EIR (Table 2-1); and the actual comment letters submitted. The comment letters have been numbered as shown in Table 2-1 and include letters and emails. The individual comments within each letter have been numbered in the margin. There is a response for each comment in Chapter 3, *Responses to Comments*. The location of the responses for each letter is indicated in Table 2-1.

Table 2-1. List of Commenters and Location of Responses

Letter #	Commenter	Location of Responses in Chapter 3
State Agencies		
S1	California Department of Transportation (Caltrans)	Page 3-1
S2	California State Lands Commission (SLC)	Page 3-2
S3	Central Valley Flood Protection Board (CVFPB)	Page 3-8
S4	State of California Governor's Office of Planning and Research (OPR)	Page 3-9
Regional Agencies		
R1	Central Valley Regional Water Quality Control Board (Central Valley RWQCB)	Page 3-9
Local Agencies		
L1	Alameda County Transportation Commission (Alameda CTC)	Page 3-11
L2	City of Livermore	Page 3-12
L3	City of Merced	Page 3-12
L4	City of Ripon	Page 3-13
L5	Merced County Association of Governments (MCAG)	Page 3-13
Organizations		
O1	Merced County Farm Bureau (MCFB)	Page 3-13
O2	Train Riders Association of California (TRAC) & Transportation Solutions Defense and Education Fund (TRANSDEF)	Page 3-16
Private Companies		
P1	Scoto Properties LLC & Scoto Brothers Farming, Inc	Page 3-26
P2	Terra Land Group LLC	Page 3-28
P3	Union Pacific Railroad (UPRR)	Page 3-33
Individuals		
I1	Albert Cresci	Page 3-34
I2	Hong-An Doan	Page 3-34
I3	Mark Jacops	Page 3-34
I4	Brad Johnson	Page 3-34

1

Letter #	Commenter	Location of Responses in Chapter 3
I5	Linda Johnson	Page 3-35
I6	Frank Mchugh	Page 3-35
I7	Richard Meissner	Page 3-35
I8	Frank and Christine Mendes	Page 3-36
I9	Kevin Moss	Page 3-36
I10	Sandra Moss	Page 3-36
I11	Kenneth Sacca	Page 3-37
I12	Adam Serpa	Page 3-37
I13	Christopher Stai	Page 3-37

2 2.1 Draft EIR Comments

3 The following pages include comments received on the draft EIR in their entirety.

Gmail Matt Hertel <aceextension.south@gmail.com>

SCH - 2018012014 - ACE Extension Lathrop to Ceres Merced Project - Caltrans Comments - 05-29-18

1 message

Wu, Bo@DOT <Bo.Wu@dot.ca.gov> Tue, May 29, 2018 at 4:56 PM
To: "ACEextension.south@gmail.com" <ACEextension.south@gmail.com>
Cc: "Bushong, Christian M@DOT" <christian.bushong@dot.ca.gov>, "Behrooj, Hadi H@DOT" <hadi.behrooj@dot.ca.gov>, "Maurice, Patricia@DOT" <patricia.maurice@dot.ca.gov>, "Dumas, Thomas A@DOT" <tom.dumas@dot.ca.gov>, "Cheung, Jerry@DOT" <Jerry.Cheung@dot.ca.gov>, "Martinez, Steven R@DOT" <Steven.R.Martinez@dot.ca.gov>, "Swearingen, Joshua B@DOT" <joshua.swearingen@dot.ca.gov>

Good afternoon,

Attached is Caltrans' comment letter for the *ACE Extension Lathrop to Ceres/Merced Project*. SCH# 2018012014.

Thank you,

Bo Wu

LD-IGR Statewide Coordinator

Office of Smart Mobility and Climate Change

Division of Transportation Planning

California Department of Transportation

bo.wu@dot.ca.gov | (916) 651-8197

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SCH_-_2018012014_-_ACE_Extension_Lathrop_to_Ceres_Merced_Project_-_Caltrans_Comments_-_05-29-18.pdf
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Making Conservation a California Way of Life.

May 29, 2018

SCH# 2018012014
GTS# 04-MULTIPLE-2018-00072
GTS I.D. 10454

Mr. Kevin Sheridan
San Joaquin Regional Rail Commission
949 East Channel Street
Stockton, CA 95202

ACE Extension Lathrop to Ceres/Merced Project – Draft Environmental Impact Report

Dear Mr. Sheridan:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Draft Environmental Impact Report (DEIR) of the proposed ACE Extension Lathrop to Ceres/Merced Project (project). The mission of Caltrans is to provide a safe, sustainable, integrated, and efficient transportation system to enhance California's economy and livability.

Caltrans is the responsible agency of this project where the State Highway System (SHS) is involved and has the following comments at this time:

Segments that affect the State Right of Way (ROW) will require the following discussion:

- Maintenance Agreements between all affected parties.
- Signal Operations must be addressed to ensure continued optimal function.
- Features affecting bridge structures, columns, footings, vertical clearances, etcetera, requires Headquarters Office of Structures input.

S1-1

The follow are additional Caltrans Policies that are not all-inclusive, and may be applicable:

- Project Development Procedures Manual (PDPM) Chapter 17 – "Encroachments and Utilities" for topic matters regarding encroachments within State ROW, installing utilities within State ROW, etc. http://www.dot.ca.gov/design/manuals/pdpm.html
- PDPM Chapter 27 – Access Control Modification. Please note that access control rights are preserved; connection points on freeways and expressways are kept to a minimum. Access control modification is permitted only after careful analysis to determine that no detrimental effect would impact facility operation. http://www.dot.ca.gov/design/manuals/pdpm.html

- Any design features affecting State facility's design standards/features based on the Caltrans Highway Design Manual (HDM) will have to be evaluated. See HDM Table 82.1 located within Chapter 80, Application of Design Standards. http://www.dot.ca.gov/design/manuals/hdm.html
- A transit platform and associated facilities/structures within the State ROW will require review/input from the Division of the State Architect. http://www.dgs.ca.gov/dsa/home.aspx
- The transit platform and associated facilities will also have to comply with "Pedestrian Accessibility Guidelines for Highway Projects" from the Design Information Bulletin (DIB) 82-06 http://www.dot.ca.gov/design/stp/dib/dib82-06.pdf

S1-1 cont

Growth and development can have a significant impact on traffic and congestion on State and local transportation facilities. In order to create more efficient and livable communities, we encourage the applicant to work towards a safe, functional, interconnected, multi-modal system integrated with "smart growth" type planning propose mitigation measures.

In lieu of reliance on the automobile, we encourage the applicant to design features that are pedestrian-, bicycle-, and transit-friendly in order to enable residents to choose alternative modes of transportation to the ACE facilities. Improved transit accommodation through the provision of park and ride facilities, signal prioritization, and other enhancements, such as Zero Emission Vehicle (ZEV) charging stations as well as bike- and car-share options are considerations.

S1-2

We encourage the applicant to incorporate design features and site proximities that foster walking and bicycling, expanded public transit options, accessibility for children, elderly, and persons with disabilities. Transit synchronization considerations can make travel times competitive with the automobile, such as present and future connectivity to Amtrak and California High Speed Rail services.

Please continue to keep us informed of this project and any future developments that could potentially affect State transportation facilities. Should you have any questions regarding this letter, please contact Bo Wu at (916)-651-8197 or bo.wu@dot.ca.gov.

Sincerely,

Christian Bushong

CHRISTIAN BUSHONG
Branch Chief, Local Development-Intergovernmental Review
Headquarters

c: State Clearinghouse

Gmail Matt Hertel <aceextension.south@gmail.com>

Comments ACE Extension Lathrop to Ceres_Merced Project

1 message

Miller, Laura@SLC <Laura.Miller@slc.ca.gov> Tue, May 29, 2018 at 2:43 PM
To: "ACEextension.south@gmail.com" <ACEextension.south@gmail.com>
Cc: "state.clearinghouse@opr.ca.gov" <state.clearinghouse@opr.ca.gov>, "Tutov, Dobri@SLC" <Dobri.Tutov@slc.ca.gov>, "Garrett, Jamie@SLC" <Jamie.Garrett@slc.ca.gov>, "Borack, Alexandra@SLC" <Alexandra.Borack@slc.ca.gov>

Good Afternoon Mr. Sheridan -

Please find attached our department's comment letter on the ACE Extension Lathrop to Ceres/Merced Project (EIR). Feel free to contact me if you have any questions. An original copy will follow via U.S. Mail.

SCH # 2018012014

Thank you,

Laura Miller

CA State Lands Commission

Division of Environmental Planning and Management

916-574-1911

Comment Letter ACE Extension Lathrop to Ceres_Merced Project.pdf
2629K

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Established in 1938

May 29, 2018

File Ref: SCH #2018012014

Kevin Sheridan
San Joaquin Regional Rail Commission
949 East Channel Street
Stockton, CA 95202

VIA REGULAR & ELECTRONIC MAIL (ACEextension.south@gmail.com)

Subject: Draft Environmental Impact Report (EIR) for Altamont Corridor Express (ACE) Extension Lathrop to Ceres/Merced Project, San Joaquin, Stanislaus, and Merced Counties

Dear Mr. Sheridan:

The California State Lands Commission (Commission) staff has reviewed the Draft EIR for the ACE Extension Lathrop to Ceres/Merced Project (Project) prepared by the San Joaquin Regional Rail Commission (SJRRC). The SJRRC, as the public agency proposing to carry out the Project, is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) The Commission is a trustee agency for projects that could directly or indirectly affect State sovereign land and their accompanying Public Trust resources or uses. Additionally, because the Project involves work on State sovereign land, the Commission will act as a responsible agency. On February 9, 2018, the Commission staff submitted a comment letter on the Notice of Preparation (NOP) for the EIR (see attached), requesting consultation on the CEQA document pursuant to Public Resources Code, section 21153, subdivision (a), and State CEQA Guidelines, section 15086, subdivisions (a)(1) and (2). SJRRC staff did not consult or coordinate with Commission staff before releasing the Draft EIR for public review. S2-1

Commission Jurisdiction and Public Trust Lands

For a review of the Commission's jurisdiction and management authority, please see the NOP comment letter dated February 9, 2018. As noted in the Draft EIR, the bridge crossings over the Stanislaus River, Tuolumne River, and Merced River include State-owned sovereign land, and a lease and formal authorization will be required from the Commission for the portions of the Project encroaching on State sovereign land.

Project Description

SJRRC proposes to implement a suite of improvements to the regional rail system to improve passenger service in the San Joaquin Valley, reduce greenhouse gas and air emissions from automobiles, and support transportation planning goals. From the Project Description, Commission staff understands that the Draft EIR includes both project-level and programmatic analysis. Improvements analyzed at a program level of review, would be reviewed subsequently at a Project level. The following components have potential to affect State sovereign land.

- Project-Level Analysis (Phase I): Ceres Extension Alignment: New track connections and bridge crossings over the Stanislaus River and Tuolumne River between Lathrop and Ceres
- Programmatic Analysis (Phase II): Merced Extension Alignment: Expand rail service to Merced with new tracks, including a new bridge crossing over the Merced River

The Draft EIR identifies the Environmentally Superior Alternative as a combination of different alternatives for Phase I and II improvements. The Environmentally Superior Alternative does not alter any of the Project activity impacts occurring under the Commission's jurisdiction.

Environmental Review

Commission staff requests that the SJRRC consider the following comments on the Draft EIR and the attached NOP comment letter, which are incorporated by reference below, to ensure impacts to State sovereign land are adequately analyzed to support Commission action on the lease application. Unless specified, all comments apply to the bridge crossing activities for the Stanislaus, Tuolumne, and Merced Rivers. S2-1 cont

General Comments

1. Project Description: The Project includes three new single-track concrete bridges that would require two to three supporting piles placed within the Stanislaus, Tuolumne, and Merced Rivers, all within the Commission's jurisdiction. The bent H-piles would be driven into reinforced concrete cast-in-drill-hole pile shafts.

   The Project Description lacks a detailed explanation of the in-water work for the bridge crossings, requested in Commission staff's NOP comments. For example, all three bridge crossings will have 100-foot spans between the piles, shown in the 15 percent preliminary engineering drawings[1] and in Table 2-3. However, the Draft EIR does not clarify whether a 100-foot span is considered a "longer span" that will require a temporary work trestle, which would increase impacts. The Draft EIR also doesn't evaluate the Project's in-water construction impacts with the trestle (the more conservative scenario). In addition, other activities associated with pile driving in the rivers are only briefly mentioned; it is not until page 4.4-47 (Chapter 4.4, Biological Resources) where coffer dams and other dewatering activities are first

[1] Appendix C-10, p. 4 for Stanislaus River Crossing. Appendix C-10, p. 5 for Tuolumne River Crossing.

discussed. The Final EIR Project Description should also include the details found in Mitigation Measure (MM) BIO-3.2 regarding the number of strikes per day for pile driving, the overall period, and how that period is broken down both over a calendar year and over the Project's multi-year construction schedule.

The Project Description in Chapters 2 and 3[2] should describe the in-water activities that will occur, including dewatering activities and any temporary structures placed in the river, to ensure an accurate and consistent Project Description required by State CEQA Guidelines, section 15124, subdivision (c). The Draft EIR has conflicting or absent information regarding the structure and dewatering activity location, footprint, and duration. For example, construction for the bridge crossing would last between 14 and 36 months, depending on in-water work windows, but Table 2-7 shows 26 months for bridge construction. For the environmental impact analysis, the Final EIR should clarify and describe the most conservative construction timetable, especially given the in-water seasonal work restrictions imposed by mitigation measures. For example, MM BIO-3.3 requires river channel work between June 15 and October 15, which would likely result in a more drawn-out construction timeline. S2-1 cont

In the absence of an adequate Project Description and detailed impact analysis, the Commission may require subsequent environmental review prior to considering a lease approval for the Project.

2. Environmental Footprint: The Project study area associated with a new bridge crossing over the Stanislaus River is not shown in Appendix B-2. There appears to be a gap between pages 4 and 5 of the appendix where the Stanislaus River would be. The Final EIR should edit these figures or add a new figure to clearly indicate the Project study area that is part of the Project Description in Chapter 2 and evaluated in Chapter 4. S2-2

Biological Resources

3. Impact Analysis (Phase I): The Draft EIR shows the acres of habitat potentially impacted by the Project activities and identifies construction impacts to special-status plants as potentially significant but does not explain how the mitigation measures would lower impacts to a less-than-significant level as required by State CEQA Guidelines, section 15126.4, subdivision (a)(1)(B). In addition, the document defers evaluation of impacts to special-status plant species until after Project approval, by including a mitigation measure requiring protocol-level surveys that would determine actual presence of any listed plants (MM BIO-1.1). While pre-construction surveys as mitigation can be appropriate, Commission staff recommends the Final EIR include more detailed baseline information regarding the presence or absence of plant species. The environmental setting and impact analysis should be supported by current surveys of the Project area and review of the California Natural Diversity Database and other information sources. S2-3

[2] The Project Description for the Merced River bridge crossing is identical, both in type of structures used and in construction equipment/activities, and therefore should have a similar level of detail for the in-water work.

4. Special-Status Wildlife Mitigation: The Draft EIR discloses the potential presence of special-status species in and around the Stanislaus, Tuolumne, and Merced Rivers and that construction activities could directly impact these species within the Project impact area. The Draft EIR also states that the proposed mitigation measures will reduce all potential impacts to less than significant (e.g., MM BIO-2.6 requires construction work to cease until all appropriate measures are taken regarding giant garter snakes). The Draft EIR, however, does not disclose the results of any consultation with agencies such as the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) as to what types of measures these agencies would recommend. Commission staff recommends that the SJRRC consult with the USFWS and CDFW for direction on compensatory mitigation to better support less than significant impact determinations. The results of that consultation should be included in the Final EIR to support impact determinations and mitigation measures. S2-4

   In addition, MM BIO-2.5 and MM BIO-2.6 require certain special-status amphibians and reptiles, if found within the Project impact area, to be relocated. The Final EIR should clarify how the handling of listed species will be done in conformance with the Federal and State Endangered Species Act, as applicable, and conservatively analyze the associated impact of these mitigation measures. If the USFWS does not provide comments on the Draft EIR for MM BIO-2.5 and MM BIO 2.6, the SJRRC should contact the USFWS and the Final EIR should document correspondence to confirm that these mitigation measures will not result in adverse environmental impacts. If there are potential adverse impacts, the Final EIR should disclose them pursuant to State CEQA Guidelines section 15126.4, subdivision (a)(1)(D).

5. Special-Status Wildlife Preconstruction Surveys: The mitigation measures to avoid certain wildlife species include preconstruction surveys occurring at varying times (3 days before construction, 7 days before construction, etc.), but other mitigation measures do not include a specified time window. The Final EIR should clarify why each time window was chosen and why there is no specified time for MM BIO-2.7.

   Mitigation Measure BIO-2.8 requires construction activities to avoid the bird nesting season to the extent feasible. The nesting season for most species is identified as February 1 through August 31. However, per MM BIO-3.3, construction activities within the river channels can only occur between June 15 and October 15, which overlaps with the avoidance period. Commission staff notes that the work window restriction could create a conflict with MM BIO-2.8, if nests are found (activities designed to establish buffer zones), depending on the acoustic impacts from in-water work and the sensitivity of the species present. S2-5

6. Special-Status Fish Species: While the Draft EIR identifies that "noise from pile driving can injure or kill fish if impact hammers are used to drive piles," Commission staff were unable to find any quantitative analysis or information explaining how this conclusion was determined, which would allow for an evaluation of the likelihood and S2-6

degree of injury or kill identified.[3] An underwater acoustic analysis should be included in the Final EIR, identifying a threshold of significance for each fish species by providing the hearing range and onset level for Level A harassment (injury) and Level B harassment (behavioral modification). In addition, the analysis should provide the expected noise level and distance of threshold exceedance calculations for both vibratory and impact pile driving, since both methods may be used to drive the piles into the Stanislaus, Merced, and Tuolumne Rivers.[4] These calculations should also include the result of any proposed noise reduction measures, and include a brief discussion explaining the results. Without this additional analysis and information, it is unclear how MM BIO-3.1 will reduce the potentially significant impact to less than significant. Commission staff notes that the impact analysis appears feasible, because Chapter 4.12, Noise (page 4.12-31), provides the quantitative results for human exposure to pile driving activities. S2-6 cont

7. Permanent and Temporary Habitat Loss: The Draft EIR provides various measures that mitigate for special-status species' habitat with compensatory mitigation. Mitigation Measure BIO-5.2 includes different mitigation ratios but does not indicate the footprint for permanent versus temporary impacts. The Final EIR should include the estimated acres of permanent and temporary habitat lost. S2-7

Cultural Resources

8. Submerged Resources: As requested in the Commission staff's NOP comments, the Final EIR should evaluate potential impacts to submerged cultural resources in the Project area. The Commission maintains a shipwrecks database that can assist with this analysis. Commission staff requests that, if not already complete, the SJRRC contact Staff Attorney Jamie Garrett (see contact information below) to obtain shipwrecks data from the database and Commission records for the Project site. The results of this inquiry should be included in the Final EIR. Please note that any submerged archaeological site or submerged historic resource that has remained in state waters for more than 50 years is presumed to be significant. Because of this possibility, please add a mitigation measure requiring that, "In the event cultural resources are discovered during any construction activities in or near the Stanislaus, Tuolumne, and Merced Rivers, Project personnel shall halt all activities in the immediate area and notify both the California State Lands Commission and a qualified archaeologist to determine the appropriate course of action." S2-8

9. Title to Resources: Please see Commission staff's NOP comment letter (attached). In addition, Commission staff requests that the following statement be included in the EIR's Mitigation and Monitoring Program: "The final disposition of archaeological, historical, and paleontological resources recovered on state lands under the S2-9

[3] *City of Maywood v Los Angeles Unified Sch. Dist.* (2012) 208 Cal.App.4th 362, 395. The Final EIR's impact findings could be inadequate if there is no evidence or information in the document showing that the impact was studied.

[4] Page 4.12-23 of the Draft EIR (Chapter 4.12, Noise) states that the Project would "avoid the use of impact pile drivers where possible near noise-sensitive areas or use quieter alternatives (e.g., drilled piles) where geological conditions permit."

jurisdiction of the California State Lands Commission must be approved by the Commission." S2-9 cont

Hazardous Materials

10. Hazardous Materials Release Sites: Figure 4.9-3 shows a hazardous materials release site, identified by GeoTracker, located within the environmental footprint for construction activities and near the Tuolumne River. Please include additional information in the Final EIR explaining any nexus between bridge crossing construction activities and a potential release from this site into the river and identifying any mitigation measures that address the impact. S2-10

Hydrology and Water Quality

11. Dewatering: While the Draft EIR mentions dewatering activities briefly on page 4.10-26 (Chapter 4.10, Hydrology), the Final EIR should provide a description of the dewatering activities, including the anticipated footprint, materials and equipment used, duration of the dewatering activities, and any associated impact on water quality or biological resources (particularly for pipe construction that may be needed to divert stream flow around bridge construction areas). See also comment 1. Project Description above. S2-11

12. Water Quality Mitigation: Impact HYD-1 includes mitigation measures to reduce the water quality impacts from construction. However, the Draft EIR identifies MM HYD-1.1 and MM HYD-1.2 to determine a less-than-significant impact, but later includes MM HAZ-2.3 and MM HYD-7.1 without explaining how those measures help. The Final EIR should include a brief discussion of all applied mitigation measures to appropriately justify the significance determination. S2-12

13. Mercury/Methylmercury: As noted in the Draft EIR, all three rivers under the Commission's jurisdiction are identified as impaired for mercury in the state's Clean Water Act Section 303(d) list, but no further information, analysis, or determination is provided regarding the bridge construction activity impacts. Commission staff's NOP comments requested an analysis of the possible contaminated sediment disturbance and identification of a threshold of significance for mercury release (see attached). While MM HYD-1.2 includes water quality monitoring pursuant to the Regional Water Quality Control Board (RWQCB) Section 401 certification, Commission staff recommends that the SJRRC coordinate with the RWQCB to obtain, through informal communications, information related to the agency's mercury concerns in the Project's footprint, and a non-exclusive list of actions typically required that have lowered the mercury impact for similar projects or disturbances to less than significant. The results of that coordination should be included in the Final EIR with a description of expected outcomes and measures to mitigate any significant impacts. S2-13

Recreation

14. Navigation Impediments: The Project involves construction of a new bridge adjacent to the existing rail bridge structure in the Stanislaus, Tuolumne, and Merced rivers. When heavy watercraft traffic is present on the rivers (i.e., summer weekends, S2-14

holidays, prime fishing seasons, etc.), the in-water piers and any associated protective structures for these bridges can pose permanent navigational obstacles, resulting in constrained navigation. These in-water structures also accumulate large woody debris, sediment, and other materials that get caught in the debris piles, which can also be a hazard for navigation. Periodic maintenance could be required to remove accumulated debris and maintain any protective structures for the bridge piles. The Draft EIR does not include an analysis of these potentially significant permanent navigational impacts. An approach to mitigate these impacts could include removal of other existing derelict structures and navigational hazards in the Project vicinity. Derelict structures could include abandoned pilings, outfall pipelines, piers, floating docks, or artificial debris. This mitigation approach is needed on State public land, given the construction of three new bridges and retention of adjacent freight rail bridges. The SJRRC is encouraged to provide this analysis in the Final EIR, identify the permanent navigational impacts as potentially significant, and consider a mitigation approach.

S2-14 cont

Thank you for the opportunity to comment on the Draft EIR for the Project. As a responsible and trustee agency, the Commission will need to rely on the Final EIR for the issuance of any new lease as specified above, and therefore, staff requests that you consider these comments prior to certification of the Final EIR. Commission staff will review the certified EIR concurrent with a lease application for this Project. If the EIR does not adequately identify and mitigate potentially significant impacts on State sovereign land, then additional environmental review by Commission staff pursuant to CEQA may be required.

Please send copies of future Project-related documents, including electronic copies of the certified EIR, Mitigation Monitoring and Reporting Program, Notice of Determination, CEQA Findings, and if applicable, Statement of Overriding Considerations when they become available. Please refer questions concerning environmental review to Alexandra Borack, Environmental Scientist, at (916) 574-2399 or via email at alexandra.borack@slc.ca.gov. For questions concerning archaeological or historic resources under Commission jurisdiction, please contact Staff Attorney Jamie Garrett, at (916) 574-0398 or via email at jamie.garrett@slc.ca.gov. For questions concerning Commission leasing jurisdiction, please contact Dobri Tutov, Public Land Management Specialist, at (916) 574-0722 or via email at dobri.tutov@slc.ca.gov.

Sincerely,

Cy R. Oggins, Chief
Division of Environmental Planning
and Management

cc: Office of Planning and Research
D. Tutov, Commission
A. Borack, Commission
J. Garrett, Commission

STATE OF CALIFORNIA EDMUND G. BROWN JR., *Governor*

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

JENNIFER LUCCHESI, *Executive Officer*
(916) 574-1800 *Fax* (916) 574-1810
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Contact Phone: **(916) 574-1890**
Contact FAX: **(916) 574-1885**

Established in 1938

February 9, 2018

File Ref: SCH # 2018012014

San Joaquin Regional Rail Commission
949 East Channel Street
Stockton, CA 95202

SENT VIA EMAIL TO: ACEextension.south@gmail.com

Subject: Notice of Preparation (NOP) for an Environmental Impact Report (EIR) for the Altamont Commuter Express (ACE) Extension Lathrop to Ceres/Merced Project, San Joaquin, Stanislaus, and Merced Counties

Dear Sir or Madam:

The California State Lands Commission (Commission) staff has reviewed the subject NOP for the ACE Extension Lathrop to Ceres/Merced Project (Project) EIR, which is being prepared by the San Joaquin Regional Rail Commission (SJRRC). The SJRRC, as the public agency proposing to carry out the Project, is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). The Commission is a trustee agency for projects that could directly or indirectly affect sovereign land and their accompanying Public Trust resources or uses. Additionally, because the Project involves work on sovereign land, the Commission will act as a responsible agency. Commission staff requests that the SJRRC consult with Commission staff on preparation of the Draft EIR as required by CEQA section 21153, subdivision (a) and State CEQA Guidelines section 15086, subdivisions (a)(1),(2).

Commission Jurisdiction and Public Trust Lands

The Commission has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The Commission also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code, §§ 6009, subd. (c); 6009.1; 6301; 6306). All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the common law Public Trust Doctrine.

As general background, the State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and waterways upon its

admission to the United States in 1850. The state holds these lands for the benefit of all people of the state for statewide Public Trust purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. On tidal waterways, the State's sovereign fee ownership extends landward to the mean high tide line, except for areas of fill or artificial accretion or where the boundary has been fixed by agreement or a court. On navigable non-tidal waterways, including lakes, the state holds fee ownership of the bed of the waterway landward to the ordinary low-water mark (OLWM) and a Public Trust easement landward to the ordinary high-water mark (OHWM), except where the boundary has been fixed by agreement or a court. Such boundaries may not be readily apparent from present day site inspections.

After review of the information contained in the NOP, the bridge crossings over the Stanislaus River, Tuolumne River, and Merced River include State-owned sovereign land. A lease and formal authorization for the use of sovereign land will be required from the Commission for the portions of the Project encroaching on State-owned land. Although the NOP includes a map of existing infrastructure over the San Joaquin River, which also includes State-owned sovereign land, Commission staff understands from the NOP that Project improvements are not specifically proposed on or over the San Joaquin River. Page 4 of the NOP states that, "no improvements are proposed along the existing ACE corridor between Stockton and San Jose."

Project Description

SJRRC proposes to implement a suite of improvements to modernize the existing ACE rail service to meet the agency's objectives and needs as follows:

- Improve Passenger Service: Reduce travel time, increase service reliability and frequency in the San Joaquin Valley, improve passenger facilities, and extend the reach of ACE rail service to downtown Modesto and Merced
- Reduce Emissions from Automobiles: Provide a mobility alternative to automobiles and lower greenhouse gas (GHG) emissions and improve air quality
- Support Transportation Planning Goals: Further land use and transportation planning goals under Senate Bill 375 and other local, regional, and state sustainability initiatives

From the Project Description, Commission staff understands that the EIR would include both project-level and programmatic analysis. Improvements that are analyzed at a program level of review would be reviewed subsequently at a Project level before they would be approved at a Project level. Components of the Project are discussed with their level of analysis below:

Project-Level Analysis (Phase I)

- New and/or Relocated Stations: Installation of a new or relocated station for the Lathrop/Manteca station, with new stations in Downtown Manteca, Ripon, Modesto, and Ceres

- New Track Connections and Improvements: Track improvements at the existing Lathrop/Manteca Station; a new Oakland-Fresno Subdivision Connection with a new track connection between the Oakland and Fresno Subdivisions; new track and bridge crossings over the Stanislaus River and Tuolumne River between Lathrop and Ceres
- Temporary or Interim Structures: A temporary Ceres Layover Facility to support operations until the extension to Merced is completed, as well as an interim bus bridge between Merced and Ceres
- Increase in Service: The operations to Ceres would include three to four additional trains in the morning and evening from Ceres to Lathrop, which would also run in reverse, with four buses providing connections to Merced

Programmatic Analysis (Phase II)

- Merced Extension Alignment: Expand rail service to Merced with new tracks, upgrades, and bridges (including over the Merced River), as well as new stations in Turlock, Livingston, Atwater, and Merced
- Increase in Service: The operations to Merced would include three to four additional trains in the morning and evening from Merced to Lathrop, which would also run in reverse

Environmental Review

Commission staff requests that the SJRRC consider the following comments when preparing the EIR.

General Comments

1. Project Description: A thorough and complete Project Description should be included in the EIR to facilitate meaningful environmental review of potential impacts, mitigation measures, and alternatives. The Project Description should be as precise as possible in describing the details of all allowable activities (e.g., types of equipment or methods that may be used, maximum area of impact or volume of sediment removed or disturbed, seasonal work windows, locations for material disposal, etc.), as well as the details of the timing and length of activities. Thorough descriptions of work to occur at river crossings, with specific reference to the OHWM and OLWM will facilitate Commission staff's determination of the extent and locations of its leasing jurisdiction, make for a more robust analysis of the work that may be performed, and minimize the potential for subsequent environmental analysis to be required. Additionally, please ensure that the Project Description and subsequent environmental analysis continue to clearly distinguish between project-level analysis and programmatic analysis (Phase I and II).

   With regard to the new Oakland-Fresno Subdivision Connection with a new track connection between the Oakland and Fresno Subdivisions associated with Phase I improvements, Commission staff requests the following additional information to be included in the Draft EIR:

- Notation on the Project location map to illustrate and clarify the location of the new subdivision connection along the Phase I route alignment
- Additional discussion in the Project Description on the location of where new subdivision and/or right-of-way entitlements are needed for Phase I and II improvements

2. Programmatic Document: Because the EIR is proposed as both a "programmatic" and a "project-level" document, the Commission expects the Project will be presented as a series of distinct but related sequential activities (i.e., Lathrop to Ceres improvements, then an extension to Merced). The State CEQA Guidelines, section 15168, subdivision (c)(5) states that a program EIR will be most helpful in dealing with subsequent activities if it deals with the effects of the program as specifically and comprehensively as possible. To avoid the improper deferral of mitigation, a common flaw in program-level environmental documents, mitigation measures should either be presented as specific, feasible, enforceable obligations, or should be presented as formulas containing "performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way (State CEQA Guidelines, § 15126.4, subd. (a))." As such, the EIR should make an effort to distinguish what activities, impacts, and mitigation measures are being analyzed in sufficient detail to be covered under the program EIR without additional project specific environmental review, and what activities will trigger the need for additional environmental analysis (see State CEQA Guidelines, § 15168, subd. (c)).

Biological Resources

3. Sensitive Species: The EIR should disclose and analyze all potentially significant effects on sensitive species and habitats in and around the Project area (particularly within affected waterways), including special-status wildlife, fish, and plants, and if appropriate, identify feasible mitigation measures to reduce those impacts. The SJRRC should conduct queries of the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database and U.S. Fish and Wildlife Service's (USFWS) Special Status Species Database to identify any special-status plant or wildlife species that may occur in the Project area, including aquatic species. The EIR should also include a discussion of consultation with the CDFW and USFWS, including any recommended mitigation measures and potentially required permits identified by these agencies.

4. Invasive Species: One of the major stressors in California waterways is introduced species. Therefore, the EIR should consider the Project's potential to encourage the establishment or proliferation of aquatic invasive species (AIS), such as quagga and zebra mussels, or other nonindigenous, invasive species including aquatic and terrestrial plants. For example, construction boats and barges brought in from long stays at distant projects may transport new species to the Project area via hull biofouling, wherein aquatic organisms attach to and accumulate on the hull and other submerged parts of a vessel. If the analysis in the EIR finds potentially significant AIS impacts, possible mitigation could include contracting vessels and

barges from nearby, or requiring contractors to perform a certain degree of hull-cleaning. The CDFW's Invasive Species Program could assist with this analysis as well as with the development of appropriate mitigation (information at www.dfg.ca.gov/invasives/).

5. Construction Noise: The Project includes several bridge crossings, which may require pile-driving for support piles in the Stanislaus, Tuolumne, and Merced Rivers. Therefore, the EIR should evaluate noise and vibration impacts on fish, birds, and other affected species (aquatic species in-particular) from construction, restoration, and flood control activities in the water, on levees, and for land-side supporting structures. Barotrauma effects to fish and other aquatic species could occur if the underwater sound pressure levels caused by pile-driving activities exceed known injury thresholds. The EIR should discuss, as applicable, the type of piles and methods proposed for pile installation and analyze the potential for these activities to disturb, injure, or kill sensitive fish (including eggs and larvae) or other organisms. Mitigation measures could include vibratory pile-driving, soft-start operations, bubble curtains, cushioning blocks, and species-specific work windows as defined by CDFW, USFWS, and the National Marine Fisheries Service. Again, staff recommends early consultation with these agencies to minimize the impacts of the Project on sensitive species.

Climate Change

6. GHG Emissions: A GHG emissions analysis consistent with the California Global Warming Solutions Act (Assembly Bill 32) and required by the State CEQA Guidelines should be included in the EIR. This analysis should identify a threshold for significance for GHG emissions, calculate the level of GHGs that will be emitted as a result of construction and ultimate build-out of the Project, determine the significance of the impacts of those emissions, and, if impacts are significant, identify mitigation measures that would reduce them to the extent feasible.

7. Effects on Rivers: Because the proposed bridge crossings have potential to be impacted by the effects of climate change on riverine processes, Commission staff requests that the SJRRC include this analysis in the EIR. As stated in *Safeguarding California* (California Natural Resources Agency 2014), climate change is projected to increase the frequency and severity of natural disasters related to flooding, drought, and storms. In rivers, more frequent and powerful storms can result in increased flooding conditions and damage from storm created debris. Conversely, prolonged droughts could dramatically reduce river flow and water levels, leading to loss of public access and navigability. Climate change will further influence riverine areas by changing erosion and sedimentation rates. Flooding and storm flow, as well as runoff, will likely increase scour, decreasing bank stability at a faster rate.

   Due to these potential climate change impacts, proposed bridge crossing infrastructure could need reinforcement in the future to withstand higher levels of flood exposure and more frequent storm events. These structures may require more frequent maintenance or replacement to ensure continued function during and after storm seasons or to avoid dislodgement. Please include this analysis in the EIR, and

please note that this information will be required with a lease application for proposed work on State sovereign land.

Cultural Resources

8. Submerged Resources: For crossings over navigable waterways, the EIR should evaluate potential impacts to submerged cultural resources in the Project area. The Commission maintains a shipwrecks database that can assist with this analysis. Commission staff requests that the SJRRC contact Staff Attorney Jamie Garrett (see contact information below) to obtain shipwrecks data from the database and Commission records for the Project site. The database includes known and potential vessels located on the State's tide and submerged lands; however, the locations of many shipwrecks remain unknown. Please note that any submerged archaeological site or submerged historic resource that has remained in state waters for more than 50 years is presumed to be significant. Because of this possibility, please add a mitigation measure requiring that in the event cultural resources are discovered during any construction activities, Project personnel shall halt all activities in the immediate area and notify a qualified archaeologist to determine the appropriate course of action.

9. Title to Resources: The EIR should also mention that the title to all abandoned shipwrecks, archaeological sites, and historic or cultural resources on or in the tide and submerged lands of California is vested in the state and under the jurisdiction of the California State Lands Commission (Pub. Resources Code, § 6313). Commission staff requests that the SJRRC consult with Staff Attorney Jamie Garrett (see contact information below), should any cultural resources on state lands be discovered during construction of the proposed Project.

Recreation

10. River Access: The EIR should consider the Project's impacts to recreation, navigation, and pubic access on navigable waterways, in particular the Stanislaus, Tuolumne, and Merced Rivers. Construction and operations of new river crossings for rail lines may disrupt recreational boating activities and public access to navigable rivers. Please assess these impacts in the EIR, and if significant impacts are found, develop mitigation measures to reduce impacts to less than significant.

Hydrology and Water Quality

11. Mercury/Methylmercury: Project area waterways have been listed by the Central Valley Regional Water Quality Control Board (CVRWQCB) as being impaired by mercury under the Clean Water Act. Mercury is a sediment-associated pollutant. Activities that disturb sediment and cause turbidity can release mercury and make it available for uptake by fish. Some potential Project activities, such as construction of river crossings, may disturb sediment and contribute to mercury transport in the rivers. The sediment disturbance may release mercury and increase the likelihood of exposure by the public. Please identify a threshold of significance for mercury release, include an estimate of the amount of mercury released by Project-related

activities, determine the significance of the impacts of the release using the threshold, and if the impacts are potentially significant, identify mitigation measures or Project changes that would reduce them to less than significant.

To provide some background, on April 22, 2010 the CVRWQCB identified the Commission as both a state agency that manages open water areas in the Sacramento-San Joaquin Delta Estuary and a nonpoint source discharger of methylmercury (Resolution No. R5-2010-0043), because subsurface lands under the Commission's jurisdiction are impacted by mercury from legacy mining activities dating back to California's Gold Rush. Pursuant to a CVRWQCB Total Maximum Daily Load (TMDL), the CVRWQCB is requiring the Commission to fund studies to identify potential methylmercury control methods in the Delta and to participate in an Exposure Reduction Program. The goal of the studies is to evaluate existing control methods and evaluate options to reduce methylmercury in open waters under the jurisdiction of the Commission. Any action taken that may result in mercury or methylmercury suspension upstream of the Sacramento-San Joaquin Delta Estuary may affect the Commission's efforts to comply with the CVRWQCB TMDL.

Thank you for the opportunity to comment on the NOP for the EIR. As a trustee and responsible agency, Commission staff requests consultation for this Project and to be kept advised of changes to the Project Description and all other important developments. Please send additional information on the Project to the Commission staff listed below as the EIR is being prepared.

Please refer questions concerning environmental review to Alexandra Borack, Environmental Scientist, at (916) 574-2399 or via e-mail at alexandra.borack@slc.ca.gov. For questions concerning archaeological or historic resources under Commission jurisdiction, please contact Staff Attorney Jamie Garrett, at (916) 574-0398 or via e-mail at jamie.garrett@slc.ca.gov. For questions concerning Commission leasing jurisdiction please contact Dobri Tutov, Public Lands Management Specialist, at (916) 574-0722 or via e-mail at dobri.tutov@slc.ca.gov.

Sincerely,

Cy R. Oggins, Chief
Division of Environmental Planning
and Management

cc: Office of Planning and Research
D. Tutov, CSLC
A. Borack, CSLC
J. Garrett, CSLC

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY EDMUND G. BROWN JR., GOVERNOR

CENTRAL VALLEY FLOOD PROTECTION BOARD
3310 El Camino Ave., Ste. 170
SACRAMENTO, CA 95821
(916) 574-0609 FAX: (916) 574-0682

April 19, 2018

Mr. Kevin Sheridan
San Joaquin Regional Rail Commission
949 E. Channel Street
Stockton, California 95202

Subject: Altamont Corridor Express Lathrop to Ceres/Merced, Draft Environmental Impact Report, SCH No.: 2018012014

Location: Counties of San Joaquin, Stanislaus and Merced

Dear Mr. Sheridan,

Central Valley Flood Protection Board (Board) staff has reviewed the subject document and provides the following comments:

The proposed project is within Bear Creek and the Stanislaus, Tuolumne and Merced Rivers, regulated streams under Board jurisdiction, and may require a Board permit prior to construction.

The Board's jurisdiction covers the entire Central Valley including all tributaries and distributaries of the Sacramento and San Joaquin Rivers, and the Tulare and Buena Vista basins south of the San Joaquin River.

Under authorities granted by California Water Code and Public Resources Code statutes, the Board enforces its Title 23, California Code of Regulations (Title 23) for the construction, maintenance, and protection of adopted plans of flood control, including the federal-State facilities of the State Plan of Flood Control, regulated streams, and designated floodways. S3-1

Pursuant to Title 23, Section 6 a Board permit is required prior to working within the Board's jurisdiction for the placement, construction, reconstruction, removal, or abandonment of any landscaping, culvert, bridge, conduit, fence, projection, fill, embankment, building, structure, obstruction, encroachment, excavation, the planting, or removal of vegetation, and any repair or maintenance that involves cutting into the levee.

Permits may also be required to bring existing works that predate permitting into compliance with Title 23, or where it is necessary to establish the conditions normally imposed by

permitting. The circumstances include those where responsibility for the works has not been clearly established or ownership and use have been revised.

Other federal (including U.S. Army Corps of Engineers Section 10 and 404 regulatory permits), State and local agency permits may be required and are the applicant's responsibility to obtain.

Board permit applications and Title 23 regulations are available on our website at http://www.cvfpb.ca.gov/. Maps of the Board's jurisdiction are also available from the California Department of Water Resources website at http://gis.bam.water.ca.gov/bam/.

S3-1 cont

Please contact James Herota at (916) 574-0651, or via email at James.Herota@CVFlood.ca.gov if you have any questions.

Sincerely,

Andrea Buckley
Environmental Services and Land Management Branch Chief

cc: Office of Planning and Research
P.O. Box 3044, Room 113
Sacramento, CA 95812-3044

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

May 30, 2018

Kevin Sheridan
San Joaquin Regional Rail Commission
949 E. Channel Street
Stockton, CA 95202

Subject: ACE Extension Lathrop to Ceres/Merced
SCH#: 2018012014

Dear Kevin Sheridan:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on May 29, 2018, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

S4-1

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
1-916-322-2318 FAX 1-916-558-3184 www.opr.ca.gov

RECEIVED
MAY 24 2018

CALIFORNIA Water Boards

Central Valley Regional Water Quality Control Board

Edmund G. Brown Jr.
Governor

Matthew Rodriquez
Secretary for
Environmental Protection

21 May 2018

CERTIFIED MAIL
91 7199 9991 7036 6990 3957

San Joaquin Regional Rail Commission
949 East Channel Street
Stockton, CA 95202

COMMENTS TO REQUEST FOR REVIEW FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, ACE EXTENSION LATHROP TO CERES/MERCED PROJECT, SCH# 2018012014, SAN JOAQUIN COUNTY

Pursuant to the State Clearinghouse's 13 April 2018 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Draft Environment Impact Report* for the ACE Extension Lathrop to Ceres/Merced Project, located in San Joaquin County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38. R1-1

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases,

the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues.

For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:
http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/.

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Policy is available on page IV-15.01 at:
http://www.waterboards.ca.gov/centralvalleywater_issues/basin_plans/sacsjr.pdf

R1-1 cont

In part it states:

> *Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.*
>
> *This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.*

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan

R1-2

(SWPPP).

For more information on the Construction General Permit, visit the State Water Resources Control Board website at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml.

R1-2 cont

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits[1]

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

R1-3

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/.

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

Industrial Storm Water General Permit

Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ.

For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml.

R1-4

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACOE). If a Section 404 permit is required by the USACOE, the Central Valley Water Board will review the permit application to ensure

R1-5

[1] Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements.

If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACOE at (916) 557-5250.

R1-5 cont

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACOE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications.

R1-6

Waste Discharge Requirements – Discharges to Waters of the State

If USACOE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation.

For more information on the Water Quality Certification and WDR processes, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/help/business_help/permit2.shtml.

R1-7

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Risk General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Risk Waiver)
R5-2013-0145. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Risk General Order and the application process, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

R1-8

For more information regarding the Low Risk Waiver and the application process, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2013-0145_res.pdf

R1-8 cont

Regulatory Compliance for Commercially Irrigated Agriculture

If the property will be used for commercial irrigated agricultural, the discharger will be required to obtain regulatory coverage under the Irrigated Lands Regulatory Program. There are two options to comply:

1. **Obtain Coverage Under a Coalition Group.** Join the local Coalition Group that supports land owners with the implementation of the Irrigated Lands Regulatory Program. The Coalition Group conducts water quality monitoring and reporting to the Central Valley Water Board on behalf of its growers. The Coalition Groups charge an annual membership fee, which varies by Coalition Group. To find the Coalition Group in your area, visit the Central Valley Water Board's website at: http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/for_growers/apply_coalition_group/index.shtml or contact water board staff at (916) 464-4611 or via email at IrrLands@waterboards.ca.gov.

R1-9

2. **Obtain Coverage Under the General Waste Discharge Requirements for Individual Growers, General Order R5-2013-0100**. Dischargers not participating in a third-party group (Coalition) are regulated individually. Depending on the specific site conditions, growers may be required to monitor runoff from their property, install monitoring wells, and submit a notice of intent, farm plan, and other action plans regarding their actions to comply with their General Order. Yearly costs would include State administrative fees (for example, annual fees for farm sizes from 10-100 acres are currently $1,084 + $6.70/Acre); the cost to prepare annual monitoring reports; and water quality monitoring costs. To enroll as an Individual Discharger under the Irrigated Lands Regulatory Program, call the Central Valley Water Board phone line at (916) 464-4611 or e-mail board staff at IrrLands@waterboards.ca.gov.

Low or Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Dewatering and Other Low Threat Discharges to Surface Waters* (Low Threat General Order) or the General Order for *Limited Threat Discharges of Treated/Untreated Groundwater from Cleanup Sites, Wastewater from Superchlorination Projects, and Other Limited Threat Wastewaters to Surface Water*

R1-10

(Limited Threat General Order). A complete application must be submitted to the Central Valley Water Board to obtain coverage under these General NPDES permits.

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2013-0074.pdf

R1-10 cont

For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2013-0073.pdf

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit.

R1-11

For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/help/business_help/permit3.shtml

If you have questions regarding these comments, please contact me at (916) 464-4644 or Stephanie.Tadlock@waterboards.ca.gov.

Stephanie Tadlock

Stephanie Tadlock
Environmental Scientist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

Gmail **Matt Hertel <aceextension.south@gmail.com>**

Alameda CTC Comment letter

1 message

Carolyn Clevenger <cclevenger@alamedactc.org> Fri, May 25, 2018 at 3:39 PM
To: "ACEextension.south@gmail.com" <ACEextension.south@gmail.com>
Cc: Tess Lengyel <tlengyel@alamedactc.org>

Attached pls find a comment letter from Alameda CTC on the Draft EIR.

Regards,

Carolyn

AlamedaCTC_ACE_Extension_Comment_Letter_Draft_20180525_clean.pdf
210K

ALAMEDA
County Transportation Commission

1111 Broadway, Suite 800, Oakland, CA 94607 • 510.208.7400 • www.AlamedaCTC.org

May 25, 2018

Mr. Dan Leavitt
Manager of Regional Initiatives
San Joaquin Regional Rail Commission
Attn: ACE Extension Lathrop to Ceres/Merced Draft EIR
949 East Channel Street
Stockton, CA 95202

Dear Mr. Leavitt:

Thank you for the opportunity to comment on the Altamont Commuter Express (ACE) Extension, Lathrop to Ceres/Merced Environmental Impact Report (EIR). The San Joaquin Regional Rail Commission should be commended for advancing this major effort and continuing its work to improve rail service and connectivity between the San Joaquin Valley, Alameda County and Santa Clara County.

ACE service is vital to the mobility of Alameda County residents, providing high quality transit service for the residents of the Tri-Valley and the southern part of Alameda County, connecting people to jobs, and reducing congestion on two of the most congested corridors in the region, I-580 and I-680. As the county that connects the Bay Area and much of the Central Valley, the Alameda County Transportation Commission (Alameda CTC) is acutely aware of the transportation challenges facing people traveling between the two regions and the impacts that travel has on the rest of the county's transportation system. L1-1

Alameda CTC appreciates seeing the distinct analysis of core capacity impacts, including both capital and operating analysis, in the Draft EIR. By specifically acknowledging these issues, and identifying specific mitigations, ACE is ensuring that both the public and policy makers understand the full potential impacts of the proposed project. Alameda CTC is encouraged to see that funding appears to be available for additional coaches and platform extensions that are critical to ensuring core capacity impacts are proactively addressed. By remaining attentive and proactively addressing core capacity issues, ACE can help to maintain the high quality of service its customers currently enjoy. Alameda CTC will work with ACE to continue to monitor any impacts to the core system with the expansion.

Thank you again for the opportunity to comment on the new ACE Extension Draft EIR. Alameda CTC looks forward to continuing to work with ACE to advance transportation improvements benefiting and serving Alameda County and the larger megaregion. Please contact Tess Lengyel, Deputy Executive Director of Planning and Policy, tlengyel@alamedactc.org, if you have any questions. L1-1 cont

Sincerely,

for

ARTHUR L. DAO
Executive Director

Gmail

Matt Hertel <aceextension.south@gmail.com>

Letter to San Joaquin Regional Rail Commission

1 message

Riley, Stephen <spriley@cityoflivermore.net> Tue, May 29, 2018 at 5:00 PM
To: "ACEextension.south@gmail.com" <ACEextension.south@gmail.com>
Cc: "Ross, Andy" <aaross@cityoflivermore.net>, "McBride, Ashley" <asmcbride@cityoflivermore.net>, "Vinn, Bob" <bgvinn@cityoflivermore.net>, "Stewart, Steve" <scstewart@cityoflivermore.net>

Dear San Joaquin Regional Rail Commission staff,

The City of Livermore has provided a comment letter (see attached). Unfortunately, due to the Memorial Day holiday, we were unable to provide our comments to you on Monday, May 28. If you have any questions, please contact me or Associate Planner Andy Ross.

Thank you,

Steve Riley

Stephen Riley

Principal Planner, AICP

Community Development

City of Livermore

(925) 960-4461

www.cityoflivermore.net

LIVERMORE CALIFORNIA

San Joaquin RR Commission.pdf
126K

LIVERMORE
CALIFORNIA

May 29, 2018

San Joaquin Regional Rail Commission
Attn: ACE Extension Lathrop to Ceres/Merced Draft EIR
949 East Channel Street
Stockton, CA 95202
ACEextension.south@gmail.com

RE: ACE Extension Lathrop to Ceres/Merced Draft EIR

Dear San Joaquin Regional Rail Commission:

The City of Livermore (City) appreciates the opportunity to comment on the ACE Extension Draft EIR. The City understands that this extension is a phased improvement proposed by the San Joaquin Regional Rail Commission (SJRRC) to enhance commuter and intercity rail service and to promote greater transit connectivity between the San Joaquin Valley and the San Francisco Bay Area. It is the City's understanding that the primary focus of this EIR is the Phase I and II improvements that will extend ACE service from Lathrop to Ceres/Merced; however, the EIR also analyzes impacts at existing ACE stations in the Bay Area.

There are two ACE transit stations within the City limits located in Downtown Livermore and Vasco Road. Generally, the City supports the intent of the proposed improvements to increase service and frequency, enhance passenger facilities, and reduce travel times. In addition, the City supports relieving congestion on I-580 by providing transportation alternatives. However, the City has concerns with the potential for local impacts associated with platform improvements to existing stations. The Draft EIR states:

L2-1

> "Station platforms at the Pleasanton, Livermore, Vasco Road, Tracy, and Existing Lathrop/Manteca Stations would be lengthened to accommodate the longer train consists on the trunk line. Existing platforms at these stations are approximately 450 feet and would be extended by approximately 550 feet for a total station platform length of 1,000 feet. The extended platforms would accommodate longer ACE trains proposed to be used. These platform extensions functions independently of the ACE Extension and have independent utility. These platform extensions have undergone environmental review and construction is anticipated for 2018. In addition, the Fremont Station platform would be extended, also as an independent project."

The City would like additional information about the proposed station platform improvements. The City supports any opportunity to increase public safety, improve traffic flow, and minimize traffic congestion, but is concerned that the proposed platform

improvements could result in potential impacts to the local roadway network including traffic and safety impacts. Please clarify these platform extensions' previous environmental review and how these potential impacts were considered and/or evaluated. L2-1 cont

The proposed Iron Horse Trail is a Class I paved trail that provides non-motorized travel opportunities with connections to ACE transit stations. In Livermore, the Iron Horse Trail is a proposed six-mile segment that parallels the rail tracks through portions of the City. The largest challenge to realizing the Iron Horse Trail is obtaining right-of-way and/or aerial rights to cross rail track. The City requests that SJRRC contemplate and program Iron Horse Trail connections to station areas as a means to increase ridership, improve access to ACE passenger facilities, and alleviate vehicle trips as part of the platform improvements. If SJRRC requires right-of-way acquisition for platform improvements in Livermore, the City requests that SJRRC consider and include the identified Iron Horse Trail alignment. L2-2

If you have any other questions, please feel free to contact me at sriley@cityoflivermore.net or Andy Ross at aaross@cityoflivermore.net.

Sincerely,

Steve Riley

Steve Riley
Principal Planner
Community Development Department

Gmail **Matt Hertel <aceextension.south@gmail.com>**

ACE Extension South DEIR Comments -- City of Merced

1 message

Quintero, Frank <QUINTEROF@cityofmerced.org> Fri, May 25, 2018 at 4:05 PM
To: "ACEExtension.south@gmail.com" <ACEExtension.south@gmail.com>
Cc: Dan Leavitt <danl@acerail.com>, "Carrigan, Steve" <CarriganS@cityofmerced.org>, "Dietz, Stephanie" <DietzS@cityofmerced.org>, "McBride, Scott" <McBrideS@cityofmerced.org>, "Quintero, Frank" <QUINTEROF@cityofmerced.org>, "Hren, Michael" <HrenM@cityofmerced.org>

Attached for your review and record are the comments from the City of Merced concerning the ACE Extension South DEIR. Should you have any questions regarding the comments, please direct them to Frank Quintero, (209) 385-6826 or quinterof@cityofmerced.org.

Respectfully submitted,

Frank Quintero | Director of Economic Development

City of Merced | 678 W. 18th Street | Merced, CA 95340

1-800-723-4788

(209) 385-6827 office

(209) 388-7612 pc fax

quinterof@cityofmerced.org

www.cityofmerced.org

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TEAMCALIFORNIA

www.teamca.org

ACE EXTENSION DEIR COMMENTS .pdf
1452K

CITY OF MERCED

"Gateway to Yosemite"

May 21, 2018

San Joaquin Regional Rail Commission
Attn: Comment on ACEforward Draft Environmental Impact Report
949 East Channel Street
Stockton, CA 95202

Dear Sirs/Madams,

The City of Merced is grateful for the opportunity to comment on the Draft Environmental Impact Report (EIR) for the ACEforward project (SCH #2013062059). The City is in support of the proposed extension of ACE Rail service to Merced and looks forward to collaborating with ACE and others to help create and revise the project-level environmental analyses that will form the backbone of the plan to make reliable, efficient ACE Rail service a reality for the San Joaquin Valley.

L3-1

The City of Merced believes that the Alternative Site for the Layover Facility East of State Route 99 is the superior option. This option, formerly used for food processing, is already an industrial area befitting the character of the proposed facility. In addition, this site would be more integrated into Merced's General Plan as it is on a site the City has identified as Heavy Industrial, whereas the proposed facility located on the west side of State Route 99 would be in an area designated as Residential Reserve. Using the Alternative Site would be more beneficial and in character with the surrounding land uses, both existing and projected, and would therefore more effectively encourage economic development and attraction of

supporting services to the surrounding Industrial Park. This in turn will develop a stronger network of potential passengers to add ridership as the service matures, creating benefits for both the ACE Rail service and the communities to which it provides transportation.

L3-1 cont

The City of Merced also supports the bus terminal for the bus bridge portion of Phase I improvements. This terminal's location at the downtown at the 16th Street Transportation Center, as well as the installation of infrastructure supporting electric bus operations is a beneficial improvement and complement to the existing transit services already taking place in Merced at that location.

L3-2

Sincerely,

Steve Carrigan
City Manager
City of Merced, California

cc:
Frank Quintero, Director of Economic Development, City of Merced
Scott McBride, Director of Development Services, City of Merced

Gmail Matt Hertel <aceextension.south@gmail.com>

ACE Extension Lathrop to Ceres/Merced

1 message

Kevin M. Werner <KWerner@cityofripon.org> Mon, May 28, 2018 at 12:42 PM
To: "ACEextension.south@gmail.com" <ACEextension.south@gmail.com>
Cc: "Kevin M. Werner" <KWerner@cityofripon.org>

Please find attached a comment letter from the City of Ripon.

If you have any questions, please feel free to contact Mayor Restuccia, Council member Zuber, or myself.

Thank-you,

Kevin Werner

2 attachments

Werner_COR_Updated.pdf
631K

ATT00001.txt
1K

City of Ripon

259 N. Wilma Avenue • Ripon, California 95366
Phone: 209 599-2108 • Fax: 209 599-2685

May 24, 2018

Steve Dresser, Chair
San Joaquin Regional Rail Commission
949 East Channel Street
Stockton, CA 95202

Dear Mr. Dresser,

For the past several years, the City of Ripon has been working with the San Joaquin Regional Rail Commission to locate an Altamont Commuter Express (ACE) train stop in Ripon that would be integrated as part of Ripon's future downtown multi-modal station. I am writing this letter to communicate the important benefits of this future ACE train stop.

The City of Ripon has made a significant investment in alternative modes of transportation for the residents of Ripon and the surrounding region, most recently purchasing 3.25 acres of land for the City's future downtown multi-modal station. This station is planned to include a 7,000 square foot building, off-street parking, a bus loading and staging area, and a rail platform for the ACE train. **Ripon's downtown multi-modal station will be an important part of the region's effort to reduce traffic congestion and improve air quality conditions, but it will also significantly enhance the economic vitality of Ripon's downtown.**

Ripon's downtown consists of six blocks of commercial buildings, including a number of historic buildings that date back to the early 1900's. Like many downtowns throughout America, Ripon's downtown has gone through a transformation over the past several decades. Before, downtowns were the hub of the community where the communities business was conducted. With the advent of regional shopping centers and discount superstores, the traditional downtown's economic foundation has drastically changed. Now, downtowns have evolved to a more quaint businesses environment with businesses that provide a specialized service and attracting customers downtown has become a constant challenge for our downtown businesses. L4-1

By adding an ACE train stop at Ripon's downtown multi-modal station, it will provide an economic benefit to our downtown businesses. It's expected that this station would experience 100,000 "on & offs" initially and that is projected to double within 5 years. This volume of potential customers would provide an increase in commercial activity, which would stabilize the downtown businesses and provide a tax base that will generate additional business revenue.

Regionally, the Ripon Multi-Modal Station will serve as a hub for access to alternative modes of transportation, including bike, bus, and train. With convenient access to an ACE station, commuters in Ripon and Stanislaus County will be able to travel to various destinations by train

rather than vehicles. This switching of their transportation mode will reduce vehicles on the roadways during traffic peaks, resulting in a reduction in greenhouse gas emissions.

Our City Council has passed a motion supporting an ACE train stop at Ripon's future downtown multi-modal station on January 7, 2014 and looking forward to continuing to work with the San Joaquin Regional Rail Commission on this important project.

L4-1
cont

Sincerely,

Michael P. Restuccia
Mayor

Gmail Matt Hertel <aceextension.south@gmail.com>

DEIR comment letter

1 message

Matt Fell <matt.fell@mcagov.org> Fri, May 18, 2018 at 11:55 AM
To: "ACEextension.south@gmail.com" <ACEextension.south@gmail.com>

Attached please find MCAG's comments on the Draft EIR.

Thank you,

Matt Fell

Transportation Planning Manager

Merced County Association of Governments

209-723-3153 ext. 128

matt.fell@mcagov.org

MCAG comment letter on DEIR May 18, 2018.pdf
102K

MERCED COUNTY ASSOCIATION OF GOVERNMENTS

PH: 209.723.3153
FAX: 209.723.0322
www.mcagov.org
369 W. 18th Street
Merced, CA 95340

May 18, 2018

San Joaquin Regional Rail Commission
949 East Channel Street
Stockton, CA 95202

RE: ACE Extension Lathrop to Ceres/Merced Draft Environmental Impact Report (DEIR)

Chair Dresser and Commissioners,

The Merced County Association of Governments (MCAG) thanks you for the opportunity to comment on the DEIR. We request that as you move forward with the Extension, you continue to work with MCAG, and that you also work with the Transit Joint Powers Authority (TJPA), especially in regard to developing the proposed new bus shuttle service in Merced County.

Page 2-20 says that MCAG is anticipated to operate the bus bridge between Merced and Ceres. However, the operator of a such a service, if not ACE, would more likely be the TJPA or an entity yet to be determined.

The DEIR discusses, in a general way, the parameters and potential impacts of the bus service. We appreciate the preliminary information, and wish to continue the discussion of the service characteristics, including: L5-1

- operating entity,
- funding for operations,
- charging infrastructure location and operation,
- bus stop locations and parking capacity,
- Merced Transportation Center (Transpo) operational capacity, and
- fare system

We look forward to working with the Commission on planning related to ACE service and connections in the Merced County region.

Sincerely,

Patrick Pittenger
Executive Director

Gmail Matt Hertel <aceextension.south@gmail.com>

ACE Extension Lathrop to Ceres/Merced Comments

1 message

Breanne Ramos <bramos@mercedfarmbureau.org> Mon, May 28, 2018 at 12:16 PM
To: ACEextension.south@gmail.com
Cc: Gino Pedretti <ginoiii@sbcglobal.net>, dietzs@cityofmerced.org, Mark Hendrickson <mhendrickson@co.merced.ca.us>, SMaxey@co.merced.ca.us

Good Afternoon,

On behalf of the Merced County Farm Bureau, please find our comments related to the ACE DEIR Lathrop to Ceres/Merced. We appreciate the opportunity to comment and look forward to speaking should the opportunity arise.

Thanks in advance,

Breanne Ramos
Executive Director
Merced County Farm Bureau

ACE Ceres-Merced- Merced County Farm Bureau Comments.pdf
115K

Merced County Farm Bureau

May 27, 2018

San Joaquin Regional Rail Commission
Attn: ACE Extension Lathrop to Ceres/Merced Project
949 East Channel Street
Stockton, CA 95202

Dear San Joaquin Regional Rail Commission,

As an organization that proudly serves as the largest agricultural advocacy group in Merced County, we appreciate the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the ACE Extension Lathrop to Ceres/Merced Project. Merced County Farm Bureau (MCFB) has the privilege of representing 1,000 farming, ranching and dairy families that reside and/or work in Merced County. You may note we have kept a keen eye on this project as it has taken shape. We have provided comments for the public record on both the ACE*forward* and the Notice of Preparation (NOI) for Lathrop to Ceres/Merced.

To begin, we understand from the DEIR *Introduction 1-11*, "the Phase II improvements are more conceptual and evaluated in a more general manner" and will be done at a later date as not to speculate on a project of this size. We understand that additional studies will be completed prior to Phase II build out, but we strongly request a timeline be provided to impacted landowners. This would allow them to determine the best mode of action for the impact to their properties should the project move forward as is.

O1-1

In the chapter titled *Description of Phase II Improvements 3-14* the reader finds, "The majority of improvements for the Merced Layover Facility would be located outside the UPRR ROW. Specific ROW and easement needs have not been determined and would be identified in future project-level analysis." This would be the area that would house support facilities "such as an administrative office, crew facilities, light vehicle repair facilities, parts storage, fueling facilities, wayside power, and train cleaning function areas." We are concerned for the landowners in this area where production will be impacted. Along with concern for the acreage that will be removed, we also have worries with this type of operation moving into an agricultural area. Far too many times businesses come into an area and complain about the everyday agricultural practices that take place. We want to ensure our growers can remain under the Right to Farm Ordinance that was adopted by our county through the most recent general plan.

On page 4.2-24 of *Agricultural Resources* the reader finds the following, "Permanent conversion of Important Farmlands to nonagricultural use would occur where the Phase II improvements are located on Important Farmland currently being used for agricultural purposes, outside of the existing UPRR

(209) 723-3001 – Fax (209) 722-3814 – 646 South Highway 59 – P.O. Box 1232 – Merced, CA 95341
www.mercedfarmbureau.org

ROW and within the proposed UPRR ROW." The DEIR has also determined this to be "Less than Significant." The homes and operations on the proposed Merced Layover Facility would be subject to being landlocked, forcing the creation of an easement on a neighboring parcel's property. This can also be cumbersome and costly in addition to the mitigation measures that Merced County would require through their Agricultural Mitigation Ordinance. By land locking agricultural operations, you are also placing employees and families at risk should an unfortunate emergency occur and first responding vehicles be required to enter. O1-1 cont

Under *Alternative Uses - Land Use and Planning* found on page 6-13, "The Merced Layover of SR 99 alternative is within the City of Merced and is designated in the General Plan for manufacturing and industrial land uses. This site is in a zoned Heavy Industrial District. A railyard is considered an allowable use within the site designation and zoning, which allows freight terminal use subject to site plan review permit." Following this statement, an individual finds that the Merced Layover Facility is identified within unincorporated Merced County and within the City of Merced's sphere of influence. Under Merced County, the land is identified for agriculture use and the City of Merced has identified it as residential reserve. We strongly encourage you to select the Merced Layover East of 99 alternative route. It is known that the destruction of previously occupied canning facilities would need to be done as well as increasing the distance of the track by 3.9 miles, however 15 acres of productive farm ground would remain in use with this option. O1-2

We also have concerns with the construction track work and existing utility lines. Under *Phase II Improvements* on 3-21 the reader comes across the following, "Track construction could conflict with existing utility lines, and these lines would be relocated or protected." We know now California High Speed Rail Authority (CHSRA) also estimated costs only to find final costs to be much higher. O1-3

In *Agricultural Resources* section on 4.2-5, the DEIR notes the local jurisdictional general plans. We would suggest revisiting the City of Livingston's General Plan as the document issued in 2008 was not fully approved due to litigation. Livingston is still working from their 1999 General Plan. O1-4

Lastly, we find it astonishing that Impact HYD-11, found on 4.10-56, is considered "Less than Significant." Impact HYD-11 states, "Construction of the phase II improvements could substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of local groundwater table level." The DEIR states that this is a potential possibility and could offset the depletion with dewatering effluent. We have high concerns with this as agriculture faces the strictest water quality regulations throughout the state and are surprised that this would be allowed. O1-5

We appreciate the opportunity to comment and look forward to discussions as this project proceeds. Should you have any questions and concerns on the above please call our office at your convenience.

Sincerely,

Breanne Ramos
Executive Director

Gmail Matt Hertel <aceextension.south@gmail.com>

DEIR Comments

1 message

David Schonbrunn <David@schonbrunn.org> Mon, May 28, 2018 at 2:19 PM
To: ACE Rail <aceextension.south@gmail.com>
Cc: Stacey Mortensen <stacey@acerail.com>

Attached please find TRAC's comments on the ACE Extension DEIR. TRANSDEF has joined the comments.

An email indicating receipt would be much appreciated.

Thank you,

--David

David Schonbrunn, Vice-President for Policy
Train Riders Association of California (TRAC)
P.O. Box 151439
San Rafael, CA 94915-1439

415-370-7250 cell & office

David@Schonbrunn.org
www.calrailnews.org

2018 ACE DEIR comments.pdf
231K

TRAC
Train Riders Association of California

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Sacramento CA 95814-3516

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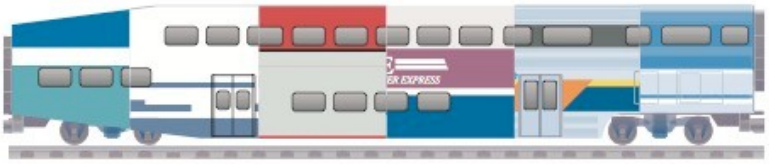
www.calrailnews.com
trainriders2100@gmail.com



May 28, 2018

By Email to:
ACEextension.south
@gmail.com

ACE Extension Lathrop to Ceres/Merced Project
San Joaquin Regional Rail Commission
949 East Channel Street
Stockton, CA 95202

Re: ACE Extension Lathrop to Ceres/Merced Project DEIR

Dear Ms. Mortensen:

The Train Riders Association of California, TRAC, and the Transportation Solutions Defense and Education Fund, TRANSDEF, vigorously object to the DEIR's dismissive treatment of TRAC's February 9, 2018 NOP Scoping Comments (which are hereby included by reference). The entire point of the NOP process is to gather ideas from outside the project team on what should be studied, both in the terms of impacts and project alternatives. It is therefore improper under CEQA to assert that "Thus, this alternative is beyond the scope of this project" (DEIR, p. 6-24) by unreasonably limiting the scope. It is shocking to see a public agency reject proposals that would enhance its ability to fulfill its mission.

The DEIR's approach to alternatives proposed by TRAC was to reject them out-of-hand, using conclusory language unsupported by substantial evidence. Constructive scoping input from the public should be welcomed, rather than be met with resistance. O2-1

Discussion of Rejection Rationales

OPS-1: "This alternative was dismissed because it does not meet the project purpose and need because it would increase service times. Furthermore, this alternative would not avoid or substantially reduce significant environmental impacts of the Proposed Project."

This statement lacks any detail in support of the conclusory statement that splitting trains "would increase service times." That conclusion assumes without evidence the continued failure of American railroads to maintain passenger schedules. That assumption is disproven by the Capitol Corri-

dor's success in incentivizing its host railroad to achieve higher levels of on-time performance than its California peers.

In Europe, where schedule adherence is much tighter, train splitting is a common operating mode. The undersigned rode the Thalys from Paris to Brussels, and personally observed the train being split in half, with one trainset continuing on to Amsterdam. Operators of that service have obviously determined that the benefits of train splitting (conserving schedule slots and lowering labor costs) outweighed the insignificant increase in travel time for coupling/uncoupling.

O2-1 cont

The fact that ACE is planning to offer a bus bridge from Ceres to Merced, yet is expending significant resources to environmentally clear a replacement rail extension for it, demonstrates that ACE has determined that transfers are not desirable. Well-established transportation research indicates that avoiding the transfer penalty by offering one-seat rides from both Stockton and Ceres/Merced will result in increased ridership. That would better meet the project purpose and need, attracting more commuters to rail, and avoiding VMT and GHG emissions. As a result of this fair argument, the FEIR is required by CEQA to study OPS-1.

OPS-2: "The DMU designs usually consist of lightweight equipment and to date have only been permitted by the FRA in limited circumstances and areas where temporal separation between heavyweight freight trains and lightweight DMUs on the same line is provided or where operations are on separate lines."

The FRA has granted waivers that certify European DMUs as meeting the Alternative Compliance standard, allowing them to be used on freight railroads without temporal separation. Denton, Texas, is the first example. The DEIR's information is surprisingly out-of-date. To the best of our knowledge, a railroad must rely on FRA's certification of equipment and not substitute its judgment for that of the FRA. That makes the UP's purported objection to DMUs irrelevant. These multiple factually incorrect and/or irrelevant statements invalidate the purported finding of infeasibility reached by the DEIR. As a result of this fair argument, the FEIR is required by CEQA to study OPS-2.

O2-2

Oddly, however, OPS-2 is not the Alternative C proposed by TRAC, which was for DMU service from Stockton that would couple onto the Ceres-originating train at Lathrop. This appears to be an oversight. Please revise OPS-2 to be consistent with our Alternative C proposal.

OPS-3 in its current form is garbled and nonsensical: "This alternative is similar to the description provided in OPS-2, but this alternative does not change the number of trains in service between Stockton and San Jose. Thus, this alternative is beyond the scope of this project." The only way we are able to decipher the meaning of OPS-3 is to assume that it contains a fatal typo. It appears that "does not change" should have been "increases."

O2-3

This same phrase was repeated in the following, but with a meaning in context that is opposite to the sentence above: "Also, since the project does not change the number of trains between Stockton and San Jose, the use of DMUs on that section is not related to any impacts caused by the Proposed Project and thus this alternative would not lower any potential impacts of the project between Stockton and San Jose."

No matter whether the phrase is incorrect or not, the statement is clearly false. As stated in TRAC's NOP letter,

> DMUs offer striking advantages: DMUs accelerate faster, allowing faster travel times. Because a DMU train can be sized to meet the passenger demand, DMUs can make midday service economically feasible. A one-unit off-peak DMU would cost far less to operate than an entire locomotive-hauled train, greatly lowering the subsidy required.
>
> In addition, DMU engines are essentially bus engines. They do not require the highly specialized and very expensive maintenance that locomotives require. On a total-cost-of-ownership basis, we believe that DMUs will be less expensive and offer scheduling flexibilities that are not available with current equipment.

O2-3 cont

The following advantages will increase ridership, conferring significant environmental benefits:

- Faster acceleration, reducing travel times
- the ability to run midday trains within existing budgets
- lower maintenance costs free up operating funds to run more trains

By increasing ridership, a DMU alternative furthers the Purpose and Need. It avoids significant impacts commuters would otherwise generate by driving: congestion, criteria pollutants and GHG emissions, resulting in lower overall project impacts.

This alternative seems to have been designed to be rejected, since it is apparently inconsistent with the project scope. It also does not reflect what TRAC proposed as Alternative D.

OPS-5: The DEIR is partly mistaken in asserting: "The Proposed Project does not change the amount of ACE service to the Bay Area." Because the DEIR does not identify any constraints on access to weekend slots, there is no physical difference between OPS-5 and the Proposed Project. The fact that the conception of the Proposed Project does not include weekend service points more to a failure of imagination than any limitation cognizable under CEQA. Because, for the same reasons as stated above, adding weekend service will further the Purpose and Need and lower overall project impacts, it was unreasonable and imprudent that the DEIR did not study weekend service.

O2-4

Note, however, that the inclusion of Union City in the definition of the alternative appears to be another fatal error, as the Proposed Project does not include elements west of Lathrop. If OPS-5 is read without it containing a reference to Union City, it offers an alternative that must be studied. O2-4 cont

OUT-1: The DEIR is superficial, simplistic and fundamentally in error in the following:

> Despite these construction challenges and costs, even if the West Side Line could be put into full freight operations, UPRR will not let ACE use the Fresno Subdivision from Lathrop to Merced without installation of a new second track. The Fresno Subdivision is UPRR's primary freight route in the northern San Joaquin Valley and serves many customers between Lathrop and Merced that cannot be served by the West Side Line and thus UPRR will want to maintain its freight capacity on the Fresno Line. If the West Side Line were to be put back into action, it would be to serve freight from the Bay Area to Fresno and points south and not customers between Fresno and Lathrop. (DEIR, p. 6-25.)

This analysis ignores the part of TRAC's NOP comment letter dealing with local freight:

> The Fresno Subdivision would primarily be used by passenger trains, with the Railroad retaining the right to serve local freight customers. Under emergency conditions, through-freights could be dispatched as needed, while preserving passenger train priority. This arrangement would be similar to the one negotiated by the CCJPA, wherein passenger trains south of Oakland will exclusively use the Coast Subdivision. O2-5

TRAC's understanding is that local freights on the Fresno sub are greatly outnumbered by through-freights heading to or from the Bay Area and the Pacific Northwest. If substantial evidence demonstrates this to be accurate, shifting the through-freights to the West Side Line would greatly reduce traffic on the Fresno Subdivision. The existing single track would then be able to serve both the ACE passenger traffic and current local freight traffic. That would eliminate the UPRR objection of inadequate capacity, and set the stage for a negotiation, as TRAC proposed.

> While this alternative might divert *some* freight traffic from the Fresno Subdivision, it would be cost prohibitive to ACE and would not deliver any meaningful improvements in ACE service from Merced compared to the Proposed Project. Thus, due to financial costs, logistical constraints with UPRR's approach to maintaining freight capacity, and greater environmental impacts than the Proposed Project,

> this alternative was dismissed from further consideration.
> (DEIR, p. 6-26, emphasis added.)

Based on our presentation above, we assert that the DEIR is factually incorrect in using the word "some" in the statement quoted immediately above. We believe that the alternative would divert most freight traffic from the Fresno Subdivision. This factual issue is determinative of whether a capacity constraint would actually occur on the Fresno Subdivision if through-freights were diverted to the West Side Line. Capacity constraint is what triggers the cost prohibitiveness and logistical constraint justifications for dismissing the alternative from further consideration. Because the DEIR presents no substantial evidence to support its claim of "some," the DEIR has failed to establish a reasonable basis to dismiss the alternative.

The DEIR acknowledges Phase I improvements to be 24 miles of track (DEIR, ES-9), while Phase II would be 34 miles of track. (DEIR, ES-15.) Clearly, this is much less track than the 124 miles identified on p. 6-25. On the other hand, it is much less expensive to upgrade existing track than it is to lay new track. TRAC's NOP letter called for a preliminary study to develop an order-of-magnitude cost estimate for the upgrade:

> The track lengths, siding lengths, track condition and road-bed condition of the West Side line would be compared to the proposed Lathrop-to-Merced extension, to establish an order-of-magnitude estimate of the level of financial commitment needed to undertake this alternative. If the financial commitment is roughly similar, the project should be considered financially feasible at the programmatic level of review. The EIR analysis would then evaluate the potential benefits of this Alternative, especially the separation of passenger traffic from most freight traffic, providing justification for further project grants beyond the appropriation already received.

O2-5 cont

The West Side Line Alternative offers the possibility of a route that is predominantly dedicated to passenger traffic, allowing significantly higher speeds and therefore, significantly higher ridership and avoided emissions. This possibility is so transformative for the entire Central Valley that it offers a rationale to perform the preliminary study, to open the door for the EIR to evaluate the respective benefits of the Proposed Project and the West Side Line Alternative.

If the state offered to pay an amount equivalent to the cost of the Lathrop-Merced extension to bring the West Side Line up to Class 1 standards, UPRR might have reasons of its own to look favorably on the idea and add any needed funds.

Conclusion

TRAC and TRANSDEF appreciate this opportunity to comment on the DEIR for the ACE Extension Lathrop to Ceres/Merced Project, and hope that our alternatives will result in a better and more effective project.

Sincerely,

/s/ DAVID SCHONBRUNN

David Schonbrunn,
Vice-President for Policy, TRAC
President, TRANSDEF

Gmail Matt Hertel <aceextension.south@gmail.com>

Merced Layover Facility

1 message

Augie and Joe scoto <scotobros@hotmail.com> Sun, May 27, 2018 at 9:33 AM
To: ACE Rail <aceextension.south@gmail.com>, "DietzS@cityofmerced.org" <DietzS@cityofmerced.org>

Ace comment letter - Clean Edits.docx
16K

Scoto Properties LLC. & Scoto Brothers Farming, Inc.

1861 N. Southern Pacific Ave.

Merced, CA 95348

(209)383-5226

San Joaquin Regional Commission

ATTN: ACE Extension Lathrop to Ceres/ Merced Project

949 E. Channel Street

Stockton, Ca 95202

Dear San Joaquin Regional Rail Commission,

We have been farming and dairying in Merced County for more than four generations, employing over twenty full-time and over 150 seasonal employees. Our operation grows six different commodities that are used mainly for human consumption and cattle feed.

We are very concerned with the placement choice of the proposed Merced Layover Facility for the Merced Extension. According to the Draft Environmental Impact Report (DEIR) for the ACE Lathrop to Ceres/Merced Project, these layover tracks would be located on our property Assessor's Parcel Numbers (APN) 059-330-005, 059-330-028 and 059-030-041. The DEIR states that this project would result in the permanent loss of 15 acres of prime and unique farmland. We believe these numbers are incorrect and the total loss of our prime and unique farmland due to this project would be more than the DEIR states. This project would also land lock our parcels of property by closing entry and all access points to these parcels making them useless and left with no value. Our neighbor to the east of our parcels is not willing to provide an easement for access to our parcels. This is by far a monumental concern but does not include the infrastructure changes that would have to be made to the irrigation and drainage systems. Another concern to us would be the aesthetics, litter, crime and the vagrant potential of this project. One must look no further than the Union Pacific Railyard located in Fresno. Our parcels grow agricultural crops that are picked fresh for the consumer and are mandated by law to be held to the highest food safety standards by keeping fields clean from pests, litter, animals, etc. This would be a difficult task to manage with this project. P1-1

Another apprehension and very worrisome problem is access to our other parcels of property APN 059-030-041, 059-030-028, 059-030-029, 059-030-044 and 059-030-039. Emergency services such as fire and ambulance could be curtailed or denied and other services such as mail, garbage and any farm service

delivery such as fertilizer, fuel, etc. would be problematic. Southern Pacific Avenue is the only legal and year-round access to our headquarters for employees and management. Should this go through it would almost eliminate our homes. P1-1 cont

Another major concern would be the winter runoff drainage from rainfall. According to the DEIR the proposed rail line would be built on the north or east side of the Union Pacific Railroad. This would require filling in the northern and eastern side of the rail bed with soil and roadbed, making this drainage system inoperable. This drainage system was built years ago to drain State Highway 99 and the surrounding communities during a major rain event. Not too many years ago we had two major 100 year floods that inundated the Beachwood community just to the north of this project and our surrounding agricultural properties west of this project. This type of system was placed in this location for a reason. Merced and these county parcels are in a flood zone resulting in excess runoff from rainfall draining into the surrounding creeks via these drain systems. We were shocked to find that the DEIR would eliminate these necessary systems. P1-2

We would greatly appreciate a timely response to our concerns on the Merced layover Facility project.

Sincerely,

Joe Scoto and Augie Scoto

Scoto Properties LLC.

Scoto Brothers Farming, Inc

1861 N. Southern Pacific Ave.

Merced, CA 95348

(209)383-5226

CC-Stephanie Dietz, Assistant city Manager, City of Merced

Gmail

Matt Hertel <aceextension.south@gmail.com>

Public Comment Letter #1 for ACE Extension Lathrop to Ceres/Merced

1 message

Terra Land Group <terralandgroup@gmail.com> Wed, May 16, 2018 at 1:31 PM
To: ACEextension.south@gmail.com
Cc: marlo.duncan@stocktongov.com, nguyen@sjcog.org, "Glaser, Jim" <jglaser@sjgov.org>, "Blackmon, Lisa" <lblackmon@ci.manteca.ca.us>, "Butler, Peter" <Peter.Butler2@mail.house.gov>, "Nomellini, Grilli & McDaniel" <ngmplcs@pacbell.net>, pamforbus@sbcglobal.net, albertboyce@gmail.com, Betty Garcia <bgarcia@ssjid.com>, "Duzenski, Mimi" <mduzenski@sjgov.org>, "Toland, Tanis J CIV CESPK CESPD (US)" <Tanis.J.Toland@usace.army.mil>, michael.mierzwa@water.ca.gov, jon.ericson@water.ca.gov, mary.jimenez@water.ca.gov, website_cco@ci.lathrop.ca.us, leslie.gallagher@cvflood.ca.gov

Good Afternoon,

Attached please find a letter dated May 16, 2018 from Terra Land Group, LLC to the San Joaquin Regional Rail Commission Re: LETTER #1: Draft Environmental Impact Report for the April 2018 Altamont Corridor Express (“ACE”) Extension Lathrop to Ceres/Merced project: Public Review and Comment.

Please let us know if you experience any trouble opening the attachment or any of the hyperlinks in the document.

Thank you,

Martin Harris

Terra Land Group

MH/cm

2018-05-16_LTR_SJRRC_LTR1_ACEDEIR_PublicComm.pdf
638K

TERRA LAND GROUP, LLC

May 16, 2018

VIA EMAIL

San Joaquin Regional Rail Commission
Attn: ACE Extension Lathrop to Ceres/Merced Project
949 East Channel Street
Stockton, CA 95202
(ACEextension.south@gmail.com)

Re: LETTER #1: Draft Environmental Impact Report for the April 2018 Altamont Corridor Express ("ACE") Extension Lathrop to Ceres/Merced project: Public Review and Comment.

Dear Project Team,

My name is Martin Harris and I am an authorized representative for Terra Land Group, LLC ("TLG"). TLG owns several properties located in the Lower San Joaquin River Basin that may benefit or be adversely affected as a result of various local, state, or federal government flood protection improvement actions currently being considered for future implementation.

At this time, TLG is in receipt of the Draft Environmental Impact Report for the April 2018 Altamont Corridor Express ("ACE") Extension Lathrop to Ceres/Merced project ("ACE Extension"). TLG presents the following responses to the ACE Extension with the hope that the public concerns detailed in this letter will be carefully considered by San Joaquin Regional Rail Commission ("SJRRC") staff members and all other authorities involved for the purposes of mitigating any and all flood water drainage and other impacts created to less than significant levels. TLG believes the ACE Extension and the relocated Lathrop/Manteca station alternatives inclusion, when viewed in the context of other closely related past, present, and reasonably foreseeable future projects, may contribute in creating significant cumulative impacts to existing flood water drainage pathways affecting businesses and residents located in the urban and rural areas of Manteca and/or Lathrop. **Therefore, our letter will focus mainly on this subject with emphasis on calling attention to the known deficiencies in public utilities/services infrastructure serving the area.**

P2-1

As recent flooding in Houston, Texas has demonstrated, unrestrained development without consideration for flood impacts can have serious consequences. In particular, as more and more development projects continue to move forward, TLG has put forth a regular effort to ensure that local authorities are aware of the need for cumulative environmental review and analysis of all hydrology-related impacts associated with all past, present, and reasonably foreseeable development projects affecting drainage in and along the Lower San Joaquin River Basin and especially the areas affecting the urban and rural areas of Manteca and Lathrop.

With that in mind, TLG calls your attention to recent information presented in the form of TLG's public review and comments submitted in response to the recently released January 2018 San Joaquin River Basin Lower San Joaquin River, CA FINAL Integrated Interim Feasibility Report/Environmental Impact Statement/Environmental Impact Report ("LSJRFS"). (**See Enclosure 1**)

For some time now, TLG has sent various copies of our letters to the SJRRC and other authorities expressing public concerns related to development in the floodplain and the need to examine any potential impacts related to San Joaquin River (and tributary) flow deficiencies and the potential for upstream and downstream channel flow stage increases due to drainage patterns affected by grade, levee location, and other environmental considerations. (**See Enclosure 1** which contains a list of letters and related items in its own Enclosure 1. This list contains information that TLG believes is important to consider in the decision-making process. Also **See Enclosures 2 & 3**)

In brief, the enclosures attached describe recently discovered information as detailed in letters from TLG to various agencies that may affect flood control in the Reclamation District No. 17 ("RD 17") and Manteca/Lathrop region. These letters provide supporting evidence while building an overall context and framework for TLG's and other members of the public's concerns regarding any current and/or future development projects that continue to be approved with the potential to affect hydrology in the urban and rural areas of Lathrop and Manteca. The significant details contained in the enclosed letters offer a framework which leads TLG to believe that the complex nature of the potential flood issues involved may be too difficult for the public to adequately understand without the benefit of a comprehensive and cumulative CEQA and NEPA Environmental Review and Analysis.

P2-2

Further, TLG believes that it is important to mention that the LSJRFS may not fully consider the potential for any and all flood and other hydrology related impacts involved due to RD 17's plan to pursue a phased strategy of levee improvements and other Federally assisted improvements in order to meet California Senate Bill No. 5 ("SB5") requirements. (See page 3-40 of the LSJRFS).

This is especially important when you consider that Page 3-42 of the LSJRFS states:

> *The identification of Alternative 7a as the NED Plan serves to set the level of Federal participation in the project. Alternative 7a may not fully meet the NFS objective of SB 5 compliance, but in order to expedite authorization, the NFS elected not to pursue a Locally Preferred Plan (LPP) at this time.*

QUESTION: What non-federal sponsor elected not to pursue a Locally Prefered Plan at this time? Is it in the public's best interest to allow a non-federal sponsor to pursue any flood risk management plan that places emphasis on expediting the process over taking the time to consider and mitigate against the potential for very significant drainage impacts affecting the developing and non-developing urban and rural areas of Manteca and Lathrop?

Most concerning is TLG's belief that it is the intent of local authorities to assign a project sponsor to seek Section 408 approval from the U.S. Army Corps of Engineers allowing expansion and/or relocation of the RD 17 dry land cross levee system to a location south of the point that Paradise Cut and the San Joaquin River converge. (**See Enclosure 1**)

It is in this way that TLG believes our local authorities intend to move forward with plans to gain the approvals necessary to construct critical but currently unidentified public services infrastructure supporting:

(i) Storm water drainage,
(ii) Disinfected and undisenfected effluent wastewater spray field discharge,
(iii) Groundwater sustainability through percolation and recharges, and
(iv) Traffic circulation

as well as any and all SB5 flood protection and drainage improvements necessary to accommodate the rapid pace of development affecting both the urban and rural developing and non-developing areas of our local communities.

Why is this important? For some time now, the City of Manteca has continued to approve a high volume of development projects without key stormwater, disinfected and undisinfected wastewater effluent spray field and San Joaquin River discharge, potable water well, and traffic circulation utilities services infrastructure being properly identified, analyzed, and presented for public review in support of protecting the needs of our growing community.

P2-2 cont

Most recently, both the Manteca City Council and the Manteca Planning Commission appeared to completely ignore potential flood impacts and other environmental concerns (as presented by the public) while proceeding to approve the Terra Ranch and Oakwood Landing - Cerri and Denali subdivision projects while failing to properly allow for and guard against what appears to be very significant stormwater drainage and effluent wastewater spray field discharge deficiencies and associated impacts involved. (**See Enclosures 4 & 14 to 17**)

Most important, TLG believes that the mitigation measures identified with Impact 3.9-6 as presented on pages 60 through 64 of the "CEQA Findings for the Oakwood Landing - Cerri and Denali Subdivisions" (as included in the May 8, 2018 MPC Meeting Agenda Item 6.3, Attachment 3) do not appear to adequately address how flood and other hydrology related impacts will be mitigated and reduced for any and all residents, businesses, and property owners situated south of the RD 17 cross levee system that may be affected.

Further, the Oakwood Landing - Cerri and Denali subdivision sites appear to be the last available property sites north of and protected by the south Manteca portion of the RD 17 levee that would be suitable to utilize as a stormwater drainage retention basin and a disinfected and/or undisinfected effluent wastewater discharge facility. (**See Enclosure 7**: 09/06/2017 letter from TLG to the Manteca Community Development Department describing project impacts, suggested mitigation measures, and TLG comments/rebuttals as included on pages 5 to 12 of the letter. **Also See Enclosures 8 & 10 to 14**)

For this reason, TLG believes that the ACE Extension proposed Phase I Lathrop to Ceres rail system improvements (and related effects) do not include the necessary public utilities infrastructure placement information necessary to clearly identify the potential for flood and other hydrology related impacts when analyzed in conjunction with City of Manteca (and other local authorities and/or non-federal sponsors) plans to utilize a phased approach to modify, expand, and/or extend the existing RD 17 dryland cross levee to achieve 200 year flood protection and compliance in support of the development growth currently occuring and anticipated to continue to occur in the urban and urbanizing areas of Manteca and Lathrop.

For this reason, TLG believes that the environmental conditions affected by the Phase 1 portion of the project should be analyzed at a programmatic level. This analysis should fully evaluate the potential for cumulative flood and other hydrology related impacts in association with any closely related past, present, and reasonably foreseeable projects including any and all SPFC and non-SPFC flood protection levee and San Joaquin River (and associated tributary) channel flow improvement projects affecting drainage in Reclamation District Nos. 17, 2094, 2075, 2085, 2096, and 2064. (**See Enclosure 1**)

P2-3

This becomes very important when considering the size and placement of stormwater drainage, conveyance and retention, disinfected and undisinfected wastewater effluent spray field and San Joaquin River discharge, potable water delivery, and traffic circulation infrastructure as well as any SB5 flood protection improvements necessary to accommodate the rapid pace of development affecting both the urban and rural developing and non-developing areas along the South Delta/Lower San Joaquin River Basin. (**See Enclosures 1 to 17**)

In closing, TLG believes that by allowing for and considering the RD 17 flood protection and other closely related past, present, and reasonably foreseeable public utilities services infrastructure improvements described in this letter, the ACE Extension project members can serve the best interests of the public by promoting a higher level of flood protection for the entire RD 17 drainage system area (ie. this includes RDs 2064, 2075, 2094, & 2096). Most important, this effort shall offer the necessary protections and allow appropriate mitigation measures to be identified and put in place to ensure the reduction of any impacts associated with any and all flood protection alternatives being considered for all developing and non-developing urban and rural properties that may be affected.

Thank you for your consideration and for your attention to these important matters.

Yours truly,

Martin Harris
Terra Land Group, LLC

MH/cm

Enclosures:

Please note: To conserve file size, some of the longer Enclosures below are available for individual download through Dropbox at the provided hyperlinks. Please advise if you require any assistance. All other Enclosures are attached.

1. February 26, 2018 letter from TLG to San Joaquin Area Flood Control Agency. *Please access this Enclosure by downloading the file from Dropbox at this link:* (https://www.dropbox.com/s/8scnhemfwexbkr9/2018-02-26_LTR_SJAFCA_LSJR%20EIR_PublicComm_wEncl.pdf?dl=0)
2. March 5, 2018 letter from TLG to the San Joaquin County Local Agency Formation Commission. *Please access this Enclosure by downloading the file from Dropbox at this link:* (https://www.dropbox.com/s/tl0ir7soookd6ze/2018-03-05_LTR_SJAFCA_Letter2.pdf?dl=0)
3. San Joaquin County Local Agency Formation Commission Reclamation District Municipal Service Review Administrative Draft, Page 26-9
4. March 8, 2018 letter from TLG to the San Joaquin Area Flood Control Agency (https://www.dropbox.com/s/wt0bmm77jxi39zd/2018-03-08_LTR_SJAFCA_LTR3_LSJRFS_MHjr_stamped.pdf?dl=0)
5. March 28, 2018 letter from TLG to the San Joaquin Council of Governments (https://www.dropbox.com/s/zh6z7q38g799dky/2018-03-28_LTR_SJCOG_LTR1_RTPSCS.pdf?dl=0)
6. April 24, 2018 letter from TLG to the Central Valley Flood Protection Board (https://www.dropbox.com/s/xue1wpdx4v4zgot/2018-04-24_LTR_CVFPB_AgIts9C9A9B10A11C.pdf?dl=0)
7. September 6, 2017 letter from TLG to the Manteca Community Development Department (https://www.dropbox.com/s/i7caj91itppw0lh/2017-09-06_LTR_MCDD_CerriDenaliProj_MHcm_STAMPED.pdf?dl=0)
8. September 16, 2016 letter from TLG to the Manteca Community Development Department (https://www.dropbox.com/s/u4jud1veljhy686/2016-09-16_LTR_TLG-MH_MCCD_ReDEIROakwoodLanding_MHjs.pdf?dl=0)
9. May 7, 2018 letter from TLG to the South San Joaquin Irrigation District (https://www.dropbox.com/s/wjelcf0sp5zx4ez/2018-05-07_LTR_SSJID_AgIt5.pdf?dl=0)
10. May 7, 2018 letter from TLG to the Manteca Planning Commission, Letter #1 Re: Agenda Item 6.3 (https://www.dropbox.com/s/0b1swytnj6vdwz9/2018-05-07_LTR_MPC_LTR1_AgIt6.3.pdf?dl=0)
11. May 7, 2018 letter from TLG to the Manteca Planning Commission, Letter #2 Re: Agenda Item 6.3 (https://www.dropbox.com/s/uaqljq31mpdkfsr/2018-05-07_LTR_MPC_LTR2_AgIt6.3.pdf?dl=0)
12. May 7, 2018 letter from W/L Harris Ranches to the Manteca Planning Commission (https://www.dropbox.com/sh/3gycgl1m8vq8xwp/AABYrceMHtRjL16FU3UgWbPGa?dl=0)
13. May 7, 2018 letter from TLG to the Manteca Planning Commission, Letter #3 Re: Agenda Item 6.3 (https://www.dropbox.com/s/ps1m4zywvh4vi8x/2018-05-07_LTR_MPC_LTR3_AgIt6.3.pdf?dl=0)
14. May 14, 2018 letter from TLG to Greg Showerman, Manteca Community Development Director for the City of Manteca (https://www.dropbox.com/s/8oao37q42u7u4e5/2018-05-14_LTR_GShowerman_TM2.2.pdf?dl=0)
15. May 1, 2018 "Letter #2" from TLG to the Manteca City Council Re: Agenda Item D.2 (https://www.dropbox.com/s/u9etc6o63hz78us/2018-05-01_LTR_MCC_AgItD2.pdf?dl=0)

16. March 19, 2018 letter from TLG to the Manteca City Council Re: Agenda Item D.4 (https://www.dropbox.com/s/64rgsbxpr60ugrq/2018-03-19_LTR_MCC_AgItD4.pdf?dl=0)
17. May 14, 2018 letter from TLG to the Manteca City Council (https://www.dropbox.com/s/ks9dyi0cfzmk8j0/2018-05-14_LTR_MCC_AgItsC1C2C4.pdf?dl=0)

cc: San Joaquin Area Flood Control Agency Board Members, % Marlo Duncan, Project Manager (marlo.duncan@stocktongov.com)
San Joaquin Council of Governments Board Members, % Diane Nguyen (nguyen@sjcog.org)
San Joaquin Local Agency Formation Commission Board Members, % James Glaser (jglaser@sjgov.org)
Manteca City Council, % Lisa Blackmon, City Clerk (lblackmon@ci.manteca.ca.us)
Jeff Denham, United States House of Representatives, % Peter Butler (Peter.Butler2@mail.house.gov)
Reclamation District No. 17 Board Members, % (ngmplcs@pacbell.net)
Reclamation District No. 2075 Board Members, % Pam Forbus (pamforbus@sbcglobal.net) Reclamation District No. 2094 Board Members, % Albert Boyce (albertboyce@gmail.com)
South San Joaquin Irrigation District Board of Directors, % Betty Garcia (bgarcia@ssjid.com)
San Joaquin County Board of Supervisors, % Mimi Duzenski (mduzenski@sjgov.org)
Tanis Toland, U.S. Army Corps of Engineers, Sacramento District (Tanis.J.Toland@usace.army.mil) Michael Mierzwa, Lead Flood Management Planner, California Department of Water Resources (michael.mierzwa@water.ca.gov)
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Central Valley Flood Protection Board, Attn: Leslie Gallagher, Executive Officer (leslie.gallagher@cvflood.ca.gov)

Senate Bill 5 (SB 5)

Future development and growth of the Delta is substantially affected by Senate Bill (SB) 5 that applies to all areas within the FEMA 500-year and 100-year floodplains. It requires cities and counties to establish substantial evidence that certain development and projects are protected from a 200-year flood event before approval can be granted. The requirements for substantial evidence are provided in the Urban Levee Design Criteria (ULDC) and the Urban Level of Protection (ULOP) documents developed by DWR. This also applies to in-fill development.

The burden of enforcement of the SB 5 requirement is on the land use authorities (cities and counties) not the reclamation districts. Table 26-4 shows the land use authority that has jurisdiction within each of the reviewed districts. Some of the districts, such as RD 17, encompass land within multiple municipalities.

Table 26-4: Reclamation District Associated Land Use Authority

DISTRICT	NAME	LAND USE AUTHORITY				
		STOCKTON	LATHROP	MANTECA	TRACY	COUNTY
RD 17	Mossdale	✓	✓	✓		✓
RD 348	New Hope					✓
RD 404	Boggs Tract	✓				✓
RD 828	Weber Tract	✓				
RD 1007	Pico & Nagle				✓	✓
RD 1608	Smith Tract	✓				✓
RD 1614	Smith Tract	✓				✓
RD 2042	Bishop Tract	✓				
RD 2058	Pescadero				✓	✓
RD 2062	Stewart Tract		✓			
RD 2064	River Junction			✓		✓
RD 2074	Sargent-Barnhart	✓				
RD 2075	Mc Mullin					✓
RD 2085	Kasson			✓		✓
RD 2094	Wathal			✓		✓
RD 2095	Paradise					✓
RD 2096	Wetherbee			✓		✓
RD 2107	Mossdale		✓			✓
RD 2115	Shima Tract	✓				
RD 2119	Wright-Elmwood	✓				✓
RD 2126	Atlas Tract	✓				

Gmail

Matt Hertel <aceextension.south@gmail.com>

Public Comment Letter #2 for ACE Extension Lathrop to Ceres/Merced

1 message

Terra Land Group <terralandgroup@gmail.com> Wed, May 16, 2018 at 3:45 PM
To: ACEextension.south@gmail.com
Cc: marlo.duncan@stocktongov.com, nguyen@sjcog.org, "Glaser, Jim" <jglaser@sjgov.org>, "Blackmon, Lisa" <lblackmon@ci.manteca.ca.us>, "Butler, Peter" <Peter.Butler2@mail.house.gov>, "Nomellini, Grilli & McDaniel" <ngmplcs@pacbell.net>, pamforbus@sbcglobal.net, albertboyce@gmail.com, Betty Garcia <bgarcia@ssjid.com>, "Duzenski, Mimi" <mduzenski@sjgov.org>, "Toland, Tanis J CIV CESPK CESPD (US)" <Tanis.J.Toland@usace.army.mil>, michael.mierzwa@water.ca.gov, jon.ericson@water.ca.gov, mary.jimenez@water.ca.gov, website_cco@ci.lathrop.ca.us, leslie.gallagher@cvflood.ca.gov

Good Afternoon,

Attached please find a letter dated May 16, 2018 from Terra Land Group, LLC to the San Joaquin Regional Rail Commission Re: **LETTER #2**: Draft Environmental Impact Report for the April 2018 Altamont Corridor Express ("ACE") Extension Lathrop to Ceres/Merced project: Public Review and Comment.

Please let us know if you experience any trouble opening the attachment or any of the hyperlinks in the document.

Thank you,

Martin Harris

Terra Land Group

MH/cm

2018-05-16_LTR_SJRRC_LTR2_ACEDEIR_PublicComm.pdf
437K

May 16, 2018

VIA EMAIL

San Joaquin Regional Rail Commission
Attn: ACE Extension Lathrop to Ceres/Merced Project
949 East Channel Street
Stockton, CA 95202
(ACEextension.south@gmail.com)

Re: LETTER #2: Draft Environmental Impact Report for the April 2018 Altamont Corridor Express ("ACE") Extension Lathrop to Ceres/Merced project: Public Review and Comment.

Dear Project Team,

My name is Martin Harris and I am an authorized representative for Terra Land Group, LLC ("TLG"). TLG owns several properties located in the Lower San Joaquin River Basin that may benefit or be adversely affected as a result of various local, state, or federal government flood protection improvement actions currently being considered for future implementation.

At this time, TLG is in receipt of the Draft Environmental Impact Report for the April 2018 Altamont Corridor Express ("ACE") Extension Lathrop to Ceres/Merced project ("ACE Extension"). TLG presents the following responses to the ACE Extension with the hope that the public concerns detailed in this letter will be carefully considered by San Joaquin Regional Rail Commission ("SJRRC") staff members and all other authorities involved for the purposes of mitigating any and all flood water drainage and other impacts created to less than significant levels. TLG believes the ACE Extension and the relocated Lathrop/Manteca station alternatives inclusion, when viewed in the context of other closely related past, present, and reasonably foreseeable future projects, may contribute in creating significant cumulative impacts to existing flood water drainage pathways affecting businesses and residents located in the urban and rural areas of Manteca and/or Lathrop. **Therefore, our letter will focus mainly on this subject with emphasis on calling attention to San Joaquin River levee structural problems and channel flow deficiencies affecting the South Delta/Lower San Joaquin River Basin.**

P2-4

As recent flooding in Houston, Texas has demonstrated, unrestrained development without consideration for flood impacts can have serious consequences. In particular, as more and more development projects continue to move forward, TLG has put forth a regular effort to ensure that local authorities are aware of the need for cumulative environmental review and analysis of all hydrology-related impacts associated with all past, present, and reasonably foreseeable development projects affecting drainage in and along the Lower San Joaquin River Basin and especially the areas affecting the urban and rural areas of Manteca and Lathrop.

For some time now, TLG has sent various letters to the SJRRC and other agencies expressing public concern related to development in the floodplain and the need to examine any potential impacts related to San Joaquin River (and tributary) flows and related upstream and downstream channel flow stage increases due to drainage patterns affected by grade, levee location, and other environmental considerations. (**See Enclosure 1** for a list of letters and related items sent from TLG to various agencies that TLG believes are important to consider in the Environmental Impact Study and Review process. Also **See Enclosure 2:** List of Environmental Impact Reports and Feasibility Studies Reviewed by TLG in preparation for writing this letter.)

In January 2018, the San Joaquin Area Flood Control Agency ("SJAFCA") published the San Joaquin River Basin Lower San Joaquin River, CA FINAL Integrated Interim Feasibility Report/Environmental Impact Statement/Environmental Impact Report ("LSJRFS") Through careful study, the letters included in Enclosure 1 can offer significant details relating to what appears to be very significant drainage impacts affecting the Delta South Lower San Joaquin River Drainage system and in particular the affected areas described in the January 2018 LSJRFS ("Study Area") to include the regions detailed below:

1. Page ES-1 of the LSJRFS states: *The study area also includes the distributary channels of the San Joaquin River in the southernmost reaches of the Delta; Paradise Cut and Old River as far north as Tracy Boulevard, and Middle River as far north as Victoria Canal.*

2. Page 3-31 of the LSJRFS states: *Currently, the levee safety program has defined the levee system that incorporates RD 17 as bounded on the north by Walker Slough, west by the San Joaquin River and south by the Stanislaus River. This includes RD 17, RD 2096, RD 2094, RD 2075 and RD 2064.*

3. Page 5-17 of the LSJRFS states: ***Stanislaus River to Paradise Cut.*** *The confluence of the San Joaquin and Stanislaus Rivers defines the upstream extent of the hydraulic model used for this study.*

4. Page ES-2 of the LSJRFS states:
   Analysis of the study area is challenged by the presence of three sources of flooding, the Delta Front, Calaveras River and San Joaquin River. This results in commingled floodplains for the North and Central Stockton areas. The distributary nature of the Delta also affects Delta water levels, because high flows from the Sacramento River may "fill" the Delta prior to a peak inflow on the San Joaquin River as occurred in 1997, raising water levels on the Delta front levees.

5. Page 5-27 of the LSJRFS states: *2.1.1 FLOODING Problem:* ***There is significant risk to public health, safety and property in the study area associated with flooding.*** *The study area is located in the Central Valley of California which has very little topographic relief, resulting in potential flooding of areas far from water courses…*

P2-5

As a result, TLG believes that the Study Area as defined in LSJRFS is consistent with the study area for the ACE Extension as described on page 4.10-10 of the ACE Extension which states:

P2-6

4.10.3 Environmental Setting
This section describes the environmental setting related to hydrology and water quality by geographic segment for the ACE Extension improvements. For the purposes of this analysis, the study area for hydrology and water quality includes the watersheds, tributaries, and receiving streams that are connected to the environmental footprints for ACE Extension improvements, which may be affected by changes within the improvement footprint. Figure 4.10-1 depicts hydrologic basins and large watersheds and Figure 4.10-2 depicts the groundwater basins and subbasins of the study area for hydrology and water quality.

P2-6 cont

As a result, TLG believes that the comments and drainage concerns stated in the February 26, 2018 letter from TLG to SJAFCA are applicable and directly apply to the Study Area as may be affected by the proposed ACE Extension. (**See Enclosure 3: February 26, 2018 letter**. Also see the ACE Extension, Chapter 1: Introduction, page 1-1, lines 3 to 38, and page 1-2, lines 1-2)

I. Upstream and Downstream Flood and Other Hydrology-Related Drainage Concerns to Consider as Presented in the February 26, 2018 Public Comment Letter in Response to the LSJRFS

Accordingly, TLG believes that total drainage impacts to the study area appear to be significant and a cause for public concern when you consider the following items as outlined below.

1. Representations made by Dante Nomelini of RD 17 to the San Joaquin County Board of Supervisors ("SJCBS") on November 7, 2017 indicate that "The flow in the San Joaquin River is difficult to measure because the gauging station at Vernalis, which is upstream from RD 17, it gets flooded out. In '97 it was inoperable. The estimate was, there was about 110,000 cubic feet per second [unconfirmed] at that point, which is 100-year event. The 200-year event is expected to be much higher than that." (**Within Enclosure 3: 02/26/2018 Letter to SJAFCA:** See its own Enclosure 3: 04/20/2017 Letter to SJCBS; also see its own Enclosure 4: 11/07/2017 SJCBS Meeting Transcript)

P2-7 cont

2. Dennis Wyatt at the Manteca Bulletin wrote this quote in his March 22, 2016 article titled "Paradise Cut Work Nears:" "Engineers determined expanding the Paradise Cut would reduce flood stages significantly at Mossdale Crossing — 1.8 feet under a 50-year event as well as under a 100-year event such as the 1997 flood that inundated 70 square miles between Manteca and Tracy." (**Within Enclosure 3: 02/26/2018 Letter to SJAFCA:** See its own Enclosure 5: 03/22/2016 Manteca Bulletin News Article "Paradise Cut work nears"; also see its own Enclosure 6: Map of Paradise Cut with Questions)

3. **QUESTION:** Doesn't the formation of a seventy square mile flood water basin pond describe a watershed region without a means to effectively drain?

4. **QUESTION:** If the channel flow capacity of the San Joaquin River at the Vernalis monitoring station is limited to approximately 40,000 cubic feet per second ("cfs"), as measured in the channel at the time of the February 20, 2017 levee breach, what flood impacts may be created if flows totalling 110,000 cfs are experienced as forecasted by Dante Nomellini to the San Joaquin County Board of Supervisors

"SJCBS" on November 7, 2017? (**Within Enclosure 3: 02/26/2018 Letter to SJAFCA:** See its own Enclosure 4: 11/07/2017 SJCBS Meeting Transcript)

5. **QUESTION:** If channel flow capacity is limited to 37,000 cfs at Mossdale and 15,000 cfs at Paradise Cut (totalling 52,000 cfs), where will San Joaquin River flows of 110,000 cfs (as forecasted by Dante Nomellini to the SJCBS on November 7, 2017) be drained at the time of a future flood event of magnitude and size forewarned by Mr. Nomellini (110,000 cfs)? Is it time to consider a southern bypass? (**Within Enclosure 3: 02/26/2018 Letter to SJAFCA:** See its own Enclosure 7: Conceptual Vernalis Bypass Design)

6. The LSJRFS states in Appendix F: "Hydraulics," Page 88, that: *c. Frequency. The Delta Front raises are unlikely to impact flood frequency. However, improvements to the RD17 tieback levee would impact stages for events more rare than 1% ACE.*

7. **QUESTION:** If adequate flood drainage channel flows are not allowed for on the San Joaquin River, Old River, and Paradise Cut, both upstream and downstream of the Clifton Court Forebay, where will the next 70 square mile flood water basin form and at what depth will flood waters reach?

8. **QUESTION:** Based on past flood history in our area and potential new impacts due to global warming, it appears that both Old River and Paradise Cut flows both upstream and downstream of Clifton Court Forebay may be insufficient in total capacity to handle the drainage flows expected at the time of future flooding. (**Within Enclosure 3: 02/26/2018 Letter to SJAFCA:** See its own Enclosure 6: Map of Paradise Cut with Questions)

9. This becomes more concerning when considering Paradise Cut improvements as compared to certain information provided in the LSJRFS which calls attention to an "observed decrease in efficiency as the project size increases is consistent with the hydraulic limitations presented by the downstream stage boundary being within the tidal region of the Delta." For the original text, see the LSJRFS Page 3-6; also see Page 88 of Appendix F: "Hydraulics," as quoted above in Item # 6. (**Within Enclosure 3: 02/26/2018 Letter to SJAFCA:** See its own Enclosure 6: Annotated Map of Paradise Cut and Walthall Slough Maps; also see its own Enclosure 8: 04/22/2014 Letter from Mike Babitzke to Diane Nguyen, specifically pages 2 & 3: "Flooding" section)

10. **QUESTION:** Is that why the U.S. Army Corps of Engineers ("USACE") determined that the Paradise Cut Bypass alternative would not be carried forward, as it is not cost-effective and brings about concerns regarding downstream impacts of widening the bypass? (See LSJRFS Page 3-6 and Pages 87 to 90 of Appendix F: "Hydraulics")

11. **QUESTION:** If the bypass is not widened to offset increased flood impacts associated with RD 17 (b) alternatives being considered, what mitigation measures will be created to reduce stage increases for events more rare than 1% ACE to less than significant levels?

P2-7 cont

12. Most concerning is the conflicting position taken by the state Department of Water Resources in the March 2017 Basin-Wide Feasibility Study San Joaquin Basin Draft ("BWFS") which describes the State Recommended Plan to expand Paradise Cut in accordance with Option M-Ag. (See BWFS Page 7-6)

13. **QUESTION:** What mitigation or other action measures can our federal, state, and local government authorities take to ensure the safe and effective drainage of flood and other forms of drainage water that, if not accommodated for, could result in the formation of retention basin(s) with the potential to reach or exceed the 70 square miles (44,800 acres) inundated between Manteca and Tracy at the time of the 1997 flood?

14. This is especially concerning when considering channel flow deficiencies affecting the San Joaquin River (and associated tributaries) in and along the Delta Front-Lower San Joaquin River Basin. Most concerning is Paradise Cut's inability to handle large volumes of water anticipated to be generated at the time of future flooding without causing stage increases downstream. This is important when considering that Page 4-8 of the BWFS indicates that increased Paradise Cut bypass flows may cause stage increases along Old River and Grant Line Canal. (**Within Enclosure 3: 02/26/2018 Letter to SJAFCA:** See its own Enclosure 6: Annotated Map of Paradise Cut and Walthall Slough Maps)

15. **QUESTION:** In relation to managing drainage flows throughout the system, how many drainage flow choke points or other channel restrictions or blockages exist along the San Joaquin River and associated downstream tributaries in any areas affecting flood water drainage flows through the Lower San Joaquin River Basin? (**Within Enclosure 3: 02/26/2018 Letter to SJAFCA:** See its own Enclosure 6: Annotated Map of Paradise Cut and Walthall Slough Maps)

P2-7 cont

16. **QUESTION:** If safe and unimpeded drainage flows through the Lower San Joaquin River Basin are not achieved, what potential impacts may be created affecting the entire Lower San Joaquin River Basin system for all San Joaquin River, Old River, Middle River, Turtle Beach, Walthall Slough, and Paradise Cut river and/or tributary locations situated both upstream and downstream of the point that Paradise Cut and the San Joaquin River converge? What stage increases will be created in the rural areas south of the new RD 17 alternative (b) tie back levee? (See the LSJRFS, Page 88 of Appendix F: "Hydraulics," as quoted above in Item #6)

17. **QUESTION:** Will stage increases along Old River and Grant Line Canal impede flows and cause flood water to back up and affect San Joaquin River and Old River channel flow elevations as those rivers run in, along, and through the City of Lathrop?

18. **QUESTION:** What impacts could be created for either 100-year or 200-year flood events?

19. **QUESTION:** Will flood risk management improvement actions lead to the need to install control structures in and along Paradise Cut to limit Paradise Cut channel flows in a manner that limits stage increases downstream?

20. **QUESTION:** If control structures are installed along Paradise Cut that result in blocking and/or impeding Paradise Cut channel flows in a way that causes flood water to back up and pond, isn't it likely that the area between the Lathrop to Tracy Union Pacific Railroad track systems may be affected? (**Within Enclosure 3: 02/26/2018 Letter to SJAFCA:** See its own Enclosure 9: May 2017 SJRRC DEIR ACE*forward* Map: Figure ES-5 Tracy to Lathrop Segment. This map depicts rail service crossover tracks both east and west of Paradise Cut that may effectively create a flood water retention basin affecting drainage in the area.)

21. **QUESTION:** Wouldn't the ponding of flood water as described in Question #20 result in similar flood risk management improvement actions involving the utilization of gate structures to control flows as those utilized affecting Old Mormon Slough as described on Page 7-7 of the BWFS and Page 4-21 of the LSJRFS?

22. **QUESTION:** If gate structures in the Paradise Cut channel and diversion structures along the left bank of Paradise Cut are utilized to limit flood water flows to mitigate stage increases along Old River and Grant Line Canal, what impacts could be created upstream?

23. **QUESTION:** What increased flood water elevations could be created in RD 2064, RD 2075, RD 2094, or RD 2096?

24. **QUESTION:** Wouldn't it make sense for our local governing authorities to promote a full and comprehensive flood impact environmental review (as previously requested by the public) to properly identify and evaluate the size and locations of any and all public utilities infrastructure involved prior to receiving public comments to utilize in mitigating impacts to hydrology in the area? (**Within Enclosure 3: 02/26/2018 Letter to SJAFCA:** See its own Enclosure 10: Three Petitions, Specifically Petition #2: August, 2017)

25. In this way, before any consideration is given to any development project with the potential to affect flood and storm drainage flows affecting the Lower San Joaquin River Basin, all channel flow capacity deficiency impacts affecting drainage may be considered in association with all known and yet to be determined spillways, bypasses, or other drainage waterways currently existing or needed. This is especially true when considering certain impact points at Vernalis, Turtle Beach, Middle River, Mossdale, and Old River. The following are descriptions of how drainage flow impacts may affect San Joaquin River (and associated tributary) channel elevations and the ability to flow:

    a. The San Joaquin River at Vernalis as affected by impacts to the region in association with those presented in prior letters related to potential flood impacts. These prior letters draw attention to the potential for drainage impacts involved and support TLG's claim that channel flow capacity at Vernalis has been reduced from its original capacity significantly. (**Within Enclosure 3: 02/26/2018 Letter to SJAFCA:** See its own Enclosure 3: 04/20/2017 Letter to SJCBS)

P2-7 cont

b. The San Joaquin River north of Mossdale as affected by what appears to be localized residential housing within the City of Lathrop which is currently existing along the river channel. This housing may limit future flood protection improvement options (such as river channel widening) that may been deemed necessary in accordance with the CVFPP. (**Within Enclosure 3: 02/26/2018 Letter to SJAFCA:** See its own Enclosure 11: South Lathrop Specific Plan Aerial Figure 2-4)

c. Old River as affected by anticipated impacts relating to reverse channel flows that may impede the natural flow of the river (and possibly affect salinity levels reaching the South Delta) as identified in pages 3A-28 and 3A-29 of the Bay Delta Conservation Plan California WaterFix Final EIR/EIS (December 2016). (**Within Enclosure 3: 02/26/2018 Letter to SJAFCA:** See its own Enclosure 6: Annotated Map of Paradise Cut and Walthall Slough Maps)

d. Old River as affected by negative natural channel flow impacts that may impede natural flow along the Old River channel and may cause an approximate 0.5 foot stage increase along Old River and Grant Line Canal due to increased Paradise Cut bypass flows as indicated on page 4-8 of the March 2017 Draft Basin-Wide Feasibility Study: San Joaquin River Basin ("BWFS-SJR"). (**Within Enclosure 3: 02/26/2018 Letter to SJAFCA:** See its own Enclosure 6: Annotated Map of Paradise Cut and Walthall Slough Maps)

P2-7 cont

In preparation for the next series of questions, TLG calls your attention to what appears to be significant discrepancies discovered in the Walthall Slough drainage channel flow patterns when comparing satellite imagery to computer generated images as shown in five Walthall Slough detail maps included within Enclosure 3: 02/26/2018 Letter to SJAFCA, in its own Enclosure 6: Annotated Map of Paradise Cut and Walthall Slough Maps.

The apparent discrepancies in Walthall flow patterns become more concerning when you realize that the Central Valley Flood Protection Plan 2017 Update Draft Technical Memorandum - CVFPP Investment Strategy, August 2017 ("CVFPP August 2017") includes Item 214 in Table B-5: San Joaquin Basin Management Actions Included within the 2017 Refined SSIA Portfolio, which defines a project described as follows:

> *Reclamation District 2094 Improve Dryland Levees*
> *The dryland levee located on the south boundary of RD 2094 is lower and less reliable than the levees along the San Joaquin River and was overtopped in 1997 when RD 2075 flooded. This levee was originally constructed to protect RD 2075 in the event of a failure of a levee downstream (north) on the San Joaquin River. Furthermore, this cross levee is one of only two means of egress during a flood event. This project would improve this levee to protect RD 2094 from flooding in RD 2075, and would improve public safety.*

26. **QUESTION:** Will RD 2094 (south) and/or RD 2075 (north) boundary line levee improvements be performed in a manner that will cut off and divert historic Walthall Slough drainage patterns in a

manner that will prevent Walthall Slough from draining across the RD 2075/RD 2094 boundary and into RD 2094 before continuing on to Weatherbee Lake?

27. **QUESTION:** With that in mind, TLG would like you to consider that it is commonly believed by farmers in RD 2075 that Walthall Slough in its current form originates along the southern boundary of RD 2075 (at or near the RD 2064 and RD 2075 boundary line) before continuing north through RD 2075 and RD 2094 before discharging into Weatherbee Lake (RD 2096). Therefore, if current Walthall Slough drainage flow patterns are altered in any way that blocks or diverts historic drainage flows and causes Walthall Slough to lose its ability to send drainage water north of the RD 2075/RD 2094 common boundary line before draining into Weatherbee Lake, what flood and other hydrology-related impacts (storm water, irrigation water, etc) may be created? (**Within Enclosure 3: 02/26/2018 Letter to SJAFCA:** See its own Enclosure 12: 01/27/2018 Letter to RD 2075; also See its own Enclosure 6: Annotated Map of Paradise Cut and Walthall Slough Maps)

28. **QUESTION:** Will apparent changes to Walthall Slough flow patterns result in a new basin (similar to Weatherbee Lake) forming in the northwest corner of RD 2075?

29. **QUESTION:** Will apparent changes to Walthall Slough flow patterns affect total elevation drop over what appears to be a shortened length of the Walthall Slough flow channel in a way that may lower the total applied head pressure at the base of the slough as constrained by a possible expanded levee separating RD 2094 from RD 2075?

P2-7 cont

30. **QUESTION:** Will any decrease in elevation drop head pressure at the base of a divided and shortened Walthall Slough diminish the effectiveness and ability of Walthall Slough to drain into the San Joaquin River during periods of normal use and flood events?

31. **QUESTION:** If Walthall Slough is divided and shortened, will transfer pumps be required to convey Walthall Slough drainage water from RD 2075 into the San Joaquin River?

32. **QUESTION:** If divided, what increases in sedimentation or seepage are likely to occur?

33. **QUESTION:** If divided, how effectively will RD 2075 and/or RD 2064 be able to drain?

34. **QUESTION:** Will urban storm water be drained along any remaining portion of the current drainage waterway currently dependent on and recognized as Walthall Slough? If so, what impacts will be created?

35. **QUESTION:** What potential drainage impacts to rural South San Joaquin Irrigation District ("SSJID") and McMullin Irrigation and Drainage District canals serving Reclamation Districts 2064, 2075, 2094, & 2096 currently in use may be created in conjunction with planned non-federal sponsor-supported flood protection and management modifications and other forms of infrastructure being considered? (**Within Enclosure 3: 02/26/2018 Letter to SJAFCA:** See its own

Enclosure 12: 01/27/2018 Letter to RD2075; See its own Enclosure 13: 12/12/2017 Letter to MCC; also see its own Enclosure 14: 01/22/2018 Letter to MPC)

36. **QUESTION:** Doesn't the public have a right to know any and all alterations to federal, state, and/or local district flood protection levees and irrigation and drainage canals being considered to fully understand the potential for any and all impacts that may affect them? (**Within Enclosure 3: 02/26/2018 Letter to SJAFCA:** See its own Enclosure 12: 01/27/2018 Letter to RD2075)

37. **QUESTION:** With all the conflicting information as to where and how City of Manteca storm water collection, retention, drainage, and treated/untreated waste water spray field discharges will be handled, how can anyone fully understand the potential for any and all flood occurrence impacts involved? (**Within Enclosure 3: 02/26/2018 Letter to SJAFCA:** See its own Enclosure 12: 01/27/2018 Letter to RD2075; See its own Enclosure 13: 12/12/2017 Letter to MCC; See its own Enclosure 14: 01/22/2018 Letter to MPC; See its own Enclosure 15: 02/05/2018 Letter to MCC; See its own Enclosure 16: 02/06/2018 Letter to MCC; also see its own Enclosure 17: 02/07/2018 Letter to SJC LAFCo) P2-7 cont

38. **QUESTION:** In the interest of public safety, wouldn't it make sense to reconsider the Large-Scale Cross Valley Canal that would reduce stages along the San Joaquin River (downstream of the Merced River) by conveying flood flows from the San Joaquin River and its tributaries to the San Luis Reservoir afterbay (ie. O'Neal Forebay)? (See BWFS, Page 4-23; also see the 2017 Central Valley Flood Protection Plan Update, Page 2-7)

II. Floodplain Management and Hydrology-Related Drainage Concerns Associated With the Proposed ACE Extension

To illustrate TLG's concerns and characterize the potential for very significant impacts to be involved, TLG would like the project team to consider the following items as presented below.

39. Figures 2-1 and 2-2 of the ACE Extension provide descriptions for both the "Relocated Lathrop/Manteca Station" and the "Existing Lathrop/Manteca Station."

40. Pages 4.10-30 of the ACE Extension describe proposed rail system improvements and what appears to be completely different regulatory setting pathways to follow in meeting applicable compliance standards for each of the two Lathrop/Manteca station alternative locations presented due to construction requirements conditioned upon: P2-8

    a. The relocated Lathrop/Manteca station improvements to be located outside the Union Pacific Railroad ("UPRR") Right-of-Way ("ROW"); and

    b. The existing Lathrop/Manteca station improvements to be located within the UPRR ROW. TLG believes this may be important when you consider that page 4.10-5 of the ACE

Extension appears to indicate that various types of construction activities occurring within the ROW are exempt from certain state and local regulations.

41. Construction requirements for improvements located within or outside of the UPRR ROW appears to gain additional importance when you consider that pages 2-5 and 2-6 of the ACE Extension describe a Relocated Lathrop/Manteca single station scenario that calls for the modification of the existing State Route 120 undercrossing and construction of a new retaining wall that measures 350 feet in length and 15 feet in height. P2-8 cont

42. Further, page ES-10 of the ACE Extension describes a new track connection between the Oakland and Fresno subdivisions in Lathrop.

43. Most concerning, page 4.10-31 states that the Oakland-Fresno subdivision connection would alter existing drainage flows through the construction of a new track connection.

44. This becomes especially concerning upon close examination of Figure 5-2 of the ACE Extension which appears to call for a new track connection extending a considerable distance to the west of the relocated Lathrop/Manteca station (See Project Item #8 as identified in Figure 5-2 of the ACE Extension). **QUESTION:** Will this track connection be located inside or outside the UPRR ROW? P2-9

45. This causes TLG to be concerned that new track and/or station improvements are being considered that will place or allow modification of structures within the 100 year hazard areas that may impede or redirect flows or substantially alter drainage courses affecting any or all properties located in the study area.

46. Further, TLG believes that the drainage impacts associated with new track and/or station improvements may be understated when it is realized that the Central Valley Flood Protection Board ("CVFPB") acting under the authority of the 2008 Central Valley Flood Protection Act requires encroachment permits from the CVFPB because upgrades to existing tracks, new tracks, and new railroad bridges would be constructed across levees and across floodways under CVFPB jurisdiction. (See pages 4.10-8 and 4.10-9 of the ACE Extension.) P2-10

    QUESTION: What difference in drainage impacts will be created if the SJRRC prioritizes ACE Extension rail track and station improvements to be located and constructed inside the UPRR ROW as compared to alternatives allowing rail track and station improvements to be placed outside the UPRR ROW?

47. **QUESTION:** If ACE Extension rail track and/or bridge improvements are extended west to or across the San Joaquin River and/or Paradise Cut, what drainage impact mitigation measures will be provided to ensure that flood drainage flows are not impeded or redirected? (See page 4.10-40 of the ACE Extension) P2-11

48. TLG believes this is important when you consider that page 4.10-40 of the ACE Extension includes impact characterizations that state:

    Phase I improvements intersect various flood hazard areas including storm-related flooding (100-year flood zones and 200-year flood zones), areas with reduced flood risk due to levees, and dam failure inundation areas. The Phase I improvements are not located near the coast and are therefore not susceptible to coastal flooding hazards, such as tsunamis, extreme high tides, or SLR. The potential for the Phase I improvements to be subject to flooding impacts related to dam or levee failure during operation is very low because regular inspection and maintenance of dams and levees substantially reduces the potential for their failure. Therefore potential impacts of flooding related to dam or levee failure during operation of the Phase I improvements are not discussed further.

P2-12

49. COMMENT: As presented in earlier letters, TLG believes that the San Joaquin River and associated tributary channel flow capacities in the Manteca/Lathrop region are deficient and incapable of handling future flows that are anticipated to occur. For this reason, TLG believes any consideration to perform ACE rail improvements intersecting the flood hazard regions affecting the Study Area should consider any and all potential for future flooding. (**Within Enclosure 3: 02/26/2018 Letter to SJAFCA:** See its own Enclosure 3: 04/20/2017 Letter to SJCBS; also see its own Enclosure 4: 11/07/2017 SJCBS Transcript)

50. Page 4.10-42 of the ACE Extension describes increases in offsite flooding conditions and associated mitigation measures in a form detailed as follows:

    If ACE Extension improvements could result in any increase in offsite flooding conditions compared to existing conditions, project designs will be modified to reduce the potential flooding impacts to be equivalent to the existing conditions. Modifications to designs may include the following measures.

    - *Increasing culvert sizes.*
    - *Installation of cross-drainage facilities to balance the floodplain elevations across new tracks.*
    - *Creating no net fill for improvements within floodplains.*
    - *Modifying bridge designs to reduce the restriction of flood flows through drainage courses.*

    The detailed hydraulic evaluations will be submitted to the regulatory agencies that have jurisdiction over improvements within drainage courses. For improvements requiring encroachment permits from the CVFPB, the detailed hydraulic evaluations will be submitted to the CVFPB for review and approval.

P2-13

51. **QUESTION:** Will any of the construction improvements presented in the ACE Extension consider and allow for or result in creating and/or contributing to what appears to be very significant impacts when comparing those ACE Extension improvements with current plans by local authorities and/or non-federal sponsors to utilize a phased approach for the purposes of performing 200 year flood protection modification, expansion, and/or extension to the RD 17 dryland cross levee as it currently exists in south west Manteca.

P2-14

52. With this in mind, page 1-11 of the ACE Extension describes the use of a project EIR as the most common type of EIR and applicable to projects that have been sufficiently developed to a level of certainty that is ready for detailed environmental impact analysis. Apparently the ACE Extension supports a determination that the Lathrop to Ceres extension is defined to a level of certainty to justify a standard environmental impact analysis as provided for in the Phase I portion of the Environmental Review. The ACE Extension has further determined that the Ceres to Merced ACE Extension improvements are more conceptual and must be evaluated in a more general manner. P2-15

    COMMENT: TLG believes that until all RD 17 levee flood protection infrastructure is clearly identified and presented to the public, Phase I Improvements should be subject to a full cumulative environmental impact analysis with impacts evaluated at a programmatic more conceptual level.

53. COMMENT: This is especially important when you consider that for some time now, the City of Manteca has continued to approve a high volume of development projects without key stormwater, disinfected and undisinfected wastewater effluent spray field and San Joaquin River discharge, potable water well, and traffic circulation public services infrastructure being properly identified, analyzed, and presented for public review in support of protecting the needs of our growing community. P2-16

    With this in mind, TLG believes that significant uncertainty exists and causes TLG to believe that it is probable that none of the affected members of the public fully understand the potential for what appears to be very significant flood and other hydrology related impacts that may be created in conjunction with the Phase I (project level) and Phase II (programmatic level) rail system improvements and modifications necessary to meet passenger service demand while mitigating and reducing the potential flood impacts to be equivalent to existing conditions. (See page 4.10-42 of the ACE Extension)

54. The ACE Extension includes a list of Phase I and Phase II Impacts:

    Phase I:

Page	**Impact**	
ES-48	Impact	Hyd-3, Hyd-4, Hyd-5
ES-49	Impact	Hyd-6, Hyd-7, Hyd-8
ES-50	Impact	C-Hyd-1
ES-64	Impact	USS-1, USS-2
ES-65	Impact	USS-3, USS-4
ES-66	Impact	C-USS-1

P2-17

Phase II:

Page	Impact	
ES-82	Impact	Hyd-11, Hyd-12, Hyd-13
ES-83	Impact	Hyd-14, Hyd-15, Hyd-16
ES-84	Impact	C-Hyd-1

P2-17 cont

55. TLG believes that the flood impact mitigation measures identified in the ACE Extension and associated with item 54 (above) may prove inadequate and fall significantly short of the goal to offset any increases in flood impacts created. (**See Enclosures 3 and 4**)

III. Cumulative Impacts and Hydrology-Related Drainage Concerns Associated with the Proposed ACE Extension

The following text has been quoted from page 5-1 of the ACE Extension:

> *The State California Environmental Quality Act (CEQA) Guidelines define a cumulative impact as two or more individual impacts that, when considered together, are considerable or that compound or increase other significant environmental impacts. The incremental impact of a project may be considerable when viewed in the context of other closely related past, present, and reasonably foreseeable future projects.* [1] *Cumulative impacts can result from individually minor, but collectively 8 significant, projects taking place over a period of time (State CEQA Guidelines 15355).*
>
> *State CEQA Guidelines Section 15130(b) indicates that an adequate discussion of potential cumulative effects requires consideration of either a list-based approach or a projection-based approach. This environmental impact report (EIR) uses a combination of a project-based/plan -based approach and a list-based approach to determine whether significant cumulative impacts would occur.*

P2-18

56. Page 5-3 of the ACE Extension includes table 5-1, "Summary of Cumulative Impact Methodology." Resource issues include Geographic Area of Impact which identifies impact areas limited to the "ACE Extension Corridor, vicinity, and downstream water bodies."

57. COMMENT: TLG believes that flood-impacted areas may include Reclamation District Nos. 17, 2094, 2096, 2075, and 2064.

1 Reasonably foreseeable future projects are defined as projects that have been adopted or have otherwise demonstrated likelihood to occur based on documentation from project sponsors.

58. Page 5-7 of the ACE Extension identifies and defines projects considered in the cumulative analysis and included in the ACE Extension in Table 5-3.

59. COMMENT: TLG calls your attention to a number of other closely related past, present, and reasonably foreseeable projects affecting hydrology that were identified by TLG in the February 26, 2018 letter from TLG to SJAFCA. (**See Enclosure 3**) TLG believes that due to the potential for significant impacts to hydrology, those same closely related past, present, and reasonably foreseeable projects should be considered in any ACE Extension cumulative impact study analysis. P2-18 cont

60. Page 5-45 of the ACE Extension states:

    Cumulative projects could result in changes to existing drainage patterns that may create or contribute excessive runoff that would exceed the capacity of stormwater drainage systems and result in localized flooding. Additionally, cumulative projects could be affected by and contribute to flooding, particularly if close to existing flooding zones. The water quality degradation and contribution to flooding events associated with the ACE Extension and other reasonably foreseeable projects would result in a significant cumulative impact on hydrology and water quality. P2-19

    (**See Enclosures 3 and 4**)

61. Page 5-70 of the ACE Extension states: *The cumulative demands for water and wastewater generation could result in the need for additional utility infrastructure which may entail the development of additional water supplies or wastewater treatment and distribution infrastructure.* (**See Enclosure 4**)

In closing, TLG believes that the public and, quite possibly even our governing officials, have not been adequately informed and do not understand the full potential for irreversible and very significant flood water elevation impacts that affected members of the public could be subjected to as a result of this project in association with other projects that may affect RD 17, RD 2064, RD 2075, RD 2094, RD 2096, and other Reclamation Districts located in the South Delta/Lower San Joaquin River Basin.

For this reason, TLG believes that the SJRRC Board and ACE Extension project staff can do more in working with Manteca, Lathrop, RD 17, San Joaquin County, and other agencies involved to determine and mitigate for the total amount of cumulative impacts affecting flood water drainage and other impacts to hydrology for all flood hazard impact zones affected. P2-20

To this end, TLG advises the construction of spillways and bypasses as the most effective structures for mitigating floods in our area.

Further, TLG urges all agencies involved to promote the dredging of the San Joaquin River and to carefully monitor channel flows on the river to ensure no more water is channeled than the current condition of the river and surrounding flood protection mitigation structures can safely handle.

Thank you for your consideration and for your attention to these important matters.

Yours truly,

Martin Harris
Terra Land Group, LLC

MH/cm

Enclosures:

Please note: To conserve file size, some of the longer Enclosures below are available for individual download through Dropbox at the provided hyperlinks. Please advise if you require any assistance. All other Enclosures are attached.

1. List of Letters and Items Related to Flood Impacts (with documents provided via Dropbox hyperlinks)
2. List of Environmental Impact Reports and Feasibility Studies Reviewed by TLG
3. 02/26/2018 letter from TLG to SJAFCA Re: LSJRFS (https://www.dropbox.com/s/8scnhemfwexbkr9/2018-02-26_LTR_SJAFCA_LSJR%20EIR_PublicComm_wEncl.pdf?dl=0)
4. 05/14/2018 letter from TLG to Greg Showerman, Manteca Community Development Director for the City of Manteca (https://www.dropbox.com/s/8oao37q42u7u4e5/2018-05-14_LTR_GShowerman_TM2.2.pdf?dl=0)

cc:

San Joaquin Area Flood Control Agency Board Members, % Marlo Duncan, Project Manager (marlo.duncan@stocktongov.com)
San Joaquin Council of Governments Board Members, % Diane Nguyen (nguyen@sjcog.org)
San Joaquin Local Agency Formation Commission Board Members, % James Glaser (jglaser@sjgov.org)
Manteca City Council, % Lisa Blackmon, City Clerk (lblackmon@ci.manteca.ca.us)
Jeff Denham, United States House of Representatives, % Peter Butler (Peter.Butler2@mail.house.gov)
Reclamation District No. 17 Board Members, % (ngmplcs@pacbell.net)
Reclamation District No. 2075 Board Members, % Pam Forbus (pamforbus@sbcglobal.net)
Reclamation District No. 2094 Board Members, % Albert Boyce (albertboyce@gmail.com)
South San Joaquin Irrigation District Board of Directors, % Betty Garcia (bgarcia@ssjid.com)
San Joaquin County Board of Supervisors, % Mimi Duzenski (mduzenski@sjgov.org)
Tanis Toland, U.S. Army Corps of Engineers, Sacramento District (Tanis.J.Toland@usace.army.mil)

Michael Mierzwa, Lead Flood Management Planner, California Department of Water Resources (michael.mierzwa@water.ca.gov)
Jon Ericson, Hydrology and Flood Operations Officer, California Department of Water Resources (jon.ericson@water.ca.gov)
California Department of Water Resources, Attn: Mary Jimenez (mary.jimenez@water.ca.gov)
Lathrop City Council, % Teresa Vargas, City Clerk (website_cco@ci.lathrop.ca.us)
Central Valley Flood Protection Board, Attn: Leslie Gallagher, Executive Officer (leslie.gallagher@cvflood.ca.gov)

SELECTED LIST OF LETTERS SENT BY TERRA LAND GROUP
with Permalinks to Dropbox Files

ENCLOSURE 1

	Date	Type	From	To	Description	Dropbox Permalink
1	2/7/2018	LTR	TLG	LAFCo	2/8/18 Mtg Ag Its 4 & 5	https://www.dropbox.com/s/mz8y84gnnixhewp/2018-02-07_LTR_LAFCo_AgIts4%265.pdf?dl=0
2	2/6/2018	LTR	TLG	MCC	2/6/18 Mtg Ag Its B, D.1, D.2, E.1	https://www.dropbox.com/s/33ssttfko9fer97/2018-02-06_LTR_MCC_AgItsB%20D1%20D2%20E1.pdf?dl=0
3	2/5/2018	LTR	TLG	MCC	2/6/18 Mtg At It C.11	https://www.dropbox.com/s/u8cndghar5foyfv/2018-02-05_LTR_MCC_AgItC11.pdf?dl=0
4	1/30/2018	LTR	TLG	SJRRC	ACE Extension NOP EIR	https://www.dropbox.com/s/4amu4mlri0o3sf5/2018-01-30_LTR_SJRRC_ACENOP.pdf?dl=0
5	1/27/2018	LTR	TLG	RD2075	1/27/18 Mtg Ag It Public Comments	https://www.dropbox.com/s/zxyfrflr3quoaqg/2018-01-27_LTR_RD2075_PubComm_MHkh_shorter.pdf?dl=0
6	1/23/2018	LTR	TLG	CVFPB	1/26/18 Mtg Ag It 8A (Letter 2)	https://www.dropbox.com/s/jtsvxapgys6bufa/2018-01-23_LTR_CVFPB_Ltr2AgIt8A.pdf?dl=0
7	1/23/2018	LTR	TLG	SJCOG	1/25/18 Mtg Ag It 5F	https://www.dropbox.com/s/3cjjf3vayqkhi98/2018-01-23_LTR_SJCOG_AgIt5F.pdf?dl=0
8	1/22/2018	LTR	TLG	MPC	1/23/18 Mtg Public Comments	https://www.dropbox.com/s/jv9ts3vbg59qc6a/2018-01-22_LTR_MPC_PubComm_wEncls_Reduced.pdf?dl=0
9	12/12/2017	LTR	TLG	MCC	Public Concerns Re: Flooding	https://www.dropbox.com/s/claoc2wm9iis5w2/2017-12-12_LTR_MCC_PublicConcerns_MHcm.pdf?dl=0
10	11/28/2017	LTR	TLG	SJRRC	12/1/17 Mtg Ag Its 2, 5, 6	https://www.dropbox.com/s/ou973vpx5xakxkj/2017-11-28_LTR_SJRRC_AgIts2%265%266_MHcm.pdf?dl=0
11	11/7/2017	TRANS CRIPT			Manteca City Council Meeting	https://www.dropbox.com/s/t305bxkvuvy8rra/2017-11-07_MCC_TRANSCRIPT.pdf?dl=0
12	11/7/2017	TRANS CRIPT			SJC Board of Supervisors Meeting	https://www.dropbox.com/s/tcwv3goomanz1la/2017-11-07_SJCBS_TRANSCRIPT.pdf?dl=0
13	10/11/2017	LTR	TLG	DSA (Dept. State Architect)	Flood Concerns	https://www.dropbox.com/s/yumyutzz0nl5sni/2017-10-11_LTR_DSA_FloodConcerns_MHcm.pdf?dl=0
14	10/3/2017	TRANS CRIPT			Manteca City Council Meeting	https://www.dropbox.com/s/ayvxzzbfva21fu4/Transcript%2010-03-2017%20MCC%20Meeting.pdf?dl=0
15	10/2/2017	LTR	TLG	MCC	10/3/17 Mtg Ag It D.1 - Griffin Park EIR	https://www.dropbox.com/s/u2d52mmce8gwd4e/2017-10-02_LTR_MCC_AgItD1GriffinPark_MHcm.pdf?dl=0
16	10/2/2017	LTR	TLG	MCC	10/3/17 Mtg Ag It D.2 - PFIP	https://www.dropbox.com/s/n25lih2drhkb90v/2017-10-02_LTR_MCC_AgItD2PFIP_MHcm.pdf?dl=0
17	9/18/2017	LTR	TLG	MCC	9/19/17 Mtg Ag It C.9 - Wastewater Feasibility Study	https://www.dropbox.com/s/omxkmsjaks74i1k/2017-09-18_LTR_MCC_AgItC9WastewaterFeasibilityStudy_MHcm.pdf?dl=0
18	9/12/2017	TRANS CRIPT			Manteca Planning Commission Meeting	https://www.dropbox.com/s/b1c6wo470vapezm/Transcript%2009-12-2017%20MPC%20Meeting.pdf?dl=0
19	9/12/2017	LTR	TLG	MPC	9/12/17 Mtg Ag It G.1 Griffin Park Project	https://www.dropbox.com/s/y3tl3zsj61u64vf/2017-09-12_LTR_MPC_AgIt6.1GriffinPark_MHcm.pdf?dl=0

SELECTED LIST OF LETTERS SENT BY TERRA LAND GROUP
with Permalinks to Dropbox Files

20	9/6/2017	LTR	TLG	MCDD	Oakwood Landing/Cerri Denali Project DEIR Public Comments	https://www.dropbox.com/s/i7caj91itppw0lh/2017-09-06_LTR_MCDD_CerriDenaliProj_MHcm_STAMPED.pdf?dl=0
21	8/30/2017	LTR	TLG	SJRRC (ACE)	May 2017 ACEforward DEIR Public Comments	https://www.dropbox.com/s/gy9xk0uzdhwle36/2017-08-30_LTR_TLG-ACE_PubComm_MHcm.pdf?dl=0
22	8/9/2017	LTR	MH	SR99/120	SR-99/SR-120 Interchange Improvements Comments	https://www.dropbox.com/s/wovaz73vu9ragsm/2017-08-09_LTR_MH_SR99-120InterchangeProj_MHcm.pdf?dl=0
23	7/5/2017	LTR	TLG	SJAFCA	07/06/17 Mtg Ag Its 5.1 and 5.2 Flood Funding	https://www.dropbox.com/s/0fy7d08xlatqedh/2017-07-05_LTR_SJAFCA_AgIts5.1a5.2_MHcm.pdf?dl=0
24	5/31/2017	LTR	TLG	John Maguire	Promoting Public Involvement Re: Flood Protection Along the LSJRB	https://www.dropbox.com/sh/zt4ho1yjri4wa4e/AAByDiIySd44QCN3udF_M6IWa?dl=0
25	5/16/2017	LTR	TLG	MCC	5/16/17 Mtg Ag It A.11 2017 Fed Legislative Agenda	https://www.dropbox.com/s/rwh26kchjzq3zuj/2017-05-16_LTR_MCC_ReAgItA11_MHjs.pdf?dl=0
26	5/12/2017	LTR	TLG	John Maquire	Response to 4/27/17 email re snowmelt impacts to SJR	https://www.dropbox.com/s/ss2lrlqvyx4ai4k/2017-05-12_LTR_Maguire_MHcm.pdf?dl=0
27	4/25/2017	LTR	TLG	MUSD Board of Trustees	05-09-2017 MUSDmtg/04-27-2017 MBArticle	https://www.dropbox.com/sh/cr7yy1y9m1feaqf/AAC_9lj35X5eLBT64CYHLnJKa?dl=0
28	4/20/2017	LTR	TLG	SJCBS	04/25/17 SJCBS Mtg Public Comment	https://www.dropbox.com/s/7dy40jzlqeotw56/2017-04-20_LTR_SJCBS_Re04-25-17MtgPubComm_MHcm.pdf?dl=0
29	4/18/2017	LTR	TLG	MCC	04/18/17 MCC Mtg Ag It B.2 Terra Ranch Subdivision Map	https://www.dropbox.com/s/2st0ptaifryrafa/2017-04-18_LTR_MCC_ReAgItB2TerraRMap_MHjs.pdf?dl=0
30	4/4/2017	LTR	TLG	MCC	04/04/17 MCC Mtg Ag It C.1 GP Advisory Committee	https://www.dropbox.com/s/5gur8naawvwbein/2017-04-04_LTR_MCC_ReAgItC1GPAdvisoryCommittee_MHjs.pdf?dl=0
31	3/14/2017	LTR	TLC	SWRCB	Comments on proprosed flow increases Stanislaus Tuolomne and Merced Rivers	https://www.dropbox.com/s/wtrmiukoa73y3mm/2017-03-14_LTR_CASWRCB_FlowIncreasesStanTuolMercedRivers_MH_wEnc.pdf?dl=0
32	2/20/2017	LTR	TLG	MCC	02/21/17 MCC Mtg Ag It A.5 Levee Impact Fee	https://www.dropbox.com/sh/goiphhxy938hoqw/AAALAye4m3MO2sLvMTArCcAYa?dl=0
33	2/6/2017	LTR	TLG	MCC	02/07/17 MCC Mtg Ag It B.3 Levee Impact Fee	https://www.dropbox.com/sh/209rlw89z3xdvzt/AAD-x6vECw8PfApGEiJTvyVqa?dl=0
34	11/21/2016	LTR	TLG	MPC	11/22/16 Ag Its 7.1, 7.2, 7.3 Housing/Safety/Circulation	https://www.dropbox.com/sh/h5nqt2vfuf3iz6g/AADolH6jCPfv6PPVKlLlKcf1a?dl=0
35	12/15/2015	LTR	TLG/ Bryce Perkins	MCC	12/15/15 Mtg Ag It B.1 General Plan	https://www.dropbox.com/s/02h2jtwaekhxga5/2015-12-15_LTR_MCC_ReAgItB1GenPlan_BPjs.pdf?dl=0
36	12/15/2015	LTR	TLG/MH	MCC	12/15/15 Mtg Ag It B.1 General Plan	https://www.dropbox.com/s/7hv0xgzqo7yz2ef/2015-12-15_LTR_MCC_ReAgItB1GenPlan_MHjs.pdf?dl=0
37	11/24/2015	LTR	TLG	MPC	11-24-15 MPC Mtg Ag It 6.3 GP	https://www.dropbox.com/s/z9aoz68xbgs9o6f/2015-11-24_MPC_AgIt6.3GP_MHjs.pdf?dl=0
38	6/23/2015	EML	NU	MPC	06/23/15 Mtg Ag It. 7-1 Municipal Service Review updates	https://www.dropbox.com/s/7c57w02r6fqkrwc/2015-06-23_LTR_NU-MPC_AgIt7-1MSRupdates.pdf?dl=0

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39	3/31/2015	LTR	John Minney	USACE/ Tanis Toland	Lower San Joaquin River Project Interim Report	https://www.dropbox.com/s/4lhgvtncsoswgte/2015-03-31_LTR_JMinney-USACE_LSJRInterimReport.pdf?dl=0

ENCLOSURE 2

List of Environmental Impact Reports and other Environmental and Technical Documents Reviewed by Terra Land Group

- "Regional Transportation Plan/Sustainable Communities Strategy Draft Programmatic Environmental Impact Report;" San Joaquin Council of Governments, March 2018.
- "Draft Regional Transportation Plan Sustainable Communities Strategy;" San Joaquin Council of Governments ("SJCOG"), 2018.
- "San Joaquin River Basin Lower San Joaquin River, CA FINAL Integrated Interim Feasibility Report/Environmental Impact Statement/Environmental Impact Report;" San Joaquin Area Flood Control Agency ("SJAFCA"), Central Valley Flood Protection Board ("CVFPB"), US Army Corps of Engineers ("USACE"), January 2018.
- "DRAFT Municipal Service Review Selected San Joaquin County Reclamation Districts;" San Joaquin Local Agency Formation Commission, December 20, 2017.
- "SSJID and City of Manteca Request for Proposal for Master Plan Study for the French Camp Outlet Canal;" South San Joaquin Irrigation District, City of Manteca, November 2017.
- "DRAFT Technical Memorandum Central Valley Flood Protection Plan Investment Strategy;" California Department of Water Resources ("DWR"), August 2017.
- "Central Valley Flood Protection Plan 2017 Update [Final];" DWR, August 2017.
- "Draft EIR for the Oakwood Landing-Cerri & Denali Subdivisions;" DeNovo Planning Group, July 2017.
- "Draft Environmental Impact Report San Joaquin Regional Rail Commission ACE*forward*;" ICF, May 2017.
- "San Joaquin River Basin-Wide Feasibility Study;" DWR, March 2017.
- "Flood System Long-Term Operations, Maintenance, Repair, Rehabilitation, and Replacement Cost Evaluation: Draft Technical Memorandum;" DWR, January 2017.
- "Central Valley Flood Protection Plan 2017 Update Draft;" DWR, December 2016.
- "Bay Delta Conservation Plan/California WaterFix Final EIR/EIS;" DWR, U.S. Bureau of Reclamation, December 2016.
- "CVFPP Supplemental Program Environmental Impact Report;" DWR, December 2016.
- "Recirculated Draft: Substitute Environmental Document in Support of Potential Changes to the Water Quality Control Plan for the San Francisco Bay-Sacramento San Joaquin Delta Estuary; San Joaquin River Flows and Southern Delta Water Quality;" California State Water Resources Control Board, California Environmental Protection Agency, September 2016.
- "2017 CVFPP Update Scoping Report;" DWR, July 2016.
- "San Joaquin River Basin Lower San Joaquin River, CA Draft Integrated Interim Feasibility Report/EIS/EIR;" USACE, SJAFCA, February 2015.
- "Final EIR Phase 3-RD 17 Levee Seepage Repair Project Administrative Draft;" Reclamation District No. 17, March 2015.
- "Lower San Joaquin River and Delta South Regional Flood Management Plan;" SJAFCA, November 2014.
- "Draft: Lower San Joaquin River and Delta South Regional Flood Management Plan;" SJAFCA, January 2014.
- "Environmental Impact Statement: River Islands at Lathrop, Phase 2B;" USACE, October 2014.

- “2012 Central Valley Flood Protection Plan (“CVFPP”);” DWR, June 2012.
- “Regional Mercury Load Reduction Evaluation Central Valley, California;” US Environmental Protection Agency Region 9, CA Regional Water Quality Control Board: Central Valley Region, August 2008.
- “Investing in California's Flood Future: An Outcome-Driven Approach to Flood Management;” Presentation at the Floodplain Management Association Conference, DWR, September 2016.
- “Storms and Flooding in California in December 2005 and January 2006--a Preliminary Assessment;” US Geological Survey, 2006.
- “French Camp Outlet Canal-Hydraulic Capacity Analysis Final Report;” CH2M Hill, February 2002

Gmail

Matt Hertel <aceextension.south@gmail.com>

Union Pacific Railroad Comments on the ACE Extension EIR

1 message

Clint E. Schelbitzki <CESCHELB@up.com> Fri, May 25, 2018 at 4:11 PM
To: aceextension.south@gmail.com
Cc: "Wesley J. Lujan" <WJLUJAN@up.com>, "Francisco J. Castillo JR" <FCASTILLO@up.com>, "David M. Pickett" <DMPICKET@up.com>, Kevin Sheridan <Kevin@acerail.com>

Attached are Union Pacific's comments on the EIR for proposed extended ACE service towards Merced.

Please let me know if you have any questions,

Clint

(See attached file: UPRR Merced EIR Comments 20180525.pdf)

Clint Schelbitzki | Sr. Director Network Development | Union Pacific Railroad | 10031 Foothills Blvd. Roseville, CA 95747
Office: 916.789.6360 | Fax: 402.501.1734 | ceschelb@up.com

**

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UPRR Merced EIR Comments 20180525.pdf
299K

BUILDING AMERICA®

May 25, 2018

San Joaquin Regional Rail Commission
Attn: EIR for the SJRRC ACE Extension Lathrop to Ceres/Merced
949 E. Channel Street
Stockton, CA 95202
Submitted to ACEextension.south@gmail.com

Re: Union Pacific Railroad Comments on the ACE Extension EIR

To Whom It May Concern,

This letter will serve as Union Pacific Railroad's (UPRR) formal comments to the San Joaquin Regional Rail Commission's (SJRRC) ACE Extension Environmental Impact Report (EIR). The EIR seeks to add new Altamont Corridor Express (ACE) service and construct rail infrastructure along corridors that ACE currently does not operate over today. UPRR has a direct interest in the proposed projects because it owns and operates the rail corridors noted throughout the EIR.

The UPRR corridors included in this study make up a portion of our Northern California network that is responsible for providing safe, reliable, and efficient freight rail service across the region. Through its network, which includes over 32,000 miles of rail within the western two-thirds of the United States, UPRR provides a critical link between California's freight rail customers and the national and international markets UPRR serves. The passenger service proposals included within the EIR must in no way impact these freight customers and their ability to continue to ship by rail.

P3-1

While UPRR has not approved the proposed ACE service to Ceres/Merced, we have had ongoing communication with SJRRC about how to mitigate possible negative impacts to the freight rail network from the proposals listed in the EIR. UPRR has analyzed SJRRC's proposal and is in the process of providing guidance about the necessary rail infrastructure that could be required if UPRR approves the extension of the ACE service towards Merced. As the owner of the rail network, UPRR maintains sole discretion to determine what infrastructure and compensation is required before expanded passenger service is allowed. If the service is approved by UPRR, all elements of the recently executed SJRRC/UPRR MOU and our pending infrastructure analysis, whether listed within the EIR or not, will be satisfied before new or expanded service is initiated. Any new rail infrastructure constructed as part of this process must also meet all UPRR engineering standards and requirements.

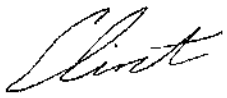
UNION PACIFIC CORPORATION
10031 Foothills Blvd.
Roseville, CA 95747

Clint Schelbitzki
General Dir. – Network Development

P 916-789-6360
E ceschelb@up.com

UPRR looks forward to continuing good-faith discussions with SJRRC regarding these proposed projects. UPRR reserves the right to comment on any modified drafts of the EIR if presented in the future. UPRR likewise notes that construction of the improvements and any changes in passenger rail service will require execution of definitive agreements between the parties. P3-1 cont

Sincerely,



Clint Schelbitzki
Sr. Director, Network Development

Cc:

Wes Lujan, Union Pacific Railroad

Francisco Castillo, Union Pacific Railroad

David Pickett, Union Pacific Railroad

Gmail Matt Hertel <aceextension.south@gmail.com>

Re: Delivery Status Notification (Failure)

1 message

albert cresci <koolhead.ac@gmail.com> Mon, May 28, 2018 at 7:23 PM
To: ACEextension.south@gmail.com

On Mon, May 28, 2018, 4:34 PM Mail Delivery Subsystem <mailer-daemon@googlemail.com> wrote:

Address not found

Your message wasn't delivered to **ACEextentions.south@gmail.com** because the address couldn't be found, or is unable to receive mail.

LEARN MORE

The response was:

```
The email account that you tried to reach does not exist. Please try
double-checking the recipient's email address for typos or unnecessary
spaces. Learn more at https://support.google.com/mail/?p=NoSuchUser 107-
v6sor2431487uas.36 - gsmtp
```

---------- Forwarded message ----------
From: albert cresci <koolhead.ac@gmail.com>
To: ACEextentions.south@gmail.com
Cc:
Bcc:
Date: Mon, 28 May 2018 16:34:22 -0700
Subject: Track overlay
I am a farmer at 1811 north southern Pacific ave my name is Albert Cresci i have recieve your projected developement schedule but your plan does not work for me cutting off my entrance and exit and my neighbor would be using my land to get in and out of his residence and this will also cut out my income rent agreement I have with the Scot bros farming and have other plans for development this is not a good plan for us i and the further possability of income

I1-1

developement will be lost not to mention financial loss for me and a well establish Scoto Bros farming and poor compensation from you to take the land we voted no for this developement

I1-1
cont

icon.png
2K

Gmail Matt Hertel <aceextension.south@gmail.com>

ACE Extension Lathrop to Ceres/Merced

1 message

Hong-An Doan <hongandoan@hotmail.com> Fri, Apr 13, 2018 at 6:09 PM
To: "ACEextension.south@gmail.com" <ACEextension.south@gmail.com>

Dear ACE:

I am overjoyed to learn about the planned ACE extension Lathrop to Ceres/Merced. Thank you so much for the initiatives and project!!! This would greatly help people living in the Merced/ Stanislaus counties to have a much easier commute to the South Bay / Bay Area and have access to a lot more job opportunities. This is AWESOME, thanks again and I wish you much success and enjoyment in this project. I2-1

Sincerely,
Hong-An Doan

Gmail Matt Hertel <aceextension.south@gmail.com>

Extension of ACE to Modesto and Ceres

1 message

Mark Jacops <mjsunol@comcast.net> Sat, Apr 14, 2018 at 1:20 PM
To: ACEextension.south@gmail.com

I am very much in favor of increasing public transportation around the Bay Area.Traffic congestion in the Bay Area has become non tolerable at times. I3-1

Mark Jacops

Sunol Ca 94586

Email : mjsunol@comcast.net

Gmail Matt Hertel <aceextension.south@gmail.com>

Concerns about the ace train service along highway 99

1 message

Mr B r a d <jhill_81@yahoo.com> Tue, May 8, 2018 at 3:51 PM
To: aceextension.south@gmail.com

concerns about the ace train service along highway 99.

As a professional radio communicator I wanted to add requirements to the project
that the train , track signaling and crossing equipment be selected and tested before and after
operation for both emission of radio frequency interference to other services and also be checked that
it can not be harmed by strong radio signals (such as high power broadcasts ,radio/cell towers
and HF heating devices) for the publics safety.
Riding on the train , of having it pass through my town or alongside my car on the road
should not produce radio static , as you know most public busses have this problem
from the use of computers as well as fluorescent and now LED light power supplies.
Diesel electric motors can also produce large amounts of radio static.
Long overhead signaling lines as used in legacy railroad control systems can also
propagate radio interference over long distances.
With proper selection of certified power supplies and the use of fairrite cores most interference
problems can be kept under control. And the public can enjoy broadcast radio/tv cell phones,
shortwave radio and fire/police radio will be protected from loss of service.
I am in full support of train service for the valley!

I4-1

thank you
Brad Johnson
Town of Salida Ca.
ValleyMedia.Org Gate way to Local Media Content for Stanislaus County Modesto Salida Ripon

ValleyMedia.Org Gate way to Local Media Content for Stanislaus County M...

Gmail Matt Hertel <aceextension.south@gmail.com>

Expansion with current train problems

1 message

Linda Johnson <l49johnson@hotmail.com> Mon, Apr 23, 2018 at 3:08 PM
To: "ACEextension.south@gmail.com" <ACEextension.south@gmail.com>

I only have one thing and that is, if you are having continued train issues on your current routes how can you expand?
Over 17 years riding off and on, you do not take the time to fix your equipment or if you do it is mickey mouse job.

I5-1

Thanks
Linda Johnson

Gmail Matt Hertel <aceextension.south@gmail.com>

ACE Extension Lathrop to Ceres/Merced

1 message

Frank McHugh <frank3fjmco@hotmail.com> Sat, Apr 14, 2018 at 7:01 AM
To: "ACEextension.south@gmail.com" <ACEextension.south@gmail.com>

Yes to Ace Extension to relieve the freeways and driving tension I6-1

Sent from Mail for Windows 10

ACE
ALTAMONT CORRIDOR EXPRESS

COMMENT SHEET

Name: Richard Meissner

Organization (if any):

Address (optional):

City, State, Zip: Modesto CA 95351

E-mail address: richard.meissner@att.net

Comments

① Start construction as soon as possible so Modesto residents (+ others who have never seen an ACE train) will know where their money is going. I7-1

② Explore a Salida station (E. of Salida Blvd near westbound Kiernan), - North of Kiernan / 99 interchange. This would attract north Modesto (+ Ockdale + Riverbank) commuters who may not want to backtrack to downtown Modesto + would want to avoid crossing the Stanislaus River (on 99) due to backups during evening commute hours. A parking lot is already there. I7-2

③ Insure media (like the Modesto Bee) print accurate stories about ACE. I7-3

Gmail

Matt Hertel <aceextension.south@gmail.com>

Impact of Station Relocation

1 message

Chris Mendes <chrismendes@verizon.net> Sun, May 27, 2018 at 1:22 PM
To: ACEextension.south@gmail.com

To whom it may concern,

This communication is on behalf of myself and my husband, Frank “Raymond” Mendes and Christine Mendes. Our address is 18401 S. McKinley Ave., Manteca, CA 95337.

We are very concerned regarding the ACE station relocation and the impact it will have on our current lifestyle. The location for moving the Lathrop Manteca Station to McKinley Avenue will cause an enormous change in traffic, noise, and quality of life, that combined with the impending McKinley Avenue interchange will change our once quite and peaceful country ranchete into a main traffic thoroughfare. We anticipate traffic from Manteca, Lathrop, Salida, Escalon, and Tracy. According to the maps we have seen the Station and the parking will be south of our property. It will be dangerous to leave our driveway.

We were also informed on Friday that ACE plans to place an undercrossing under the existing railroad track which will be in the front of our property. The tentative map we were shown has the new entrance to our drive way cutting through the middle of our front pasture. I would imagine the roadway will be widened to accommodate the extra traffic, also cutting through a portion of our property. The other option would be an overcrossing or raising of the tracks any of which will be catastrophic to our current life style. I8-1

We purchased and built our dream home on this parcel in 1990. Our plan was to live out our lives here. We are 68 and 65, we are too old to move and the stress of the changes is affecting our lives and potentially our health.

Please send an email of confirmation of receipt of this communication.

Frank and Christine Mendes

Gmail Matt Hertel <aceextension.south@gmail.com>

ACE Extension Lathrop to Ceres/Merced

1 message

Kevin Moss <kmoss2118@yahoo.com> Fri, Apr 13, 2018 at 3:52 PM
To: ACEextension.south@gmail.com

I am a long time rider from Manteca and if this change moves the station to Lathrop, the I am not in favor of this change, it would add 20 plus minutes a day to my commute. This will also add a lot more cars to the 120/5 junction causing worse traffic jams. I9-1
Thanks
Kevin

Sent from my iPhone

Gmail

Matt Hertel <aceextension.south@gmail.com>

ACE Extension Lathrop to Ceres/Merced

1 message

Sandra Moss <ksmoss2118@yahoo.com> Fri, Apr 13, 2018 at 3:44 PM
To: ACEextension.south@gmail.com

Will the Manteca station be moving to Lathrop because that is very inconvenient for the majority of people who live in Manteca. Currently Manteca is 3 to 4 times the population. It would make no sense to add those people to hi-way 120 to get to Lathrop! I10-1

Sent from my iPhone

Gmail Matt Hertel <aceextension.south@gmail.com>

ACE Extension

1 message

Kenneth Sacca <ksacca@juniper.net> Wed, Apr 25, 2018 at 12:09 PM
To: "ACEextension.south@gmail.com" <ACEextension.south@gmail.com>

No, there can be no increase in ACE service as the service has turned into a busing program for San Joaquin school districts sending kids to Great America. The months of February, March, April, May and June have turned into a circus with kids taking up valuable space on trains for commuters. The stress is already off the charts with the constant ACE delays, GPS problems, etc without expanding service which will benefit Ceres/Merced school districts. ACE must fix current issues before expanding. I've already complained to my congressman in the 15th district of CA that ACE isn't fulfilling it's charter for commuters. I11-1

Gmail

Matt Hertel <aceextension.south@gmail.com>

ACE Extension Lathrop to Ceres/Merced

1 message

Adam Serpa <mradamserpa@gmail.com> Tue, May 22, 2018 at 10:14 PM
To: ACEextension.south@gmail.com

Hello!

I ride ACE to work at least three times a week and I think this southern expansion is exactly what we need.

Many people drive from Modesto to the Bay Area for work everyday and opening up a Modesto station would make ACE available to a large metro area and also reduce traffic between Modesto and Manteca.

This extension would also open up access from Modesto to Sacramento or the Bay Area by rail and develop the quality of life for cities on the 99 corridor. People would be able to use ACE for work commute as well as eventually use the train to go to sporting events or concerts, etc. I12-1

The current rail access to Modesto is wat over east of the city in a place not easily accessed by bike or walking and Amtrak only runs through a few times a day. A station in Modesto would provide more equitable and environmentally friendly options for getting to the station as well as being closer to most neighborhoods in Modesto.

Highway 99 and 120 are becoming impossible congested during commute hours. ACE extensions to Ripon and Modesto could also provide commute options for local traffic as well. A person could commute from Modesto to Manteca or Ripon and not have to use the freeway.

Thank you for taking public comment and working on this initiative to improve our quality of life!

Adam Serpa
Modesto Resident
Bay Area Commuter

Gmail

Matt Hertel <aceextension.south@gmail.com>

ACE Extension

1 message

Christopher Stai <cstai@pacbell.net> Fri, Apr 13, 2018 at 8:24 PM
Reply-To: Christopher Stai <cstai@pacbell.net>
To: "ACEextension.south@gmail.com" <ACEextension.south@gmail.com>

If the ridership from Ceres/Modesto to Lathrop/Manteca grows to become larger than from Stockton to Lathrop/Manteca, will ACE consider having multiple trains that go from Ceres through to San Jose instead? I13-1

Chapter 3
Responses to Comments

This chapter includes responses for each of the numbered comments identified in the comment letters in Chapter 2, *Comments Received on the Draft EIR*. Each response begins with a brief summary of the comment (comment summary is noted in italics), responds to the comment, and identifies if revisions to the draft EIR are required. Revisions to the draft EIR, pursuant to individual responses and pursuant to SJRRC staff-initiated changes are included in Chapter 4, *Text Revisions to the Draft EIR*.

In responding to comments, a lead agency is not required by CEQA to conduct every test or perform all research, study, or experimentation recommended or demanded by a commenter. Rather, a lead agency need only respond to significant environmental issues and does not need to provide all information requested by reviewers, as long as a good faith effort at full disclosure is made in the EIR (CEQA Guidelines Sections 15088, 15204).

It is also important to note that, under CEQA, responses are limited to comments concerning the adequacy of the environmental analysis in the EIR. Comments advocating support or opposition to the project are noted and will be considered by the SJRRC, but are not responded to in this document. An EIR is not the document by which to consider the merits of the project, because CEQA is focused on describing the environmental impacts of a project and of the evaluated alternatives.

3.1 Individual Responses

3.1.1 Response to Comment Letter S1, Caltrans

S1-1

The comment identifies the California Department of Transportation (Caltrans) standards and policies that SJRCC would be required to adhere to.

RESPONSE S1-1: Chapter 2, *Description of Phase I Improvements* of the draft EIR identifies that certain improvements would occur near or in the Caltrans ROW. The following improvements would occur near or in the Caltrans ROW.

- Modification of the existing State Route (SR) 120 undercrossing and construction of new retaining wall. This would be located at mile-post (MP) 81.68 on the Oakland Subdivision for construction of the **Relocated Lathrop/Manteca Station.**
- Installation of pier protection on westbound SR 120 overhead structure's east pier and installation of pier protection along two of eastbound SR 120 overhead structure's east piers. This would be located at MP 98.35 on the Fresno Subdivision for construction of the **Ceres Extension Alignment**.
- Installation of pier protection along eight of southbound and northbound SR 99 overhead structure's north piers and installation of pier protection along eight of southbound and

northbound SR 99 overhead structure's south piers. This would be located at MP 111.05 on the Fresno Subdivision for construction of the **Ceres Extension Alignment**.

- Installation of pier protection along three of northbound SR 99 overhead structure's east piers and installation of pier protection along four of southbound SR 99 overhead structure's east piers. This would be located at MP 114.76 on the Fresno Subdivision for construction of the **Ceres Extension Alignment**.
- Construction of two new pedestrian paths crossing under SR 99 and new crosswalks along North Street and El Camino Avenue for the **Ceres Station**.
- Installation of a traffic signal at the intersection of the SR 99 southbound off-ramp and El Camino Avenue for the **Ceres Station**.
- Use of SR-99 for the interim bus service.

SJRCC will coordinate with Caltrans to ensure that the work and design of Phase I improvements within the Caltrans ROW will adhere to Caltrans standards.

Phase II improvements are conceptual in nature and SJRRC will continue to coordinate with Caltrans as the design for the Phase II improvements progresses.

S1-2

The comment encourages SJRCC to incorporate design features that promote a multi-modal system.

RESPONSE S1-2: Many jurisdictions are locating pedestrian and bicycle facilities in locations near and complementary to ACE station areas. In some instances, pedestrian and bicycle infrastructure enhancements are included in a city's or county's pedestrian or bicycle plan, such as the San Joaquin Council of Governments (SJCOG) Regional Bicycle, Pedestrian, and Safe Routes to School Master Plan; Stanislaus Council of Governments (StanCOG) Non-Motorized Transportation Master Plan; and Merced County Regional Bicycle Transportation Plan. On the city level, ACE is a beneficial component of currently approved and ongoing station area plans, downtown specific plans, and general plans. The ACE Extension stations would be located within the downtown areas of cities where transit services are already provided. On the regional level, ACE would connect to other regional transit systems. ACE and High-Speed Rail (HSR) are designed to be co-located in Merced. Furthermore, ACE Extension operations are consistent with the Regional Transportation Plan (RTP) for Santa Clara Valley Transportation Authority (VTA), Alameda County Transportation Commission (ACTC), SJCOG, StanCOG, and Merced County Association of Governments. The ACE Extension is one of the major projects included in these documents, which serve as the sustainable communities strategies and the 2040 RTPs for the respective areas, integrating transportation and land-use strategies to manage GHG emissions and plan for future population growth.

3.1.2 Response to Comment Letter S2, State Lands Commission

S2-1

The comment identifies the State Land Commission as a trustee agency and identifies that a lease and formal authorization will be required from the State Lands Commission for portions of the Proposed Project encroaching on State sovereign land. The comment requests that the EIR include additional

details regarding the work that would occur for the bridges over the Stanislaus, Tuolumne, and Merced Rivers, including the in-water work, activities associated with pile driving, dewatering activities, and the construction timetable.

RESPONSE S2-1: The draft EIR acknowledges that approval would be required from the State Land Commission for both Phase I and Phase II improvements. Table 2-8 in Chapter 2, *Description of Phase I Improvements* and Table 3-7 in Chapter 3, *Description of Phase II Improvements* identify the approvals required for the Proposed Project. Approval from the State Land Commission is included in Table 2-8 and Table 3-7.

Chapter 2, *Description of Phase I Improvements* has been revised to include additional details for the bridges that would be constructed over the Stanislaus and Tuolumne Rivers (see below). The Phase II improvements are conceptual in nature and will be refined as these improvements progress to the project-level analysis. Thus, additional details for the bridge over the Merced River is not included at this time but will be identified when project-level analysis is conducted. Nonetheless, the bridge details for the Merced River would be similar to those described for the bridges over the Stanislaus Tuolumne Rivers.

The commenter correctly identified an inconsistency of the timeline for bridge construction. It is conservatively assumed that bridge construction would last approximately 36 months. This has been revised in the EIR.

S2-2

The comment identifies that the environmental footprint of the new bridge crossing over the Stanislaus River is not shown in Appendix B.

RESPONSE S2-2: The environmental footprint map, which is included in Appendix B of the draft EIR has been revised to include a figure that depicts the environmental footprint over the Stanislaus River. The revised environmental footprint map included in this final EIR as Appendix A, *Updated ACE Extension Environmental Footprint*.

S2-3

The comment requests additional information about impacts to special-status plant species, including how mitigation would lower impacts to a less than significant level.

RESPONSE S2-3: The draft EIR conservatively modeled the habitat of special-status plant species throughout the ACE Extension environmental footprint, the majority of which includes existing railroad tracks and disturbed areas. The Phase I and Phase II improvements are limited in scale and the actual impacts will likely be much lower than what is identified in the draft EIR. The likelihood for many of the special-status plant species to occur within the environmental footprint is relatively low and the potential they would be impacted is lower because the footprints of the ACE Extension improvements are dominated by previously disturbed, developed, and agricultural areas. Mitigation in the draft EIR requires focused surveys for special-status plant species during their respective blooming seasons before construction to inform avoidance and, if necessary, relocation/replanting efforts. If replanting efforts are necessary, such populations will be monitored per an adaptive management plan to ensure successful compensatory mitigation.

No revisions to the draft EIR are necessary pursuant to this comment.

S2-4

The comment requests that the draft EIR identify the results of any consultation with U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW).

RESPONSE S2-4: USFWS and CDFW were given the opportunity to review the draft EIR and neither agency submitted comments. The SJRRC has also previously informally reached out to USFWS and CDFW during the ACE*forward* environmental review, which included the extension to Ceres and Merced. Coordination and formal consultation, as required, with both agencies will occur during the environmental permit application process after the final EIR is completed.

No revisions to the draft EIR are necessary pursuant to this comment.

S2-5

The comment requests clarification on time windows for preconstruction surveys and potential conflicts with overlapping restricted work windows.

RESPONSE S2-5: The draft EIR requires preconstruction surveys for several special-status wildlife species. The Mitigation Measures that require protocol level surveys were prepared by qualified wildlife biologists. The timing for the preconstruction surveys were developed by the qualified wildlife biologists according to their understanding of the special-status species behavior. In regard to Mitigation Measure BIO-2.7, there is no fixed standard established for the timing of preconstruction surveys for these special-status lizards; as such the mitigation leaves the timing to the qualified biologist.

Mitigation Measure BIO-2.8 requires a work avoidance window to the extent feasible during the bird nesting season (February 1 through August 31) and Mitigation Measure BIO-3.3 requires seasonal restriction for work in river channels (October 16 through June 16). It is acknowledged that these two restricted work windows do overlap between February 1 and June 16. Together Mitigation Measures BIO-2.8 and Bio-3.3 direct work to occur outside of the most sensitive time periods for nesting birds and migrating fish, respectively. Mitigation Measure BIO-2.8 allows work to occur during the nesting season (February 1 through August 31) under the condition that migratory bird nests are not present within species-specific buffers from the project. Furthermore, Mitigation Measure BIO-2.8 identifies that nest exclusion measures (e.g., blocking cavities, bird spikes, netting, etc.) could be implemented outside of the nesting season to exclude nests from becoming established. The installation of nest exclusion measures could potentially allow work to continue during the February 1 through August 31 period.

No revisions to the draft EIR are necessary pursuant to this comment.

S2-6

The comment requests that the EIR include an underwater acoustic analysis to clarify the impacts to special-status fish and how the mitigation would minimize impacts to a less than significant level.

RESPONSE S2-6: The EIR has been updated to include an underwater acoustic analysis. See revisions in Chapter 2, *Description of Phase I Improvements*, in response to comment S2-1 for a description of the piles that would be installed for the bridges over the Stanislaus and Tuolumne Rivers. As indicated in the revisions pursuant to the response to comment S2-1, most of the piles for the

bridges would be drilled or installed using the vibratory method including the trestle. Vibratory pile driving methods would not result in significant impacts to special-status fish species.

Impact pile driving would only occur on land, within 65 feet of the Stanislaus River, for the installation of the abutment for the bridge. No pile driving would occur in the water. The results of the underwater acoustic analysis of the impact pile driving added to the final EIR determine that the impact pile driving would not exceed noise thresholds for injury to fish.

Revisions have been added to Section 4.5, *Biological Resources*, concerning the acoustic analysis.

S2-7

The comment requests that the EIR identify the estimated area of permanent and temporary habitat impacts.

RESPONSE S2-7: As identified in the revisions to Chapter 2 in Response to Comment S2-1, only one pile would be located within the Stanislaus River. The permanent impact area for the one pile within the Stanislaus River would be 50 square feet (<0.01 acre). A temporary work area of 5,000 square feet (0.11 acre) would be required for the temporary work trestle, which would be used to support equipment to construct the bridge of the Stanislaus River. Therefore, the temporary impact to the Stanislaus River would be 5,000 square feet. The temporary impact to the Stanislaus River is conservatively estimated to be 5,000 square feet. The actual impacts to this river would be lower because the temporary impact area would be limited to the areas where the piles would be installed within the water for the construction of the temporary work trestle.

As identified in the revisions to Chapter 2 in Response to Comment S2-1, only two piles would be located within the Tuolumne River. The permanent impact area for the two piles within the Tuolumne River would be 100 square feet (<0.01 acre). A temporary work area of 6,000 square feet (0.14 acre) would be required for the temporary work trestle, which would be used to support equipment to construct the of the bridge of the Tuolumne River. The temporary impact to the Tuolumne River is conservatively estimated to be 6,000 square feet. The actual impacts to this river would be lower because the temporary impact area would be limited to the areas where the piles would be installed within the water for the construction of the temporary work trestle. The Phase II improvements are more conceptual.

Permanent and temporary habitat impacts from Phase II improvements (bridge over Merced River) will be provided in the subsequent project-level analysis.

The draft EIR used a conservative estimate for the potential impacts to the Stanislaus and Tuolumne Rivers (riverine aquatic features). Section 4.4, *Biological Resources* has been revised to reflect the updated details of the bridges over the Stanislaus and Tuolumne Rivers, as summarized in response to comment S2-1.

S2-8

The comment requests that additional details be provided in the EIR regarding potential impacts to submerged cultural resources

RESPONSE S2-8: A search of the State Lands Commission Shipwreck database, conducted by Jamie Garrett of the State Lands Commission, did not identify any shipwrecks directly within the project area at the Stanislaus and Tuolumne Rivers (Garrett pers. comm.). However, there remains the

potential to encounter previously undocumented submerged resources during project related ground disturbing activities. Page 4.5-25 (Lines 10-14) of Section 4.5, *Cultural Resources* acknowledges that construction could disturb previously undocumented archeological resources in the vicinity of the Stanislaus and Tuolumne Rivers and that these rivers and the areas around the rivers are considered areas with high general prehistoric archeological resource sensitivity and high buried archeological resource sensitivity. The draft EIR identifies mitigation to minimize impacts to previously undocumented archeological resources, which would also protect previously undocumented submerged resources. Mitigation Measure CUL-2.3 would require archeological monitoring for work in and around the Stanislaus and Tuolumne River because these areas are considered archeologically sensitive. Mitigation Measure CUL-2.4 requires implementation of procedures in the case of inadvertent archeological discoveries. Because the draft EIR already identifies measures to protect previously undocumented archeological resources and because these measures would also protect any previously undocumented submerged resources, no revisions to the draft EIR are necessary.

S2-9

The comment requests revisions to mitigation concerning cultural resources within state lands.

RESPONSE S2-9: The requested additional text stating that the final disposition of archeological, historical, and paleontological resources recovered on state lands under the jurisdiction of the California State lands Commission must be approved by the Commission has been included in Mitigation Measures CUL-2.4 and CUL-2.5 in Section 4.5, *Cultural Resources*.

S2-10

The comment requests that additional information be provided about impacts associated with construction near an open hazardous materials site located near the Tuolumne River.

RESPONSE S2-10: The comment states that Figure 4.9-3 shows a hazardous materials release site within the environmental footprint for construction activities near the Tuolumne River. This statement is incorrect. Figure 4.9-3 shows hazardous materials release sites within the Phase I study area, not within the environmental footprint of any Phase I improvements. Section 4.9, *Hazardous Materials* of the draft EIR (page 4.9-12, lines 14-21) identifies that there are hazardous materials release sites within the study area of the **Ceres Extension Alignment** (which includes the proposed bridge over the Tuolumne River); that these hazardous materials release sites could have affected groundwater underlying the **Ceres Extension Alignment**; and that the release sites are unlikely to affect soil underlying the **Ceres Extension Alignment** because these sites are not located within the **Ceres Extension Alignment** environmental footprint. Furthermore, Section 4.9, *Hazardous Materials* of the draft EIR (page 4.9-30, lines 4-13) identifies that construction of the **Ceres Extension Alignment** (which includes the proposed bridge over the Tuolumne River) could result in the disturbance of potentially contaminated groundwater. As discussed on page 4.9-30 (lines 15-20), implementation of Mitigation Measures HAZ-2.1, HAZ-2.2, and HAZ-2.3 would require a voluntary oversight agreement, site investigations, and a construction risk management plan (CRMP), which would reduce impacts from the disturbance of potentially contaminated groundwater during construction to a less-than-significant level. Additionally, as discussed in Section 4.10, *Hydrology and Water Quality* (page 4.10-27, lines 13-18), implementation of Mitigation Measures HYD-1.1 and HYD-1.2, which require specific procedures for the discharge of groundwater or dewatering effluent and specific procedures for construction work within, or crossing surface

water, would ensure that potential impacts on water quality during construction would be less than significant.

No revisions to the draft EIR are necessary pursuant to this comment.

S2-11

The comment requests that the EIR provide additional details regarding dewatering activities.

RESPONSE S2-11: See revisions to Chapter 2 in response to Comment S2-1 above.

S2-12

The comment requests that the EIR clarify how Mitigation Measures HAZ-2.2, HAZ-2.3, and HYD-7.1 would minimize potential water quality impacts in Impact HYD-1 to a less than significant level.

RESPONSE S2-12: Impact HYD-1 in Section 4.10, *Hydrology and Water Quality* has been revised to identify how Mitigation Measures HAZ-2.2, HAZ-2.3, and HYD-7.1 would be implemented to minimize impacts to water quality.

S2-13

The comment requests that the EIR identify impacts associated with disturbance of sediment contaminated with mercury when working with the Stanislaus, Tuolumne, and Merced Rivers and the results from consultation with the Regional Water Quality Control Board (RWQCB).

RESPONSE S2-13: Based on correspondence with the RWQCB (Morris pers. comm.), the actions required by Mitigation Measures HYD-1.1 and HYD-1.2, as presented in Section 4.10, *Hydrology and Water Quality* (page 4.10-27, line 1 to page 4.10-28, line 40), are requirements that would be in the Water Quality Certification. The RWQCB also indicated that because the bridges would be constructed in 303d listed waters for mercury, there may be some additional requirements for mercury monitoring and management. For example, there may be a requirement for pre-project sediment sampling to see if elevated mercury levels are present in the project area; if mercury levels are elevated, the RWQCB would likely require a sediment plan describing actions to minimize the erosion and discharge of the contaminated sediments (e.g., removal, armoring, etc.). Additionally, there may be some aqueous mercury monitoring added to the monitoring list.

As indicated in Mitigation Measure HYD-1.2 as presented on page 4.10-28 (lines 11-20), the construction contractor(s) would obtain applicable resource agency permits and approvals and comply with permit requirements to prevent impacts on water quality and demonstrate that water quality standards and/or Waste Discharge Requirements are not violated. Prior to the start of construction activities that could disturb potentially contaminated soil or sediment adjacent to or within surface waters, sampling and analysis of the potentially contaminated soil or sediment will be performed as required by Mitigation Measure HAZ-2.2, to ensure that the soil or sediment is appropriately handled, reused, or disposed of based on the sampling and analysis results. The sampling and analysis results will be presented to the State Water Board for review so that appropriate water quality monitoring parameters can be designated in permit requirements.

Based on the informal consultation with the RWQCB (Morris pers. comm.), the actions that would be required by the RWQCB for permitting of bridge construction activities within waters impaired by mercury were adequately described in the draft EIR. Mitigation Measures HYD-1.1, HYD-1.2, and

HAZ-2.2, as discussed above, would be required by the EIR, in addition to being required by the RWQCB during the 401 certification permitting process.

No revisions to the EIR are required pursuant to this comment.

S2-14

The comment requests that the EIR consider the potential recreational impacts due to reduced navigation on rivers due to the installation of new piers for new bridges.

RESPONSE S2-14: Construction of the bridge over the Stanislaus River would require the installation of one pier within the Stanislaus River; however, this pier would be located at the very edge of the Stanislaus River. Construction of the bridge over the Tuolumne River would require the installation of two piers within the Tuolumne River; however, both piers would be located at the edges of the Tuolumne River. The location of the piers are shown in Appendix C of the draft EIR. The pier that would be located in the Stanislaus River (Pier 19) is shown in Sheet 171 of 331 of Appendix C. The piers that would be located in the Stanislaus River (Piers 31 and 32) are shown in Sheet 172 of 331 of Appendix C. Because the piers that would be installed for the bridges over the Stanislaus and Tuolumne Rivers would be located at the edge of the water, it is unlikely that they would create a permanent navigational obstacle for watercrafts using the two rivers. There would be sufficient space for watercrafts to continue to use the Stanislaus and Tuolumne Rivers. Thus, the installation of the piers would not create a permanent navigational obstacle that would constrain navigation.

The comment also identified that the installation of in-water structure could result in accumulation of large woody debris, sediment, and other materials near the structures, which could create a hazard for navigation. SJRCC would periodically maintain the two bridges over the Stanislaus and Tuolumne Rivers. Chapter 2, *Description of Phase I Improvements* has been revised to indicate that periodic maintenance would include routine removal of woody debris, sediment, and other materials that accumulate near the piers of the bridges. The periodic maintenance of the bridge structures would ensure that navigation hazards are minimized.

3.1.3 Response to Comment Letter S3, Central Valley Flood Protection Board

S3-1

The comment identifies the requirements for a Central Valley Flood Protection Board (Board) Permit.

RESPONSE S3-1: The Phase I improvements would require construction of bridges over Stanislaus River and Tuolumne River. The Phase II improvements would require construction of a bridge over the Merced River. The Board has jurisdictions over designated floodways, up to 30 feet from the bank and regulated streams. The Stanislaus River, Tuolumne River, and Merced River are considered regulated streams and are under the jurisdiction of the Board (Cullum pers. comm.). Permits from the board would be required for construction of the Phase I and Phase II improvements that cross areas under the Board's jurisdiction.

Furthermore, the comment regarding other federal and state permits being required are noted. The EIR on page 2-38 notes that permits from U.S. Army Corps of Engineers (USACE), RWQCB, and CDFW are anticipated to be required for the Phase I improvements. The EIR on page 3-26 notes that

permits from USACE, RWQCB, and CDFW are anticipated to be required for the Phase II improvements.

Pursuant to this comment, the EIR on page 2-38 (Table 2-12) has been modified to identify that a permit from the Board would be required for the Phase I improvements.

3.1.4 Response to Comment Letter S4, State of California Governor's Office of Planning and Research

S4-1

The comment identifies that SJRCC has complied with the State Clearinghouse requirements and includes the comment letters that were provided by Caltrans, the State Land's Commission, Central Valley Flood Protection Board, and the Central Valley RWQCB.

RESPONSE S4-1: The State Clearinghouse's comment that SJRCC has complied with its requirements is noted. The agency comment letters included as attachments in the State Clearinghouse's letter were received directly by the SJRCC. Responses to these comment letters are not repeated here. Responses to the comment letters from Caltrans, the State Land's Commission, Central Valley Flood Protection Board, and the Central Valley RWQCB can be reviewed in Sections 3.1.1, 3.1.2, 3.1.3, and 3.1.5.

3.1.5 Response to Comment Letter R1, Central Valley Regional Water Quality Control Board

R1-1

The comment describes the regulatory requirements for water quality that would apply to the Proposed Project.

RESPONSE R1-1: The information on the Central Valley Regional Water Quality Control Board's role in reviewing the draft EIR, the purpose and content of Basin Plans, and antidegradation considerations is noted. As discussed in Section 4.10, *Hydrology and Water Quality*, the draft EIR evaluates potential impacts to both surface water and groundwater quality.

No revisions to the draft EIR are necessary pursuant to this comment.

R1-2

The comment describes the permitting requirements for the Construction Storm Water General Permit.

RESPONSE R1-2: The information on the Construction General Permit is noted. As discussed in Section 4.10, *Hydrology and Water Quality*, construction of ACE Extension would comply with the Construction General Permit.

No revisions to the draft EIR are necessary pursuant to this comment.

R1-3

The comment describes the permitting requirements for the Phase I and II MS4 Permits.

RESPONSE R1-3: The information on the Phase I and II MS4 permits is noted. As discussed in Section 4.10, *Hydrology and Water Quality*, the design and operation of ACE Extension improvements would comply with applicable Phase I and II MS4 permits.

No revisions to the draft EIR are necessary pursuant to this comment.

R1-4

The comment describes the permitting requirements for the Industrial Storm Water General Permit.

RESPONSE R1-4: The information on the Industrial Storm Water General Permit is noted. As discussed in Section 4.10, *Hydrology and Water Quality*, the **Ceres Layover Facility, variant 1** alternative; **Ceres Layover Facility, variant 2**; and **Merced Layover Facility** would include train fueling and cleaning operations and would, thus, be required to comply with the Industrial General Permit.

No revisions to the draft EIR are necessary pursuant to this comment.

R1-5

The comment describes the permitting requirements for the Clean Water Act Section 404 Permit.

RESPONSE R1-5: The information on Clean Water Act Section 404 Permitting is noted. As discussed in Section 4.10, *Hydrology and Water Quality*, the design and construction of ACE Extension improvements would comply with Section 404 Permit requirements.

No revisions to the draft EIR are necessary pursuant to this comment.

R1-6

The comment describes the permitting requirements for the Clean Water Act Section 401 Permit.

RESPONSE R1-6: The information on Clean Water Act Section 401 Permitting and Water Quality Certification requirements is noted. As discussed in Section 4.10, *Hydrology and Water Quality*, the design and construction of ACE Extension improvements would comply with Section 401 Permit and Water Quality Certification requirements.

No revisions to the draft EIR are necessary pursuant to this comment.

R1-7

The comment describes the requirements for the Water Quality Certification and Waste Discharge Requirement (WDR) processes.

RESPONSE R1-7: The information on Water Quality Certification and WDR processes is noted. As discussed in Section 4.10, *Hydrology and Water Quality*, Water Quality Certifications and WDRs would be obtained as required for applicable ACE Extension improvements.

No revisions to the draft EIR are necessary pursuant to this comment.

R1-8

The comment describes the permitting requirements for dewatering permits.

RESPONSE R1-8: The information on potentially applicable permits for dewatering activities is noted. As discussed in Section 4.10, *Hydrology and Water Quality*, discharge of dewatering effluent would be performed in accordance with applicable regulations. In addition, Mitigation Measures HAZ-2.2, HAZ-2.3, HYD-1.1, HYD-1.2, and HYD-7.1 would be implemented to avoid water quality impacts from dewatering discharges.

No revisions to the draft EIR are necessary pursuant to this comment.

R1-9

The comment describes the regulatory compliance requirements for properties that are used for commercial irrigated agriculture.

RESPONSE R1-9: ACE Extension would not include commercial irrigated agricultural; therefore, the regulatory compliance requirements for properties that are sued for commercial irrigated agriculture would not apply to the ACE Extension.

No revisions to the draft EIR are necessary pursuant to this comment.

R1-10

The comment describes the permitting requirements for the Low or Limited Threat General NPDES Permit.

RESPONSE R1-10: The information on potentially applicable permits for dewatering activities is noted. See response to Comment R1-8 above.

R1-11

The comment describes the permitting requirements for a NPDES Permit.

RESPONSE R1-11: The information on NPDES permit requirements is noted. As discussed in Section 4.10, *Hydrology and Water Quality*, ACE Extension would comply with applicable NPDES permit requirements.

No revisions to the draft EIR are necessary pursuant to this comment.

3.1.6 Response to Comment Letter L1, Alameda County Transportation Commission

L1-1

The comment expresses support of the Proposed Project.

RESPONSE L1-1: Comment noted. Alameda County Transportation Commission's support of the Proposed Project is noted and appreciated.

3.1.7 Response to Comment Letter L2, City of Livermore

L2-1

The commenter requests additional information regarding the planned platform extensions at the existing ACE Livermore and Vasco Road Stations.

RESPONSE L2-1: The planned platform extensions at the existing ACE Livermore and Vasco Roads are not part of this ACE Extension Lathrop to Ceres/Merced project. As described on page 5-14 in Chapter 5, *Other CEQA-Required Analysis*, this project functions independently of any other ACE project and has independent utility. SJRRC proposes to extend station platforms at the Livermore and Vasco Road Stations, as well as at three additional existing stations. The existing platforms at these stations are approximately 450 feet long and would be extended by approximately 550 feet, for a total station platform length of 1,000 feet. The extended platforms would be located entirely within the existing UPRR ROW and no part of this improvement would encroach onto private parcels or the City of Livermore's ROW or surrounding roadway network. The platform extensions would accommodate the use of longer ACE train (additional passenger coaches). Given the project would occur entirely within the existing UPRR ROW and has independent utility, a CEQA Statutory Exemption was filed for this project in March 2018 and construction is anticipated in late 2018. This comment does not concern the adequacy of the EIR.

No revisions to the draft EIR are necessary pursuant to this comment.

L2-2

The commenter requests SJRRC to consider implementing Iron Horse Trail connections to the existing ACE Livermore and Vasco Road Stations.

RESPONSE L2-2: The comment is noted. As described in Section 1.2, *Project History* in Chapter 1, *Introduction*; the current focus of ACE expansion is the feasible and fundable extension of service in the Central Valley. This project does not concern enhancing station connectivity to alternative modes of transportation at the Livermore and Vasco Road Stations. SJRRC will coordinate with the City of Livermore regarding the potential incorporation of trail connections separate from this project. This comment does not concern the adequacy of the EIR.

No revisions to the draft EIR are necessary pursuant to this comment.

3.1.8 Response to Comment Letter L3, City of Merced

L3-1

The comment expresses support of the Merced Layover East of SR 99 alternative.

RESPONSE L3-1: The City of Merced's comments concerning the City's opinions about the virtues of the Merced Layover East of SR 99 alternative are noted.

The analysis of the **Merced Layover Facility** options in the current EIR is at a programmatic level. SJRRC intends to carry both options forward to the subsequent project-level CEQA analysis, which will examine and compare the impacts of the two options in greater detail. The City will have an opportunity to consider that project-level analysis and provide additional comments at that time.

Only after completion of the project-level CEQA analysis will SJRRC make a decision concerning the selected layover facility location.

This comment concerns the judgement and preferences of the City concerning the Merced Layover Facility options but does not raise any concern regarding the adequacy of the EIR analysis and thus no revisions to the EIR and no further response is required.

L3-2

*The comment expresses support of the **Merced Bus Stop**.*

RESPONSE L3-2: Comment noted. The City of Merced's support of the **Merced Bus Stop** is noted.

3.1.9 Response to Comment Letter L4, City of Ripon

L4-1

The comment expresses support of the Proposed Project.

RESPONSE L4-1: Comment noted. The City of Ripon's support of the Proposed Project is noted.

3.1.10 Response to Comment Letter L5, Merced County Association of Governments

L5-1

The comment requests additional information regarding the service characteristic for the Phase I bus shuttle service.

RESPONSE L5-1: SJRRC intends to work with MCAG, TJPA, and others in regards to the bus shuttle service including identification of an operating entity, funding for operations, charging infrastructure location and operation, bus stop locations, Transpo operation capacity and fare system after the completion of the environmental process as the project moves forward to implementation (presuming project approval).

Pursuant to this comment, the EIR on page 2-20 has been modified to delete reference to MCAG as the operator of the bus bridge service and state that the service operator is yet to be determined.

3.1.11 Response to Comment Letter O1, Merced County Farm Bureau

O1-1

*The comment expresses concern about impacts to agricultural operations from the **Merced Layover Facility**, including potential impacts associated with removed access to agricultural parcels. The comment also requests a timeline to be provided to impacted landowners regarding Phase II improvements.*

RESPONSE O1-1: Although not specifically shown on the engineering drawings, access would be maintained to all three parcels directly impacted by the **Merced Layover Facility** (APNs 059-330-

027, 059-330-028, and 059-330-035). The engineering drawings have been modified to show the access roadway paralleling the **Merced Layover Facility** fence, which provides access out to Southern Pacific Avenue. These revised engineering drawings are included as Appendix B, *Updated ACE Extension 15% Preliminary Engineering Plants* in the final EIR. There will be a new at-grade crossing to the north of the **Merced Layover Facility**, which will only be used on the rare occasion that trains depart the facility and go north, or if there is a problem with the southern access. The analysis of the **Merced Layover Facility** in the current EIR is at a programmatic level. There will be more details and coordination when the project-level CEQA document is prepared. Furthermore, as described in Response to Comment O1-2, SJRCC is also considering an alternative to the **Merced Layover Facility** at a different location. SJRRC intends to carry both options forward to the subsequent project-level CEQA analysis, which will examine and compare the impacts of the two options in greater detail. Only after completion of the project-level CEQA analysis will SJRRC make a decision concerning the selected layover facility location.

Regarding the comment about a timeline for construction of Phase II improvements, construction timing would depend on when funding is secured, environmental review timing and the timing for permitting, contractor selection, final design, and construction duration. Also, construction will be phased to match funding and service priorities. No further information about the timeline is known at this time.

The commenter also expressed concern that the operation of the **Merced Layover Facility** would limit nearby farmers from farming. Operation and maintenance of the **Merced Layover Facility** would be limited to the facility itself, access to adjacent areas will be provided, and operations would not require use of any agricultural areas. Like the existing railroad, agricultural operations will be able to continue in adjacent areas.

O1-2

The comment expresses support of the Merced Layover East of SR 99 alternative, which would impact less agricultural lands than the proposed Merced Layover Facility.

RESPONSE O1-2: MCFB's comments are noted concerning their opinion and judgement about the virtues of the Merced Layover Facility East of SR 99 Option compared to the West of SR 99 option and its impact to farmland.

The analysis of the Merced Layover options in the current EIR is at a programmatic level. SJRRC intends to carry both options forward to the subsequent project-level CEQA analysis, which will examine and compare the impacts of the two options in greater detail. MCFB will have an opportunity to consider that analysis and provide additional comments at that time. Only after completion of the project-level CEQA analysis will SJRRC make a decision concerning the selected layover facility location.

This comment concerns the judgement and preferences of MCFB concerning the layover facility option but does not raise any concern regarding the adequacy of the EIR analysis and thus no revisions to the EIR and no further response is required.

O1-3

The comment expresses concern about conflicts with existing utility lines identified on Page 3-21.

RESPONSE O1-3: Chapter 3, *Description of Phase II Improvements* (page 3-21) states that track construction could conflict with existing utility lines, and that these lines would be relocated or protected. The Phase II improvements are conceptual in nature and will be refined as these improvements progress to the project-level analysis. Impact USS-7 in Section 4.18, *Utilities and Services Systems* (page 4.18-27) identifies that potential conflicts with utilities would be minimized with implementation of Mitigation Measure USS-1, which requires SJRCC to coordinate with all utility providers during the final design of the Proposed Project. Mitigation Measure USS-1 also requires implementation of a utility relocation plan to minimize service interruption and to safely relocate, repair, or replace affected utilities. SJRRC will coordinate with affected land owners and utility providers as engineering for these improvements progresses.

No revisions to the EIR are required in regards to this comment.

O1-4

The comment suggest revising Section 4.2, Agricultural Resources by referencing the 1999 Livingston General Plan, rather than the 2008 General Plan.

RESPONSE O1-4: The City of Livingston confirmed that the General Plan from 1999 is the General Plan being used by the City of Livingston (Hatch pers. comm.). The draft EIR has been revised to replace any references of the 2008 General Plan with the 1999 General Plan.

O1-5

The comment expresses concern regarding significant impacts on groundwater supplies.

RESPONSE O1-5: As indicated in Section 4.10, *Hydrology and Water Quality* (page 4.10-21, lines 33-35), the State CEQA Guidelines identify significance criteria to be considered when determining whether a project could have significant impacts on existing hydrology and water quality. The Impact HYD-11 statement on Page 4.10-56 referenced by the commenter is not indicating that the Proposed Project would substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of local groundwater table level; rather, it is identifying the significance criteria, which is then evaluated below. As discussed on page 4.10-56 (lines 9-21), only temporary and limited dewatering would be required for construction of new bridges and culverts. The dewatering effluent generated during construction would be treated and discharged back to the nearby surface water, if possible, providing an opportunity for groundwater recharge. See the response to comment number S2-1 for additional details regarding the temporary and limited nature of construction dewatering activities. As discussed on page 4.10-56 (lines 25-29), dewatering activities associated with construction of Phase II improvements would have a less-than-significant impact on groundwater resources and groundwater recharge because the dewatering activities for construction of bridges and culverts would be short term and limited to bridge and culvert locations and because the discharged effluent would have the opportunity to recharge the aquifer.

No revisions to the EIR are required in regards to this comment.

3.1.12 Response to Comment Letter O2, TRAC/TRANSDEF

O2-1

The first two paragraphs of the comment letter introduces TRAC/TRANSDEF (hereafter, TRAC) concerns about the alternative analysis in the EIR concerning alternatives suggested by TRAC in their NOP scoping letter and states that the EIR did not adequately consider the TRAC alternatives.

Starting with the third paragraph, the comment concerns train splitting and alternative OPS-1, which refers to operating trains from Stockton and from Ceres that would be joined together in Lathrop in the morning and then split apart in the evening upon return from the Bay Area. The comment states that the EIR does not provide any detail substantiating the increase in service times.

RESPONSE O2-1: The reference to an alternative being "beyond the scope of the project" on page 6-24 is in regards to Alternative OPS-3, DMU ACE Service, considered in the EIR. This is discussed further in the response to Comment O2-5 below.

All of the alternatives suggested by TRAC in their scoping letter, along with alternatives suggested by others in scoping were considered by SJRRC. CEQA requires analysis of a reasonable range of alternatives and does not require that an EIR analyze every alternative suggested. As explained in Chapter 6 of the EIR, a range of alternatives were evaluated as to whether they met the project objectives, whether they were feasible, and whether they avoided or substantially reduced significant environmental impacts of the Proposed Project. CEQA does not require analysis of alternatives that do not meet most of the project objectives, infeasible alternatives, or alternatives that do not avoid or substantially reduce significant environmental impacts.

Regarding the statement that SJRRC dismissed TRAC's alternatives out of hand or resisted TRAC's alternatives, Chapter 6 describes how alternatives were considered to determine whether they met the project's objectives, were feasible, or lowered environmental impacts of the Proposed Project. The mere suggestion of an alternative in a scoping letter does not mean that a public agency must complete a detailed analysis of an alternative if it does not meet most of the project's objectives, it is infeasible, or if it does not lower environmental impacts of the Proposed Project. Further considerations are noted below in the review of TRAC's specific comments on the alternatives.

Regarding train splitting and Alternative OPS-1, SJRRC is not denying that there might be potential one-seat convenience and ridership benefits asserted by TRAC under the right conditions. However, at present, there are multiple operational concerns including the time necessary for coupling and splitting, the risk of mechanical failure, safety, and the lack of precedent to do train splitting in North America using existing/proposed Bombardier equipment.

- Train coupling or train splitting requires two separate actions: 1) physical coupling or splitting – 5 to 10 minutes; and 2) re-establishing the Positive Train Control (PTC) system for each new consist – 15 minutes. If the PTC can be brought up at the same time as the actual coupling/splitting, then the duration would be 15 minutes. If it cannot, then the delay could be a total of 20 to 25 minutes. As shown in the prototypical schedules in the draft EIR, the delay time with the proposed time transfers in Lathrop is between 5 and 10 minutes, with most transfers taking less than 10 minutes. As such, a train splitting scenario will add between 5 and 15 minutes to each commute and up to 10 to 30 minutes for a daily commute compared to the Proposed Project.

- When doing mechanical work, such as when joining or splitting a train, there is a risk of additional mechanical failure. The train also has to be re-inspected after joining, the air brake test has to be completed, and the PTC system has to be reengaged. Mechanical failure introduces the risk of additional service delay as well as concerns about safety, which is discussed in the next bullet.
- The crew would be doing the joining/splitting at the station on the railroad mainline; thus, there is a reduced amount of safety, given the frequent passage of freight trains. Furthermore, this will tie up the mainline in single track territory, which will be a concern for UPRR and may not be permitted by UPRR.
- SJRRC has not identified any train splitting for revenue service conducted in North American using the Bombardier equipment intended to be used for the Proposed Project. This lack of precedent means that this is untested on U.S. railroads operating under FRA regulations, which raises the potential for additional delay, mechanical, and safety issues than those described above. European regulations are different and not applicable to U.S. operations.

This information above has now been added to Chapter 6 in the EIR.

The existing ACE service and the extended ACE service during the weekdays is dominated by San Joaquin Valley workers travelling to the Tri-Valley and Silicon Valley for work. As such, their commute mode choices are heavily influenced by time. For existing service from Stockton to San Jose, train coupling would nominally add 5 to 15 minutes of additional travel time each way compared to the Proposed Project. Thus, train coupling/splitting would extend the service time for riders along the extension to Ceres and Merced.

Regarding the issue of transfers, transfers are a concern for ridership, particularly between different modes. The project includes an interim bus bridge between Ceres and Merced until the extension to Merced is built, which acknowledges the issue of transfers that the commenter notes. Train splitting would trade the avoidance of a transfer for the inherent delay due to coupling and splitting, described above; thus, the benefits of a one-seat ride come at the expense of additional commute time for most riders.

Reference to intercity travel in Europe observing train splitting does not add any relevant information except to describe that train splitting is feasible and done in Europe. As noted above, to SJRRC's knowledge, train splitting has not been done for revenue service using Bombardier equipment in the United States under FRA regulations. Information about European operations does not address the delay of ACE commuter rail operations and ACE ridership or potential issues of mechanical problems or safety.

Even if train splitting resulted in higher ridership, this would not mean that Alternative OPS-1 would avoid or substantially lower a significant impact of the Proposed Project. Instead, in this hypothetical case in which ridership was lower without train splitting, the project would result in lower operational VMT, air pollution, and GHG reductions. These are benefits of the project, not adverse impacts of the project. CEQA only mandates consideration of alternatives that lower significant adverse impacts of a project; it does not mandate the consideration of alternatives that have potential higher benefits than a project.

SJRRC has evidence (in the form of additional coupling/splitting time) that train splitting would result in longer travel times for the Stockton to San Jose service and has evidence (in the form of the comparison of coupling/splitting time to Lathrop transfer times in the typical service schedule) that

shows that there would be an adverse effect on both services, resulting in an adverse effect on ridership. In addition, there are mechanical and safety concerns about the unprecedented use of train splitting on a mainline railroad that have not been addressed.

The EIR has been modified to more fully explain the consideration of the Alternative OPS-1 and to provide substantial evidence supporting the determination that the additional time would lower ridership, which will reduce the project's operational VMT, air quality, and GHG emission reduction benefits and that due to the unprecedented nature of train splitting using proposed Bombardier equipment in the U.S., there remain unresolved mechanical and safety concerns of doing such operations of a busy railroad mainline. This evidence shows that Alternative OPS-1 would not meet the project's objective of enhancing intercity transit connectivity and would not avoid or substantially reduce any of the project's significant impacts. No additional analysis of this Alternative is required.

Nothing in the Proposed Project precludes SJRRC from considering train splitting in the future. In the future, SJRRC may purchase equipment that may make splitting more practicable and that addresses the delay, potential for mechanical failure, safety, and may then be able to address UPRR concerns about train splitting/coupling on a freight mainline. But with the present equipment and the current challenges, this is not an option today.

O2-2

The comment states that the FRA has granted a waiver for light-weight DMUs to be used on freight railroads without temporal separation and cited Denton, Texas as the first example. The comment states that the EIR information on DMUs is out of date. The comment states that UPRR cannot prohibit DMU operations on their lines if the FRA certifies it. The comment states that OPS-2 is not Alternative C proposed by TRAC.

RESPONSE O2-2:

As a point of information, if UPRR were to allow light-weight DMUs at some point in the future, it is possible that the benefits in terms of performance, ability to scale trains, and increase ridership and associated environmental benefits (VMT, air pollution, and GHG reduction) would occur. SJRRC is not denying these potential benefits stated by TRAC and is aware of them. But, as explained below, this is not a feasible option now, as SJRRC must work with UPRR requirements, which currently preclude the use of DMUs. In addition, as noted in the response to Comment O2-3, there are operational concerns about use of DMUs for service to San Jose.

The FRA has granted a waiver for light-weight DMUs to be used by Denton County Transit Authority (DCTA), on a specific freight railroad in Denton, Texas, but the waiver requires temporal separation between freight and DMU operation (FRA 2016). The comment did not cite any other examples of waivers. The draft EIR states that lightweight DMU use in the United States is somewhat "limited". This is correct as shown in a 2016 survey of DMU operations in North America (Nelson, Blakey, and O Neill 2017) that identified only four light-weight non-FRA compliant DMU operations in the U.S. that shared lines with freight in 2016: DCTA, Denton, Texas; Capital MetroRail, Austin, Texas; Sprinter, San Diego County, California; and River Line, New Jersey. All four required FRA waivers which required temporal separation. None of these four were using UPRR tracks. Other DMU operations in California include BART's E-BART, which is on a dedicated track that is not shared with freight, and SMART, which uses heavy-weight FRA compliant DMUs and not light-weight DMUs. This additional information has been added to the EIR.

This additional information supports that the analysis in the EIR is accurate. Temporal separation is a big issue for a host railroad, especially on busy mainline freight routes such as the Fresno Subdivision, because it requires the host railroad to give up operational hours to the exclusive use of passenger trains on the same tracks, which can create logistical delays for freight service. While there are heavy-weight DMUs that are FRA compliant, due to their weight, they are less efficient and have less performance advantages than European style light-weight DMUs, and as such present less of an attractive alternative to conventional locomotives, which is why Alternative OPS-2 is focused on light-weight DMUs.

The comment is correct that the FRA is responsible for certifying the safety of railway equipment; however, the FRA certification only allows certain equipment to operate on Class 1 freight railroads. UPRR is not required to allow passenger rail service on its freight railroads. ACE operates on the UPRR's railroads under a trackage rights agreement. UPRR does not have to agree to a new trackage rights agreement with ACE for the extension to Ceres and Merced. Thus, were SJRRC to propose that it would use DMUs on the extension, as a private railroad, UPRR is not obligated to accept DMUs, even if FRA would allow for their use through a waiver process. SJRRC contacted UPRR in response to this comment and they confirmed the prior understanding during the preparation of the draft EIR that they would not allow DMUs to be used on their Class I freight lines (Sheridan pers. comm.). As such, DMUs are not feasible as an alternative to the Proposed Project. CEQA does not require environmental analysis of infeasible alternatives. This additional clarification has been added to the draft EIR.

Alternative OPS-2 is not the same as Alternative C suggested by TRAC in their scoping letter.

The draft EIR Alternative OPS-2 would involve use of DMUs to provide ACE service from Ceres (and Merced) to Lathrop and back instead of conventional locomotives and carriages. Alternative OPS-2 was intended to consider an alternative to use of locomotives for the ACE Extension.

The TRAC scoping letter of February 9, 2018 instead describes a "third operational scenario" (which is presumably what this comment is referring to as "Alternative C") to serve Stockton (and eventually Sacramento) with lightweight DMU equipment that would be coupled in Lathrop with trains from Ceres (presumably conventional locomotives, but the scoping letter does not clarify the equipment for the Ceres extension) and then travel to San Jose. Alternative OPS-3 in the EIR analyzes an alternative with DMUs for both the Stockton to San Jose service and for the extension, but it does not include train coupling/splitting, which was reviewed in Alternative OPS-1 as described above.

An EIR is not required to analyze every alternative suggested in scoping. TRAC "Alternative C" is infeasible for three reasons. First, as discussed above, UPRR will not allow DMUs on its Class I railroads. Second, as discussed below in response to comments on Alternative OPS-3, DMUs cannot provide sufficient capacity for the service to San Jose compared to the proposed conventional locomotive and carriage equipment and there are concerns about service times. Finally, as discussed in response to Comment O2-1 above, train splitting is considered infeasible for operational service due to the inherent delay, potential for mechanical failure, and safety concerns of doing splitting and coupling on a railroad mainline.

Thus, between analysis of Alternative OPS-1 (addressing train splitting), Alternative OPS-2 (addressing DMU use), and Alternative OPS-3 (addressing an all DMU fleet including service to San Jose), the EIR has considered the equivalent of TRAC Operational Scenario C (or Alternative C). No further revisions to the EIR are required.

O2-3

The comment stated that the description of Alternative OPS-3 is unclear, that DMUs would perform better than locomotives and carriage and thus result in better ridership and associated congestion, air pollution and GHG emission reduction benefits than the Proposed Project, and that Alternative OPS-3 is not the same as TRAC Alternative D. Finally, the comment states that the alternative was designed to be rejected.

RESPONSE O2-3:

Regarding the description of Alternative OPS-3, Page 6-24 (Lines 29-30) of the draft EIR states that "This alternative would use DMUs for the extension to Lathrop and Ceres and Merced and for operations between Stockton and San Jose." In other words, Alternative OPS-3 would convert ACE to an all-DMU service including between Stockton and San Jose and for the extension to Ceres and Merced. The draft EIR has been revised to clarify the description per this comment. The second sentence has been revised to state that this alternative is similar to the description provided in OPS-2 for the ACE extension (e.g. DMU operations along the extension) but this alternative would also replace locomotive and carriages for the existing service with DMUs.

Alternative OPS-3 includes elements that are an alternative to existing service in addition to elements that are an alternative to the Proposed Project. The Proposed Project is an extension of ACE service to Ceres and Merced and would not change the train service (e.g. 4 trains using locomotives and carriages each way) between Stockton and San Jose. As such, the element of Alternative OPS-3 that concerns service between Stockton and San Jose is beyond the scope of the project because it proposes changing something that is not part of the Proposed Project. This is not the only reason for not evaluating this alternative in detail. As described on page 6-24, because this alternative concerns the existing service and not the extension to Ceres and Merced, the element of Alternative OPS-3 concerning service between Stockton and San Jose would not lower any effects of the Proposed Project. Furthermore, as explained in the response above to Comment O2-3, UPRR will not allow DMUs on its Class I railroads and this would apply equally to service along the extension as to the existing corridor between Stockton and San Jose.

There are additional feasibility concern about Alternative OPS-3 in regards to capacity for the service to San Jose. As described in the ACE*forward* EIR, ACE's existing trackage rights with UPRR limits the number of daily round trips to San Jose to only 4 daily roundtrips. UPRR has identified that it will require additional track capacity to be installed between Stockton and San Jose in order to allow additional passenger rail slots. As ACE*forward* is not being advanced at this time, ACE is limited to only 4 daily round trip slots. Thus, any DMU alternative would be subject to the same constraint.

The current ACE service has a seated capacity of approximately 840 passengers per train based on 120 seats per each of the 7 bi-level carriages. As explained in Chapter 2, *Description of Phase I improvements* (Section 2.3.3, *Core Capacity*, Page 2-22) of the draft EIR, ACE has plans to expand the core capacity of the system to address ridership demands over time through adding additional carriages up to 10 per train, which would increase the seated capacity up to 1,200 passengers per train. SJRRC reviewed available DMU equipment for regional service, such as the Alstom Coradia Lint, which is one of the most common DMU systems in use for regional service in Europe. The Coradia Lint has a per car capacity of perhaps 60 to 90 seats/car (Alstom n.d.), comes in one to three-car sets, and up to four sets can be combined in a single 12-car consist, indicating a maximum seated capacity of 720 to 980 seats per train (Stadler n.d.). Other light-weight DMU systems in use in

the U.S. have similar seated capacities per car as the Coradia Lint. For example, Stadler DMU's used for eBart (2 car sets, 104 seats total), Capital Metro in Texas (2 car sets, 108 seats total), Fort Worth Transportation Authority in Texas (4 car sets, 224 seats total) and New Jersey Transit (2 car sets, 90 seats) have similar or smaller seated capacities as the Coradia Lint (Stadler n.d.). Most of these U.S. system are using the Stadler GTW equipment for which up to 4 sets can be combined in one consist, meaning a maximum capacity of approximately 900 seats per train (for a 16-car consist of four 4-car GTW sets), which is still short of the proposed locomotive and carriage capacity. None of the current U.S. DMU uses are operationally using such long consists, which is what would be necessary for Alternative OPS-3. While a DMU alternative could meet today's seated capacity, it would provide 220 to 480 seats less per train than the Proposed Project in the future, which relies on the current plans for longer conventional train sets. As such, an all DMU Alternative would result in lower ridership than the Proposed Project and thus less congestion, air pollution, and greenhouse gas reduction benefits.

Alternative OPS-3 included the key element of the TRAC Operational Scenario D in its scoping letter (called Alternative D in the TRAC DEIR comment letter), that is, the use of DMUs for all ACE service instead of locomotives and carriages. Alternative OPS-3 did not include the details of use of a one-unit DMU off-peak and mid-day service. Since DMUs are not allowed by UPRR on its railroad, and UPRR will not allow additional passenger slots between Stockton and San Jose unless and until track capacity improvements are made along that corridor, additional train service beyond four would not be feasible and these additional details would not change the overall conclusion that TRAC Operational Scenario D is infeasible.

Alternative OPS-3 was also carried through the three-part screening as shown in the tables in Chapter 6. As shown by the consideration above and in Chapter 6, Alternative OPS-3 was not designed to be rejected but rather was determined to be infeasible as described above.

Chapter 6 has been updated to clarify that the reasons for not analyzing Alternative OPS-3 in detail in the EIR is because the alternative is infeasible due to UPRR's prohibition of DMUs on its railroad and due to its inability to provide adequate ridership for the Stockton to San Jose service in light of the available passenger train slots from UPRR.

As a point of information, if UPRR were to allow light-weight DMUs at some point in the future, it is possible that the benefits in terms of performance, ability to scale trains, and increase ridership and associated environmental benefits (VMT, air pollution, and GHG reduction) would occur. SJRRC is not denying these potential benefits stated by TRAC and is aware of them. But, as explained above, this is not a feasible option now, as SJRRC must work with UPRR requirements, which currently preclude the use of DMUs. In addition, as noted above, there are operational capacity concerns about use of DMUs for service to San Jose.

O2-4

The comment states in regard to Alternative OPS-5 that the EIR is mistaken in stating that the Proposed Project does not change the amount of ACE service to the Bay Area, that the failure to add weekend service is a failure of imagination and that weekend service should be added to the project and studied. The comment also states that defining the alternative as including Union City is a fatal error because the Proposed Project does not include elements west of Lathrop and if the alternative was more general about weekend service to the Bay Area, it must be studied.

RESPONSE O2-4: Weekend service to Union City was mentioned in a scoping comment by Mr. Walter Freeman. As a result, SJRRC decided to include an alternative considering weekend service to Union City. TRAC did not suggest weekend service in its scoping comment.

Whether or not Alternative OPS-5 describes weekend service to Union City, San Jose, or generally to the Bay Area does not change the EIR conclusion that this alternative does not need to be evaluated in the EIR. Alternatives considered in an EIR are, by definition, alternatives to the Proposed Project. The Proposed Project does not include weekend service. As such, an alternative including weekend service does not provide any meaningful discussion of an alternative to the Proposed Project. Weekend service would not avoid or reduce any significant construction or operational adverse impacts of the Proposed Project. Weekend service in addition to the Proposed Project would reduce weekend VMT, and associated air pollution and GHG emissions. This would not be avoidance of an adverse project significant impact but an additional benefit on top of the project benefits. Additional benefits to a project that are unrelated to the fundamental aspects of the Proposed Project (which is about an extension to Ceres and Merced, not weekend service) do not provide comparative value in a CEQA evaluation.

There is nothing preventing ACE from considering weekend service separately from the Proposed Project. In fact, from time to time, ACE has considered such service. Nothing in the Proposed Project requires weekend service and nothing hinders weekend service. As such, weekend service to the Bay Area is a separate project from the Proposed Project, and does not need to be analyzed in this EIR.

O2-5

Regarding Alternative OUT-1, the comment states that the draft EIR ignores TRAC's assertions that the Fresno Subdivision would be used primarily by passenger trains not freight trains, because most freight would be diverted to the West Side Line; that upgrading track is less expensive than laying new track and an order of magnitude cost estimate should be prepared for the West Side Line Alternative to compare it to the Proposed Project; that the alternative would provide greater speeds and higher ridership than the Proposed Project; and that UPRR might contribute funds to help build OUT-1.

RESPONSE O2-5: This response addresses each of these four point in turn after presenting UPRR's position on this alternative.

UPRR's Position

UPRR's comment on the draft EIR clearly states their position that SJRRC will be required to address any impacts to freight capacity prior to UPRR allowing extension of passenger service. SJRRC followed up with UPRR about the West Side Line Alternative and UPRR stated that it will not consider a relocation of their main line (aka the Fresno Subdivision) and they declined to consider that as a feasible option (Sheridan pers. Comm.).

Freight Routing and Distances

The comment states that UPRR would divert most of the Fresno Subdivision freight to a refurbished West Side Line based on the theory that through traffic from the Bay Area or Pacific Northwest heading south of Fresno would preferentially use the West Side Line. This theory is put in doubt by a consideration of the amount of freight and routes from the Bay Area as well as the length of travel for both Bay Area and Pacific Northwest through freight trains. There are three freight routes to and from Fresno that are of concern for evaluation of this Alternative:

- From Stockton to Fresno via the Fresno Subdivision. Based on the 2018 State Rail Plan (Caltrans 2018), the average existing (2013) daily freight train traffic between Stockton and Fresno is approximately 22 daily trains. In 2040, freight trains will rise to 40. The distance from Stockton to Fresno via the Fresno Subdivision is approximately 118 miles compared to the distance from Stockton to Fresno via Lathrop and the West Side line, which is approximately 139 miles. Because this is longer, it is hard to see any motivation for freight between Stockton and Fresno (including Pacific Northwest through-freight or freight from the Bay Area via Martinez and Stockton) to be routed by the West Side Line accordingly.
- From Tracy to Fresno via the Oakland Subdivision and Fresno Subdivision. Based on the 2018 State Rail Plan (Caltrans 2018), the average existing (2013) daily freight train traffic on the Oakland Subdivision east of Niles is only 4 daily trains, rising to 8 trains in 2040. The Oakland Subdivision east of Niles is constrained by the sharp curves in Niles Canyon and the grades and curves in the Altamont Hills, which is why current and projected use is limited. The distance from Tracy to Fresno via Lathrop and the Fresno Subdivision is approximately 123 miles, which is the same as the 123 mile distance from Tracy to Fresno via the West Side Line. Given these distances are approximately the same, the difference in travel time would be nominal and this is not expected to result in a substantial shift to use of the southerly route. At this moment, it is not reasonably foreseeable that the number of freight trains will increase along the Oakland subdivision from the Bay Area beyond that forecasted in the State Rail Plan due to the track capacity constraints in Niles Canyon (single track and winding curves) and the Altamont Pass (single track, elevated grade and winding curves) and the lack of any planned, programmed, and funded improvements to the Oakland Subdivision east of Niles. It is possible that some of the Bay Area freight routed via Niles and Tracy might use the West Side Line, but given the expense (see below) it is hard to see a financial case for restoring the West Side Line, for little to no gain in travel time.
- Local deliveries between Lathrop and Fresno. Local deliveries will still need to be made via the Fresno Subdivision as TRAC acknowledges.

As such, the EIR's statement that only "some" of the Fresno freight traffic would be re-routed to the West Side Line is supported by substantial evidence since all of the current and projected Fresno Subdivision freight will, in all likelihood, remain on the Fresno Subdivision even if the West Side Line were available. Even if all of the Oakland Subdivision freight were to use a West Side Line (which is not certain as the West Side Line is not shorter than the current route via the Fresno Subdivision), the Fresno Subdivision freight level in 2040 is nearly 5 times the projected amount of Oakland Subdivision freight from Tracy, and thus the Fresno Subdivision would remain in operation to accommodate the majority of through freight operations to Fresno as well as local deliveries.

West Side Line Alternative Costs

The comment states that upgrading existing track is less expensive than laying new track and asked that a preliminary order-of-magnitude cost estimate be prepared for the West Side Line.

Alternative OUT-1 would require upgrading of the track owned by UPRR from Tracy (Lyoth) to Los Banos from the current Class 1 and 2 track rating (rated for 10 to 25 mph) to Class 4 standards (freight 60 mph, like the Fresno Subdivision); construction of new track including construction in 0.5 miles of wetlands from Los Banos to Oxalis (and acquisition of ROW predominantly in agricultural land); and upgrade of the track from Oxalis to Fresno (and acquisition of trackage rights or purchase of the rail road from the San Joaquin Valley Railroad). A rough cost estimate was

developed for the final EIR for a new connector at Lyoth from the Oakland Subdivision to the West Side Line, 103 miles of track upgrades, 20 miles of new track and ROW between Los Banos and Oxalis, and new passing sidings every 20 miles (to allow two-way travel). Using these assumptions, the track and ROW cost of re-establishing the West Side line is estimated as approximately $735 million. This estimate does not include any estimate of the cost of purchasing or acquiring track rights from the San Joaquin Valley Railroad. This cost is much higher than the $477 million cost of the second track from Lathrop to Merced (excluding any station or layover facility costs).[1]

This information has been added to the EIR and reinforces the EIR's assessment of comparative cost.

West Side Line Alternative and ACE Service and Ridership

The comment states that Alternative OUT-1 offers the possibility of higher speeds and ridership than the Proposed Project because interference with freight would be minimized. Higher speeds and ridership hinge on the premise that most of the freight would be diverted to the West Side Line and/or freight would operate outside of ACE service hours. As noted above, it is unlikely that most freight would be diverted to the West Side Line; and thus unlikely that UPRR would agree to priority for passenger service use of the Fresno subdivision between Lathrop and Merced. Since the Proposed Project includes a second track along the Fresno subdivision, there will be opportunities to schedule freight and passenger service to minimize, but not avoid, potential delays to ACE service. Even if passenger train priority on a single line could be provided, the additional cost (see above) and the remote possibility that UPRR would agree to this alternative (see above) mean that the purported benefits of higher speed and ridership would not likely be realized.

West Side Line Alternative Funding

Finally, the comment states that the state should consider funding of Alternative OUT-1 up to a similar amount expended on the proposed project's second track between Lathrop and Merced ($477 million) and that UPRR might provide the needed funds above that amount (additional $258 million using the rough cost estimate above). UPRR has no intention to move its mainline (see above) and thus will not provide more than $250 million in additional funding for a freight line that is longer than the Fresno Subdivision for all of its traffic from Stockton and the same length as its minor freight route from the Bay Area (via the Oakland Subdivision) and thus SJRRC would have to fund the full cost of this Alternative.

MOCOCO Line Variant of the West Side Line Alternative

The TRAC NOP comment letter included a map that in addition to the West Side Line improvement also notes "potential upgraded Union Pacific freight access to Ports of Oakland and Richmond" as applying to the MOCOCO line from Tracy to Port Chicago. Neither the TRAC NOP comment letter nor the TRAC draft EIR comment letter says anything in text about the MOCOCO line upgrade and thus it is unclear whether TRAC consider this an essential part of the West Side Line Alternative or not. The

[1] In addition to the track upgrades, it is probable that Positive Train Control will need to be installed, as the PTC regulation requires the addition of PTC to any track that has passengers (which the West Side Line would not have) or toxic inhalation hazard (TIH) chemicals which can include chlorine, anhydrous ammonia and other industrial chemicals. As the intent of the West Side Line Alternative is to in essence made the West Side Line a freight main line to provide freight traffic relief to the Fresno Subdivision, it cannot preclude chemical transport, and thus PTC is expected. The estimated cost of adding PTC to the West Side Line would be an additional $123 million (estimated as $1 million per mile), which would be on top of the track upgrades noted above.

draft EIR description of this alternative did not discuss upgrading the MOCOCO line and TRAC did not comment about the lack of the MOCOCO line in the draft EIR alternative description.

A MOCOCO line upgrade variant to the West Side Line Alternative is analyzed in the final EIR, which would include a MOCOCO line upgrade in addition to reestablishment and upgrade of the West Side Line.

Freight from the Bay Area and Port of Oakland to and from Fresno via Martinez is currently routed through Stockton and the Fresno Subdivision, a distance of 198 miles. This variant would allow freight from the Bay Area and Port of Oakland to travel via Martinez, then to Port Chicago, then to Tracy via the upgraded MOCOCO line, then the upgraded West Side Line to Fresno, a slightly longer distance of 201 miles. According to the State Rail Plan (Caltrans 2018), approximately 10 trains (in 2013) currently travel on the BNSF line from Port Chicago to Stockton and freight is projected to increase to 20 trains (by 2040). State Rail Plan states there is no current or projected freight use of the MOCOCO line. It is not known how many of the 10 to 20 trains on the BNSF line to Stockton are headed south from Stockton and how many of those use the UPRR Fresno Subdivision instead of the BNSF line from Stockton to Fresno. Lacking such data, for the sake of an illustrative example for 2040, it is assumed that 10 trains (50%) go south in Stockton and of those 5 trains (50% of the southward heading trains) go on the UPRR Fresno Subdivision to Fresno and points south. Given these trains are using a BNSF line from the Bay Area, these assumptions are generous. These assumed 5 trains would be out of the 40 trains using the Fresno Subdivision estimated by the State Rail Plan in 2040. Even though the MOCOCO and West Side Line route is longer than the route via Stockton and the Fresno Subdivision (201 miles versus 198 miles), for the sake of this analysis, it is assumed that these 5 trains are UPRR trains and UPRR would choose to route them via an upgraded MOCOCO line (owned by UPRR today), and the upgraded West Side Line to Fresno (owned in part by UPRR and presumed to be fully owned or have trackage rights for non-owned part in the future). Even if all of the Oakland Subdivision trains in 2040 (8, see above) use the West Side Line in addition to these additional 5 trains, there would only be a total of 13 trains using the West Side line compared to 35 trains using the Fresno Subdivision in 2040. As such, the EIR's conclusion remains valid that only "some", and certainly not "most" of the Fresno Subdivision freight operations would continue on the Fresno Subdivision even if the West Side Line were placed back into operation and the MOCOCO line were upgraded. In that scenario, UPRR would still require a second track on the Fresno Subdivision (like that in the Proposed Project) in order to provide additional passenger slots for ACE.

The MOCOCO Line from Port Chicago to Tracy is rated Class 2 for up to 25 mph only. This variant would upgrade approximately 42 miles of the line between Port Chicago and Tracy to Class 4 standards (up to 60 mph freight) along with upgrading and restoring the 123 miles of the West Side Line between Tracy and Fresno. Using the same cost estimating methods as described above for the West Side Line, the MOCOCO line track upgrade would cost approximately $206 million. These costs would be in addition to the costs for West Side Line upgrade, with total track improvement cost for this variant of approximately $941 million.[2]

[2] Using the same cost estimating methods as described above for the West Side Line, adding PTC to the MOCOCO line would cost an additional $42 million. With PTC, the total for track improvements and PTC for both the West Side Line and the MOCOCO line would be $1.1 billion.

Environmental Impact

As shown above, there is no realistic scenario in which UPRR would divert most of its freight to the West Side Line and not require SJRRC to construct a second track along the Fresno Subdivision prior to allowing ACE service. Thus, if this alternative were advanced, it would include upgrading both the West Side Line (and the MOCOCO upgrade in the variant) as well as constructing the Fresno Subdivision second track. This would result in substantially more environmental impacts than the Proposed Project.

Conclusion

For the reasons cited above, this alternative (the West Side Line Alternative and the MOCOCO Line Variant of the West Line Alternative described above) is considered infeasible. As noted above, UPRR will not consider a relocation of their main line from the Fresno Subdivision, so the West Side Line, at best, would be an auxiliary line and would not provide priority for passenger service on the Fresno Subdivision. Furthermore, the additional cost compared to the Proposed Project of upgrading the West Side Line (and the MOCOCO line in the variant) make this alternative cost-prohibitive. Since there is no scenario in which the UPRR allows ACE to add passenger service to the Fresno Subdivision without constructing an additional track, if the West Side Line were upgraded, then the construction/upgrade along both lines would result in substantially higher construction environmental impacts than the Proposed Project.

Thus, due to logistical constraints with UPRR's approach to maintaining freight capacity, financial costs, and greater environmental impacts than the Proposed Project, this alternative was dismissed from further consideration.

The information above in this response has been added to the EIR.

3.1.13 Response to Comment Letter P1, Scoto Properties LLC & Scoto Brothers Farming, Inc.

P1-1

The comment identifies the potential impacts to agricultural production at three parcels due to construction of the Merced Layover Facility, including greater area of impacts than identified in the EIR; lack of accessibility to the parcels, which could result in unviable agricultural production; impacts associated with changes in infrastructure to accommodate the layover facility, and impacts to/from aesthetics, litter, and animals.

RESPONSE P1-1: The commenter identified concern that three of their properties would be directly affected by the **Merced Layover Facility** (APNs 059-330-005, 059-330-028 and 059-030-041). Only one of those parcels would be directly affected by the **Merced Layover Facility** (APN 059-330-028). The commenter expressed concerns about the accuracy of the area of direct impacts to prime and unique farmlands identified in the draft EIR. The impacts on prime and unique farmlands were calculated using the most recent available data sources, as described in Section 4.2, *Agricultural Resources* (page 4.2-11). Updated numbers will be provided in subsequent project-level analysis, if there are any changes in the project design.

The commenter also identifies concerns about removed access to their properties (APNs 059-030-041, 059-030-028, 059-030-029, 059-030-044, and 059-030-039). See response to comment O1-1

for a description of how access will be maintained to all parcels directly impacted by the **Merced Layover Facility** and how the subsequent project-level environmental document will consider an alternative layover facility. Access would also be maintained for those parcels not directly impacted by the **Merced Layover Facility** because access would be maintained to Southern Pacific Avenue.

The commenter also expressed concerns about changes in infrastructure and impacts on aesthetics, and from litter, crime and potential for vagrancy. Impact AG-10 in Section 4.2, *Agricultural Resources* identifies that there would be potential impacts to infrastructure and that mitigation would be implemented to reduce those impacts. These mitigation measures include relocation of irrigation facility (Mitigation Measure AG-5.1) and coordination with utility providers (Mitigation Measure AG-5.2). Furthermore, the **Merced Layover Facility** would be surrounded by a fence, which would minimize access to the site and would minimize litter and associated aesthetic impacts. No animals/pets would be allowed at the **Merced Layover Facility**.

No revisions to the EIR are required in regards to this comment.

P1-2

The comment expresses concern about increased flooding impacts due to construction of the Proposed Project, including removal of existing drainage systems.

RESPONSE P1-2: Currently there are stretches where the UPRR ROW and SR 99 ROW run parallel to each other and share a drainage swale, typically within the UPRR ROW. Through the design process of the Proposed Project, there will be coordination with UPRR and Caltrans to ensure that all drainage issues are addressed either through modification, relocation, or replacement of drainage infrastructure.

As indicated in Section 4.10, *Hydrology and Water Quality* (page 4.10-61, lines 25-27), Mitigation Measure HYD-6.1 would apply to the **Merced Extension Alignment** and **Merced Layover Facility** for operational flooding hazard impacts related to improvements within drainage courses and flood zones. As indicated on page 4.10-42 (lines 4-25), Mitigation Measure HYD-6.1 requires that proposed improvements within drainage courses and flood zones be analyzed using detailed hydraulic evaluations to be completed during the next design phase of the improvements to ensure that the improvements would not impede or redirect flood flows. If improvements could result in any increase in offsite flooding conditions compared to existing conditions, project designs would be modified to reduce the potential flooding impacts to be equivalent to the existing conditions. Additionally, as indicated on page 4.10-65 (lines 27-29), Mitigation Measure HYD-8.1 would apply to the **Merced Extension Alignment** and **Merced Layover Facility** for operational impacts on storm drainage system capacity and associated flooding. As indicated on page 4.10-47 (lines 35-54) and page 4.10-48 (lines 1-21), Mitigation Measure HYD-8.1 requires detailed hydraulic evaluations to be completed during the next improvements design phase for improvements that include alteration of drainage patterns, such as alteration and construction of trackside ditches, to ensure that the new stormwater control infrastructure is appropriately designed so that runoff would not exceed the capacity of storm drainage systems and result in flooding. If improvements could result in flooding, modification of stormwater control designs or offsite storm drainage systems would be performed to reduce and control runoff and potential for flooding. Implementation of Mitigation Measures HYD-6.1 and HYD-8.1 would ensure that the Proposed Project would not increase the risk of flooding by altering the existing drainage ditch in the vicinity of the **Merced Extension Alignment** and **Merced Layover Facility**, along the existing UPRR tracks and SR 99.

No revisions to the draft EIR are necessary in regards to this comment.

3.1.14 Response to Comment Letter P2, Terra Land Group, LLC

P2-1

The comment identifies concerns about cumulative flooding impacts in the urban and rural areas of Manteca and/or Lathrop and the deficiencies in public utilities/service infrastructure serving the area.

RESPONSE P2-1: The introduction to Letter #1 of the comment letter indicates that Letter #1 focuses mainly on the subject of the potential for ACE Extension and the **Relocated Lathrop/Manteca Station** alternative to contribute to cumulative flooding impacts in the urban and rural areas of Manteca and/or Lathrop and the deficiencies in public utilities/service infrastructure serving the area. This comment does not include significant environmental issues, specific comments, or questions about ACE Extension. Many of the comments in the comment letter are related to other projects and not ACE Extension. We have reviewed the enclosures attached to the comment letter, and the only enclosure that mentions ACE Extension is Enclosure 1 of Letter #2 of the comment letter, which is a selected list of letters sent from TLG which includes a letter dated January 30, 2018 to SJRRC titled "Re: Public Comments in Response to the ACE Extension Lathrop to Ceres/Merced Project - Notice of Preparation of an EIR". This January 30, 2018 letter to SJRRC also does not have any comments or questions that raise significant environmental issues specific to ACE Extension; it only provides general comments regarding development within the floodplain and the need to examine any potential impacts related to San Joaquin River and tributary flows, and includes an enclosure which provides specific comments related to matters discussed in a December 19, 2017, Manteca City Council Meeting.

No revisions to the draft EIR are necessary pursuant to this comment.

P2-2

The comment identifies concerns regarding flooding impacts from projects other than ACE Extension.

RESPONSE P2-2: The comment includes specific comments and questions related to projects other than ACE Extension, and indicates that these other projects have not adequately considered potential cumulative flooding impacts. Because there are no significant environmental issues, specific comments, or questions about ACE Extension, the comments are noted. However, no revisions to the draft EIR are necessary pursuant to this comment.

P2-3

The comment identifies concern about the adequacy of the cumulative impacts on floods, including considering the RD 17 flood protection project in the cumulative analysis.

RESPONSE P2-3: Based on maps provided in enclosures of the comment letter, the RD 17 dryland cross levee and proposed levee extension is located over a mile away and up-gradient (with respect to potential flood flow direction) from any of the proposed ACE Extension improvements. Therefore, ACE Extension improvements would not have any effect on the RD 17 dryland cross levee modification.

ACE Extension has fully evaluated and mitigated the potential for ACE Extension improvements to contribute to cumulative flooding impacts. The evaluation of potential flooding impacts due to ACE Extension improvements was performed by qualified experts, and as indicated in Section 4.10, *Hydrology and Water Quality* (page 4.10-12, line 10 to page 4.10-13, line 2), the evaluation of existing flooding conditions was based on the best available maps produced by the Federal Emergency Management Agency and the California Department of Water Resources. As indicated on page 4.10-41 (line 17) to page 4.10-42 (line 27), Mitigation Measure HYD-6.1 would apply to ACE Extension improvements within drainage courses and/or flood zones and would ensure that the improvements would not impede or redirect flood flows by requiring that the proposed improvements be analyzed using detailed hydraulic evaluations during the next design phase of the improvements. The detailed hydraulic evaluations will be based on the most current and best available information regarding existing flooding hazards. If improvements could result in any increase in offsite flooding conditions, compared to existing conditions, project designs would be modified to reduce the potential flooding impacts to be equivalent to the existing conditions. Additionally, as indicated on page 4.10-47 (line 3) to page 4.10-48 (line 21), Mitigation Measure HYD-8.1 would apply to ACE Extension improvements that would alter drainage patterns, including creating new paved surfaces or construction of new tracks, culverts, or bridges. Mitigation Measure HYD-8.1 would ensure that the new stormwater control infrastructure is appropriately designed so that runoff would not exceed the capacity of storm drainage systems and result in flooding by requiring detailed hydraulic evaluations to be completed during the next design phase of the improvements. The detailed hydraulic evaluations will be based on the most current and best available information regarding existing stormwater drainage system capacity and existing flooding hazards. If improvements could result in flooding, modification of stormwater control designs or offsite storm drainage systems would be performed to reduce and control runoff and potential for flooding.

No revisions to the draft EIR are necessary pursuant to this comment.

P2-4

The comment identifies concerns about cumulative flooding impacts in the urban and rural areas of Manteca and/or Lathrop and the deficiencies in public utilities/service infrastructure serving the area.

RESPONSE P2-4: The introduction to Letter #2 of the comment letter indicates that Letter #2 focuses mainly on the subject of the potential for ACE Extension and the **Relocated Lathrop/Manteca Station** alternative to contribute to cumulative flooding impacts in the urban and rural areas of Manteca and/or Lathrop, the San Joaquin River levee structural problems, and channel flow deficiencies affecting the South Delta/Lower San Joaquin River Basin. See response to comment P2-1 regarding how many of the comments in the comment letter are related to other projects and not ACE Extension. No specific comments on the ACE Extension Lathrop to Ceres/Merced are provided in this comment.

No revisions to the draft EIR are necessary pursuant to this comment.

P2-5

The comment includes general comments regarding potential flooding and development in the floodplain, and provides information regarding the study area for a different project.

RESPONSE P2-5: The comment does not include any significant environmental issues, specific questions, or comments related to ACE Extension.

No revisions to the draft EIR are necessary pursuant to this comment.

P2-6

The enclosure referenced in this comment includes specific comments and questions related to projects other than ACE Extension, and includes general comments and questions regarding cumulative flooding conditions in the San Joaquin Valley.

RESPONSE P2-6: See responses to comments P2-3 above and P2-16 below regarding how the EIR considered cumulative flooding conditions and how implementation of Mitigation Measures would mitigate the potential for ACE Extension to contribute to cumulative flooding hazards.

No revisions to the draft EIR are necessary pursuant to this comment.

P2-7

The comment includes comments and questions regarding previously observed flooding conditions and potential flooding conditions and flood control projects associated with the San Joaquin River and other drainage courses in the San Joaquin Valley.

RESPONSE P2-7: The comment does not include any significant environmental issues, specific questions, or comments related to ACE Extension. The comment includes a question regarding improvements near Paradise Cut that were proposed and evaluated in the ACE*forward* draft EIR. The ACE*forward* draft EIR and improvements were rescinded and ACE Extension does not propose any improvements near Paradise Cut.

No revisions to the draft EIR are necessary pursuant to this comment.

P2-8

*The comment identifies different floodplain management regulatory pathways for improvements within and outside of the UPRR ROW. The comment expresses concern about drainage impacts from the **Oakland-Fresno Subdivision Connection.***

RESPONSE P2-8: As indicated in Section 4.10, *Hydrology and Water Quality*, (4.10-2, line 32 to page 4.10-6, line 5), all ACE Extension construction activities would be subject to the requirements of the Construction General Permit, and various ACE Extension improvements would be subject to various other National Pollutant Discharge Elimination System (NPDES) permits (e.g., municipal stormwater permits and the Industrial General Permit) depending on the location and type of improvement. As indicated on page 4.10-4 (lines 15-18), stormwater runoff from railroad track alignments within the UPRR ROW is not actively regulated under municipal NPDES permits. See response to comment P2-3 for response to concerns regarding alteration of drainage by the **Oakland-Fresno Subdivision Connection**.

No revisions to the draft EIR are necessary pursuant to this comment.

P2-9

The comment expresses concern regarding Project #8 depicted in Figure 5-2 of the draft EIR.

RESPONSE P2-9: Figure 5-2 depicts projects considered in the cumulative analysis. The commenter is referring to cumulative project #8, which is freight rail future plans. As described on page 5-16 of the draft EIR, this project entails the operational increase of freight on existing railroad lines and there are no physical improvements associated with the operational increase. This cumulative project is not part of the ACE Extension; rather, it is a project considered for the cumulative context and analysis. There is no track connection associated between ACE and the freight rail future plans. The freight rail future plans would operate within the existing UPRR ROW.

No revisions to the draft EIR are necessary pursuant to this comment.

P2-10

The comment expresses concern about construction of the Proposed Project within floodplains and asks the difference in drainage impacts between improvements within and outside of the UPRR ROW.

RESPONSE P2-10: See response to comment P2-3 for concerns regarding improvements within flood zones and drainage courses. As indicated in Section 4.10, *Hydrology and Water Quality* (page 4.10-4, lines 18-37), improvements outside of the UPRR ROW would create new paved surfaces. Design and construction of stormwater controls would be implemented in accordance with applicable municipal NPDES permit requirements, including hydromodification requirements to maintain predevelopment runoff rates and volumes. Stormwater controls within the UPRR ROW would be designed and constructed in accordance with the California Department of Transportation's Project Planning and Design Guide (PPDG) and would be required to comply with the post-construction stormwater performance standards of the Construction General Permit to ensure that runoff from station platforms would match existing runoff conditions. Potential flooding/drainage impacts evaluated in the draft EIR were determined to be less than significant for ACE Extension improvements both within and outside of the UPRR ROW. This is because the mitigation measures requiring detailed hydraulic evaluations and modification of the ACE Extension improvement to mitigate potential flooding/drainage impacts (see Response to comment P2-3) would apply to improvements within and outside of the UPRR ROW.

No revisions to the draft EIR are necessary pursuant to this comment.

P2-11

The comment asks about drainage impacts on the San Joaquin River and Paradise Cut.

RESPONSE P2-11: There are no ACE Extension improvements near or crossing the San Joaquin River or Paradise Cut.

No revisions to the draft EIR are necessary pursuant to this comment.

P2-12

The comment identifies concern about the capacity for the San Joaquin River and its tributaries to handle future flows.

RESPONSE P2-12: See response to comment P2-3 above for concerns regarding improvements within flood zones and drainage courses.

No revisions to the draft EIR are necessary pursuant to this comment.

P2-13

The comment is an excerpt from the ACE Extension Draft EIR.

RESPONSE P2-13: There are no specific comments or question is included in the comment.

No revisions to the draft EIR are necessary pursuant to this comment.

P2-14

The comment identifies concern about the adequacy of the cumulative impacts on floods, including considering the RD 17 flood protection project in the cumulative analysis.

RESPONSE P2-14: See response to comment P2-3 above.

P2-15

The comment summarizes the draft EIR approach of performing project and program level analyses for Phase I and Phase II improvements, respectively.

RESPONSE P2-15: There are no specific comments or question included in the comment.

No revisions to the draft EIR are necessary pursuant to this comment.

P2-16

The comment expresses concern about the significance of flood impacts and mitigation identified in the draft EIR.

RESPONSE P2-16: The draft EIR included a full cumulative analysis of potential impacts related to drainage and flooding in Section 5.1.4.11, *Hydrology and Water Quality* (page 5-46, line 39 to page 5-47, line 35). See response to comment P2-3 above, which explains how ACE Extension would mitigate the potential for contributing to flooding hazards. If the RD 17 levee flood protection infrastructure is not yet clearly identified and presented to the public, the RD 17 levee project is still speculative in nature. A cumulative analysis is not required to account for speculative projects. See response to comment P2-3 above regarding how ACE Extension would not impact the RD 17 levee modification project based on the location of the RD 17 levee modification project as presented in the enclosures to the comment letter.

No revisions to the draft EIR are necessary pursuant to this comment.

P2-17

The comment addresses concern about the adequacy of mitigation identified in the draft EIR to mitigate flood impacts.

RESPONSE P2-17: This comment does not provide any specific explanation as to why the commenter believes the mitigation measures referenced in this comment are inadequate for addressing potential flooding impacts. The mitigation measures were developed by experts that evaluated potential flooding impacts based on the best available information regarding existing drainage and flooding conditions, existing regulations related to drainage and flooding, and the proposed designs of ACE Extension improvements. The mitigation measures referenced in this comment include performance measures to ensure that they effectively mitigate potential drainage and flooding hazards.

No revisions to the draft EIR are necessary pursuant to this comment.

P2-18

The comment identifies past, present, and reasonably foreseeable projects that the commenter believes should be considered in analysis.

RESPONSE P2-18: While other projects identified by the commenter may have the potential to contribute to a cumulative flooding condition, the ACE Extension project would not make a cumulatively considerable contribution to the cumulative flooding conditions. Implementation of the ACE Extension would mitigate the potential to contribute to flooding hazards, according to the best available information, as discussed in responses to comments P2-3 and P2-16 above.

No revisions to the draft EIR are necessary pursuant to this comment.

P2-19

The comment is an excerpt from the ACE Extension draft EIR.

RESPONSE P2-19: There are no significant environmental issues, specific comments, or questions included in the comment.

No revisions to the draft EIR are necessary pursuant to this comment.

P2-20

The comment expresses concern about the cumulative flooding impacts from ACE Extension.

RESPONSE P2-20: It is not the responsibility of ACE Extension to fix an existing cumulative flooding hazard or potential increases in cumulative flooding hazards created by other projects. As discussed in the response to comment P2-18 above, ACE Extension would mitigate the potential for ACE Extension to contribute to flooding hazards.

No revisions to the draft EIR are necessary pursuant to this comment.

3.1.15 Response to Comment Letter P3, Union Pacific Rail Road

P3-1

The comment identifies UPRR as the owner of the rail network and that UPRR will continue to coordinate with SJRCC regarding infrastructure and compensation required to expand passenger rail service.

RESPONSE P3-1: This comment is noted. The comment does not raise any significant environmental issues or specific comments about the adequacy of the EIR analysis and thus no response is required. If the project is approved, SJRRC will continue to work with UPRR in good faith to determine the infrastructure needed to address capacity issues and any other UPRR concerns in order for ACE to extend service to Ceres and eventually to Merced.

3.1.16 Response to Comment Letter I1, Albert Cresci

I1-1

*The comment expresses concern about the loss of access to the commenter's property due to the **Merced Layover Facility**. The comment also expresses concern about financial loss due to the **Merced Layover Facility**.*

RESPONSE I1-1: The commenter identified that their property is located on 1811 North Southern Pacific Avenue. This property is located on one of the parcels identified as being directly impacted by the **Merced Layover Facility** (APN 059-330-027). Although the draft EIR does identify that this parcel would be potentially affected through the direct removal of agricultural lands, the draft EIR also identifies that an alternative layover facility east of SR 99 is being considered that would avoid impacts to this agricultural land. See response to comment O1-1 on how the subsequent project-level environmental document will consider an alternative layover facility in further detail in the subsequent project-level CEQA document. Response to comment O1-1 also identifies how access will be maintained to all parcels directly impacted by the **Merced Layover Facility**. If any properties are acquired for construction of the **Merced Layover Facility**, compensation for those properties would be conducted based on state regulations, which require payment at fair-market value.

No revisions to the draft EIR are necessary pursuant to this comment.

3.1.17 Response to Comment Letter I2, Hoang-An Doan

I2-1

The comment expresses support of the Proposed Project.

RESPONSE I2-1: Comment noted. Hong-An Doan's support of the Proposed Project is noted.

3.1.18 Response to Comment Letter I3, Mark Jacops

I3-1

The comment expresses support of the Proposed Project.

RESPONSE I3-1: Comment noted. Mark Jacops' support of the Proposed Project is noted.

3.1.19 Response to Comment Letter I4, Brad Johnson

I4-1

The commenter expresses concern regarding potential radio interferences.

RESPONSE I4-1: The ACE Extension would utilize the existing UPRR ROW where track signaling and crossing equipment currently are in place for the regulation of freight traffic. The addition of a new main track within the UPRR ROW would not result in additional radio interferences that would substantially interrupt fire/police radio over baseline conditions. No revisions to the draft EIR are necessary.

3.1.20 Response to Comment Letter I5, Linda Johnson

I5-1

The comment provides recommendations for improvements to the existing ACE service.

RESPONSE I5-1: These recommendations have been forwarded to the appropriate ACE staff. ACE welcomes feedback and comments can be submitted through the ACE website (www.acerail.com/Contact/Contact-ACE) or by calling 1-800-411-RAIL (7245). The comment does not identify any specific issues related to the adequacy of the analysis provided in the draft EIR; no further response is required.

3.1.21 Response to Comment Letter I6, Frank McHugh

I6-1

The comment expresses support of the Proposed Project.

RESPONSE I6-1: Comment noted. Frank McHugh's support of the Proposed Project is noted.

3.1.22 Response to Comment Letter I7, Richard Meissner

I7-1

The comment expresses support of the Proposed Project.

RESPONSE I7-1: Comment noted. Richard Meissner's support of the Proposed Project is noted.

I7-2

The comment expresses support of exploring the possibility of an ACE Station in Salida.

RESPONSE I7-2: As described in Chapter 6, *Alternatives*, of the draft EIR, a Salida station was considered. While there would be some conveniences to some individuals as the commenter noted, the additional station stop between Modesto and Ripon would add travel time for riders from Modesto and Ceres and ultimately Turlock, Livingston/Atwater, and Merced. In addition, a Salida station would not avoid any significant adverse environmental impact of the Proposed Project. Given the tradeoffs, a Salida station was dismissed from further consideration as the gain in local ridership that may occur would come at the certain loss of ridership from Modesto southward.

No revisions to the draft EIR are necessary pursuant to this comment.

I7-3

The comment identifies the need for media outlets to provide accurate information about ACE.

RESPONSE I7-3: ACE staff will continue to coordinate with media outlets to provide information and updates on ACE service. This recommendation has been forwarded to the appropriate ACE staff. ACE welcomes feedback and comments can be submitted through the ACE website (www.acerail.com/Contact/ Contact-ACE) or by calling 1-800-411-RAIL (7245). The comment does not identify any specific issues related to the adequacy of the analysis provided in the draft EIR; no further response is required.

3.1.23 Response to Comment Letter I8, Frank and Christine Mendes

I8-1

*The commenter expresses opposition to the **Relocated Lathrop/Manteca Station**.*

RESPONSE I8-1: The commenter's opposition to the **Relocated Lathrop/Manteca Station** is noted. As described in Chapter 2, *Description of Phase I improvements*, the Proposed Project identifies two stations in the Lathrop area consisting of the **Existing Lathrop/Manteca Station** and a new **North Lathrop Station**. The **Relocated Lathrop/Manteca Station** is an alternative that is being considered. The commenter's property located at 18401 McKinley Avenue is north of the proposed **Relocated Lathrop/Manteca Station**. The proposed undercrossing mentioned in the comment may refer to the McKinley Avenue grade separation project, which is not an improvement that is part of the ACE Extension or being pursued by SJRRC at this time. This comment does not concern the adequacy of the EIR.

No revisions to the draft EIR are necessary pursuant to this comment.

3.1.24 Response to Comment Letter I9, Kevin Moss

I9-1

*The commenter expresses preference for the **Existing Lathrop/Manteca Station** in lieu of the **North Lathrop Station**.*

RESPONSE I9-1: The commenter's preference for the **Existing Lathrop/Manteca Station**, instead of the **North Lathrop Station**, is noted. As described in Chapter 2, *Description of Phase I improvements*, the Proposed Project identifies two stations in the Lathrop area consisting of the **Existing Lathrop/Manteca Station** and a new **North Lathrop Station**. If the Proposed Project is implemented, the **Existing Lathrop/Manteca Station** would remain in service. Additionally, the Proposed Project also entails a new **Downtown Manteca Station** to be constructed along the extension to Ceres. The **Downtown Manteca Station** would be constructed at the existing Manteca Transit Center located at 220 Moffat Boulevard and provide for a second station in Manteca. This comment does not concern the adequacy of the EIR.

No revisions to the draft EIR are necessary pursuant to this comment.

3.1.25 Response to Comment Letter I10, Sandra Moss

I10-1

*The commenter expresses preference for the **Existing Lathrop/Manteca Station** in lieu of the **North Lathrop Station**.*

RESPONSE I10-1: Please see response to comment I9-1.

3.1.26 Response to Comment Letter I11, Kenneth Sacca

I11-1

The comment provides recommendations for improvements to the existing ACE service.

RESPONSE I11-1: These recommendations have been forwarded to the appropriate ACE staff. ACE welcomes feedback and comments can be submitted through the ACE website (www.acerail.com/Contact/Contact-ACE) or by calling 1-800-411-RAIL (7245). The comment does not identify any specific issues related to the adequacy of the analysis provided in the draft EIR; no further response is required.

3.1.27 Response to Comment Letter I12, Adam Serpa

I12-1

The comment expresses support of the Proposed Project.

RESPONSE I12-1: Comment noted. Adam Serpa's support of the Proposed Project is noted.

3.1.28 Response to Comment Letter I13, Chris Stai

I13-1

The comment poses the question whether ACE will consider having multiple trains go from Ceres through to San Jose directly.

RESPONSE I13-1: As described in Chapter 2, *Description of Phase I Improvements*, the draft EIR considered two operating scenarios: 1) four trains from Ceres to Lathrop with transfer to the

Stockton to San Jose trains; and 2) three trains from Ceres to Lathrop with transfer to the Stockton to San Jose trains and one direct train from Ceres to San Jose without transfers. Based on the ridership studies conducted to date, these operating scenario options capture the likely future operating scenario. However, if it is advantageous to run more direct trains from Ceres to San Jose and less trains from Stockton to San Jose, then ACE could also consider that. Under CEQA, changes in train service and frequency is statutorily exempt, which allows rail operators to optimize train service without having to go through CEQA review.

Chapter 4
Text Revisions to the Draft EIR

This chapter includes revisions to the draft EIR by errata as allowed by CEQA. The revisions are presented in the order as they appear in the draft EIR, with the relevant page number(s) indicated in italicized print. New or revised text is shown with underline for additions and ~~strikeout~~ for deletions.

All text revisions are provided for clarification or additional detail. After considering all comments received on the draft EIR, the lead agency has determined that the changes do not result in a need to recirculate the draft EIR. Per Section 15088.5(a) of the CEQA Guidelines, recirculation is required when new significant information identifies:

- A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented;
- A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance;
- A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponents decline to adopt it;
- The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

Recirculation of the draft EIR is not required where the new information merely clarifies, amplified, or makes minor modifications to an adequate EIR (CEQA Guidelines Section 15088.5(b)). The information provided below meets those criteria.

Global Text Changes

The draft EIR references Mitigation Measure AQ-2.5: Implement fugitive dust controls; however, this mitigation will not be required because the Proposed Project would comply with SJVAPCD Regulation VIII, which includes requirements to control fugitive dust emissions, as described in Section 4.3, *Air Quality.* Thus references to Mitigation Measure AQ-2.5 are deleted from the following sections in the EIR: Section ES, *Executive Summary*; Section 4.1, *Aesthetics*; Section 4.9, *Hazardous Materials*; Section 4.15, *Recreation*; Chapter 5, *Other CEQA-Required Analysis*. These text revisions are made for clarification purposes and do not alter the conclusions of the EIR.

Executive Summary

The changes to Mitigation Measures MM-BIO-4.2, MM-BIO-7, MM-CUL-2.4, MM-CUL-2.5, MM-NOI-2.1, and MM-USS-1 described below in relation to changes to Section 4.4, *Biological Resources*, Section 4.5, *Cultural Resources*, Section 4.12, *Noise and Vibration*, and Section 4.18, *Utilities and Service Systems*, are also made to Table ES-5, starting on Page ES-31, accordingly.

Chapter 2, Description of Phase I Improvements

The text on Page 2-20 (Lines 21 to 27), in Chapter 2, *Description of Phase I Improvements,* is modified as follows:

> The Ceres to Merced segment is located in the central portion of Stanislaus County and the eastern portion of Merced County. ACE currently does not operate passenger rail services in this segment. As part of Phase I improvements, a bus bridge would operate between Merced and Ceres, with stops in Livingston, Atwater, and Turlock. SJRRC will coordinate with the Merced County Association of Governments (MCAG) ~~is anticipated to operate this bus service and SJRRC~~, the Transit Joint Powers Authority, Merced Transportation Center (Transpo), cities along the bus route, and others ~~would work with MCAG to develop operational plans~~ to identify an operating entity, funding for operations, charging infrastructure location and operation, bus stop locations, Transpo operation capacity and fare system. Electric buses would be utilized for this service. This bus bridge would operate from the initiation of ACE service to Ceres until the ACE Extension to Merced is complete.

The text in Section 2.4.4.1 on Page 2-27 (Line 22) to Page 2-28 (Line 4), in Chapter 2, *Description of Phase I Improvements,* is revised as follows:

2.4.4.1 Track Maintenance

> SJRRC does not own the tracks on which ACE operates; instead, SJRRC has entered into trackage rights agreements with host railroads (both PCJPB and UPRR) to operate on portions of their respective tracks. Maintenance of way (MOW) is the responsibility of the host railroad. In general, MOW is the ongoing maintenance of track (e.g., tie replacement, switch greasing, ballast recontouring), track structures, bridges, drainage features, signal apparatus and other signal infrastructure. Maintenance activities are both ongoing responses to daily issues and planned preventive maintenance. Maintenance of bridges would include routine removal of woody debris, sediment, and other materials that accumulate near the piers of the bridges. Depending on the corridor, host railroads would have other maintenance activities that are required, specific to the features located in the corridor.

The text in Section 2.5.1.2 from Page 2-29 (Line 24) to 2-30 (Line 13), in Chapter 2, *Description of Phase I Improvements* is revised as follows:

Bridges, Underpasses, and Overpasses

> Track work would also involve the construction of track-supporting structures, such as new bridges (track over waterway) and modifications to existing at-grade crossings and grade separation structures such as overheads (roadway over the rail).

Bridges over Waterways

> The typical bridge (track over waterway) shown in the preliminary engineering plans consists of a combination of short spans supported on driven steel H-pile bents with precast concrete bent caps. Structures that require longer spans to avoid obstacles or provide adequate opening to pass design flows would likely be supported on cast-in-place reinforced concrete (RC) pier caps and columns extended from RC cast-in-drilled-hole pile shafts. The short spans consist of either precast concrete slab beams or double-cell box girders, and the longer spans would typically

consist of either single-cell precast concrete box girders, steel-plate girders, steel-plate through-girders, or a steel through-truss.

The installation of the bridge over the Stanislaus River would require four cast in place drilled (CIDH) piles and one abutment, as summarized in Table 2-6a. The installation of the bridge over the Tuolumne River would require four CIDH piles, as summarized in Table 2-6b. Construction will include installation of a casing that will extend about 20-feet into the ground. The top of the casing will be above water level. The casing for the piles would be installed using the vibration method and the abutment would be installed using pile driving. There may be some local dewatering of the casing prior to drilling; however, the construction method would be slurry displacement, which would eliminate the need for dewatering during construction. This method uses a slurry in the hole during drilling and concrete pours, which keeps the water out. As the final concrete is poured, the concrete is heavier than the slurry, and the slurry is removed at the top of the hole as concrete fills the bottom. The portion of the casing above the pile will be removed once the column is poured.

The permanent impact from installation of the bridges would be 50 square feet per pile and 400 square feet per abutment. As shown in Table 2-6a, only one pile would be placed within the water of the Stanislaus River; therefore, construction of the bridge over the Stanislaus River would result in a permanent impact in the river of 50 square feet. As shown in Table 2-6b, only two piles would be placed within the water of the Tuolumne River; therefore, construction of the bridge over the Tuolumne River would result in a permanent impact of 100 square feet in the river.

Pile driving would be required for the installation of the abutment for the bridge over the Stanislaus River. Pile driving will occur on land and would entail a total of 10 piles, 5 piles installed per day, 500 strikes per pile, and a 5 second interval between strikes.

Table 2-6a. Construction Details for the Bridge over the Stanislaus River

No.	Pile type	On Land or In Water?	Installation Method	Distance from water's edge	Days of construction
1	96-inch CIDH pile	Land	Vibration	120-feet	6 days
2	96-inch CIDH pile	Land	Vibration	60-feet	6 days
3	96-inch CIDH pile	Land	Vibration	10-feet	6 days
4	96-inch CIDH pile	Water	Vibration	N/A	6 days
5	Abutment	Land	Pile Driving	65-feet	2 days

Table 2-6b. Construction Details for the Bridge over the Tuolumne River

No.	Pile type	On Land or In Water?	Installation Method	Distance from water's edge	Days of construction
1	96-inch CIDH pile	Land	Vibration	100-feet	6 days
2	96-inch CIDH pile	Land	Vibration	50-feet	6 days
3	96-inch CIDH pile	Water	Vibration	N/A	6 days
4	96-inch CIDH pile	Water	Vibration	N/A	6 days

Abutment and pier foundations outside the waterway are typically accessed by temporary dirt roads with the construction equipment working in a temporary construction easement that extends about 50 feet from the edges of the bridge deck on both sides. Wherever possible the main waterway is crossed by a single span placed by cranes operating on both banks reaching out and passing the girders across, with the new pier foundations located just outside of the anticipated waterway.

Pier foundations within the waterway may be accessed from the ground by pushing clean fill into the waterway on top of temporary pipe culverts or narrowing or diverting the waterway, then restoring the original condition when done. For the standard railroad trestle consisting of short spans on H-pile bents, it is possible to construct in a top-down, span-by-span process with a crane on the back span reaching out to build the next pier and place the next span. The reach and lifting capacity of the crane limits the feasibility of the span-by-span top-down method for longer spans. An alternative way of accessing pier foundations in the waterway is to build a temporary work trestle bridge from which the construction equipment can work. The temporary work trestle would include installation of two platforms located on both banks of the river. A steel cap and stringers are installed and timber crane mats are used for the surface. The temporary work trestle would be used to support equipment that would install the piers located within the water. Thus, no equipment would be located within the water itself and no damming or blocking of the water would occur because work would occur from the temporary work trestle on the banks of the river. A temporary work trestle would require the installation of 18- to 24-inch steel pipe piles, including some that would be located within the water. These piles would be installed using a vibratory hammer. These piles, along with the trestle would be pulled out once construction is completed. Thus, the only temporary impact to the Stanislaus and Tuolumne River would be from the installation of these temporary piles within the water. The estimated surface area of the temporary work trestle over Stanislaus River is 5,000 square feet and the estimated surface area of the temporary work trestle over Tuolumne River is 6,000 square feet. The temporary impact to the Stanislaus River and the Tuolumne River is conservatively estimated to be 5,000 square feet and 6,000 square feet, respectively. The actual impacts to these rivers would be lower because the temporary impact area would be limited to the areas where the piles would be installed within the water for the construction of the temporary work trestle. No dewatering would be required for the installation of a temporary work trestle.

Table 2-7 on Page 2-32 in Chapter 2, *Description of Phase I Improvements* is revised as follows:

Table 2-7. Construction Durations for Phase I Improvements

Phase I Improvement	Construction Duration (months)
Lathrop to Ceres	
Lathrop station options	
Relocated Lathrop/Manteca Station	16
Existing Lathrop/Manteca Station	14
North Lathrop Station	20
Ceres extension improvements	
Oakland-Fresno Subdivision Connection	8
Ceres Extension Alignment	42
Alignment trackwork/signaling	18

Phase I Improvement	Construction Duration (months)
Bridges	~~26~~ 36
Ceres Layover Facility (variant 1 or 2)	24
Downtown Manteca Station	10
Ripon Station	20
Modesto Station	10
Ceres Station	12
Ceres to Merced	
Merced Bus Stop	3

Table 2-12 on Page 2-38, in Chapter 2, *Description of Phase I Improvements* is modified as follows:

Agency	Funding, Approval, or Permit
Regional Agencies and Transportation Agencies	
San Joaquin Regional Rail Commission (SJRRC)	Certification of CEQA environmental document; project proponent; project funding
San Joaquin Council of Governments	Funding coordination
Stanislaus Council of Governments	Funding coordination
Central Valley Flood Protection Board	Encroachment Permit

Chapter 3, Description of Phase II Improvements

Table 3-7 on Page 3-29, in Chapter 3, Description of Phase II Improvements is modified as follows:

Agency	Funding, Approval, or Permit
Regional Agencies and Transportation Agencies	
San Joaquin Regional Rail Commission (SJRRC)	Certification of CEQA environmental document; project proponent; project funding
San Joaquin Council of Governments	Funding coordination
Stanislaus Council of Governments	Funding coordination
Merced Council of Governments	Funding coordination
Central Valley Flood Protection Board	Encroachment Permit

Section 4.2, Agricultural Resources

The second bullet under subheading Section 4.2.3, Environmental Setting on Page 4.2-5 has been revised as follows:

- Local jurisdiction general plans (City of Atwater 2000; City of Ceres 1997; City of Lathrop 1991; City of Livingston 1999 ~~2008~~; City of Manteca 2003; City of Merced 2012; City of Modesto 2008; City of Ripon 2006; City of Turlock 2012; Merced County 2013a, 2013b; Merced County Association of Governments 2014; San Joaquin County 2005; Stanislaus County 2016a, 2016b).

Section 4.4, Biological Resources

The text on Page 4.4-27 (Lines 11 to 15), in Section 4.4, *Biological Resources* is revised as follows:

Direct impacts on biological resources are those that take place within the environmental footprint of the ACE Extension improvement. *Indirect impacts* on biological resources differ based on resource type and include impacts that are temporally or spatially separated from direct impacts. *Indirect impacts* are expected to occur within the environmental footprint of the ACE Extension improvement as well as within the resource-specific buffers as defined in Section 4.4.3.

Thresholds for Special-Status Fish Noise Impacts due to Pile Driving

The assessment of impacts on special-status fish species due to noise from pile driving was based on consideration of specific noise thresholds and ambient noise levels.

Noise, vibrations, and other physical disturbances can harass fish, disrupt or delay normal activities, or cause injury or mortality. In fish, the hearing structures and swim bladder and surrounding tissues are particularly vulnerable to high-pressure sounds (Popper et al 2006). The type and severity of effects depends on several factors, including the intensity and characteristics of the sound, the distance of the fish from the source, the timing of actions relative to the occurrence of sensitive life stages, and the frequency and duration of the noise-generating activities. The range of effects includes physical injury (including hearing loss), stress, mortality, and behavioral effects. Pile driving could harm fish because of the underwater noise it produces. Sound levels from project-related impact pile driving in or near open water often have the intensity to injure or kill fish within a certain radius. These high sound-pressure levels can rupture the swim bladder and damage other sensitive tissues and organs. Noise from project-related pile driving can also damage hearing organs, which can temporarily affect hearing sensitivity, communication, and the ability to detect predators or prey. Pile driving can also produce continuous lower-energy sounds, below the thresholds associated with direct injury, that cause behavioral effects (e.g., startle or avoidance responses) as well as temporary hearing loss or physiological stress, depending on the duration of exposure.

Since 2000, transportation agencies, resource agencies, ports, and other entities have been developing criteria for determining impacts and appropriate mitigation measures to protect fish from substantial harm due to underwater pile-driving sounds. In 2004, the California Department of Transportation (Caltrans) established a Fisheries Hydroacoustic Working Group (FHWG) to facilitate the development of interim criteria, based on best available scientific information. The FHWG includes participants from Caltrans, the Washington Department of Transportation, Oregon Department of Transportation, NMFS, USFWS, CDFW, and USACE. The FHWG is supported by a panel of hydroacoustic and fisheries experts and overseen by a steering committee composed of managers with decision-making authority from each of the members' organizations.

In June 2008, member agencies of the FHWG agreed in principle to interim criteria for assessing injuries to fish from underwater sound pressure caused by in-water use of an impact hammer. The criteria identified thresholds, both for the peak sound-pressure level (i.e., the largest absolute value of instantaneous sound pressure) and the cumulative sound exposure level (SEL) (i.e., the sum of acoustical energy over all pile strikes), for the onset of physical injury to fish.

Different cumulative SELs are established for fish that are greater than or equal to 2 grams and fish that are less than 2 grams. This is because smaller fish are more susceptible to injury. Physical injury to fish is expected if either of these thresholds is exceeded. The FHWG thresholds for peak noise levels and accumulated sound levels are identified in Table 4.4-3a.

Table 4.4-3a. Summary of Impact Pile Driving Noise Thresholds for Fish

Peak Noise Level Injury Evaluation	
Injury Threshold (dB)	206 dB
Peak Noise Level Injury Evaluation	
Injury Thresholds (Cumulative SEL)	Fish ≥ 2 g (187 dB); Fish < 2 g (183 dB)
Peak Noise Level Injury Evaluation	
NMFS Threshold (RMS)	150 dB
Upper Range of Background levels	160 dB
Source: Caltrans 2005	

The injury thresholds criteria above are not considered appropriate for assessing the effects of project-related vibratory pile driving. Vibratory hammers generally produce less sound than impact hammers because they generally produce continuous and lower-intensity sound that is below the levels known to cause injury in fish. Vibratory drivers are often included in mitigation measures to reduce the adverse effects on fish that result from impact pile driving. There are no established injury criteria for fish related to vibratory pile driving, and resource agencies in general are not concerned about vibratory pile driving resulting in adverse effects on fish. (Caltrans 2015).

Little is known about how pile driving and other sources of human-generated noise actually affect behavior in fish. However, it is thought that underwater noise may disrupt or alter essential behavior or activities (e.g., migration, feeding, sheltering) and affect a fish's ability to grow, survive, or reproduce (Caltrans 2015). NMFS recommends a separate threshold of 150 dB RMS for the behavioral effects of listed salmonids when evaluating impact pile driving (Caltrans 2015). However, there is no scientific support for this criterion or evidence to determine its applicability to particular species.

The text on Page 4.4-41 (Lines 21 to 28), in Section 4.4, *Biological Resources* is revised as follows:

Impacts on special-status fish species such as river lamprey, Central Valley steelhead, Central Valley Chinook salmon, and hardhead could occur under the **Ceres Extension Alignment.** The **Ceres Extension Alignment** would include in-water construction in the Stanislaus River and Tuolumne River for the construction of new bridges. The **Ceres Extension Alignment** includes construction in and around waterbodies that support special-status fish species. Aquatic habitat would be disturbed due to the placement of bridge pilings in the channel. Noise from pile driving can injure or kill fish if impact hammers are used to drive piles. Bridge construction on the Stanislaus and Tuolumne Rivers will require piles on land and in water. Installation of the 96-inch piles will be cast-in-place, so no impact pile driving will be needed. Temporary work trestles would be installed to get construction equipment, drill rigs, cranes, and concrete trucks to a wet pier location. This will require driving 18- to 24-inch steel pipe piles with a vibratory hammer. This work will occur in the water and the piles will be driven by vibration. Both cast-in-place and vibration installations will not affect fish species (Caltrans 2015). The only impact

pile driving will occur at the abutment on the Stanislaus River, 65 feet away from the river's edge. Riparian vegetation removal along the rivers and creeks decreases habitat quality for fish species.

The text on Page 4-42 (Lines 9 to 13), in Section 4.4, *Biological Resources* is revised as follows:

Noise from vibratory pile driving and cast-in place piles, which are drilled, are not expected to result in injury to fish. Noise from pile driving due to the installation of the bridge over the Stanislaus River for the **Ceres Extension Alignment** could, however, affect special-status fish. ~~kill or injure special-status fish and~~ Furthermore, riparian vegetation removal along the creek banks due to the **Ceres Extension Alignment** would decrease fish habitat quality. For the bridge over the Stanislaus River, an estimated ten concrete piles (16-inches) will be installed 65 feet away from the water's edge using an impact hammer. The assessment of pile-driving noise from an impact hammer was based on measured sound levels from similar pile-driving projects (Caltrans 2015). The sound analysis considered impact pile driving without the use of an attenuation method to mitigate underwater sound levels since no pile driving will take place in the water. Approximately 500 hammer strikes would be required to install each pile. The project engineer estimated that five concrete piles would be driven per day; based on this rate of construction, impact driving would occur over 2 working days. The resultant sound-level estimates for impact hammer pile driving relative to the injury thresholds as well as the behavioral effects threshold are shown below in Table 4.4-6a.

Peak sound levels generated by impact pile driving would not exceed the thresholds for the protection of fish within areas that are less than 33 feet from pile driving; such sound levels would be unlikely to result in fish injury. Cumulative sounds levels are also less than 33 feet from pile driving for fish both greater than and less than 2 grams.

It should be noted that special-status fish species in the study area during the time of impact pile driving (June 15 through October 15, as required by Mitigation Measure BIO-3.3, discussed further below) would most likely be large juveniles and adults and therefore capable of moving out of this zone before harmful sound levels are reached. Once impact pile driving begins, individual fish that approach the study area are likely to detect the sounds and avoid or bypass the potential injury impact zone. Opportunities for fish to avoid impact pile-driving sounds would also occur during periods when pile driving ceases (e.g., while repositioning equipment) and at night when pile driving would be suspended.

In addition to potential injury effects on fish, project-related impact pile driving may also result in behavioral effects if sound levels exceed both the NMFS behavioral threshold (150 dB RMS) and the upper range of background levels (160 dB RMS). The analysis shows that sound levels would exceed 150 dB RMS within 177 feet of the pile-driving location. Therefore, behavioral effects could occur in proximity to pile driving. However, as noted, behavioral effects on fish are not well understood; therefore, it is difficult to assess the definitive significance of such effects in the limited area in proximity to impact pile-driving separate from the injury effects. Given the limited area of effect where sound levels would be above 150 dB, the limited duration (2 days), it is not expected that impact pile-driving effects on fish behavior would result in measurable long-term physical effects on listed fish populations, although individual fish may experience temporary stress.

Therefore, construction of bridges over the Stanislaus River and Tuolumne River under the **Ceres Extension Alignment** would result in less than significant ~~potentially significant~~ impacts

on river lamprey, Central Valley steelhead, Central Valley Chinook salmon, and hardhead. However, this impact could still be potentially significant if there are any changes to the project design that result in pile driving occurring closer to the water.

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Table 4.4-6a. Summary of Effects of Impact Pile Driving on Special-Status Fish

Pile Location	Pile Diameter/ Type	Driver	Piles per Day	Project Engineers Estimate of Strikes per Pile	Estimate of Total Strikes per Day	Underwater Sound Level Assumptions [a]				Cumulative SEL at Reference Distance	Transmission Loss Constant	Distance (feet) to Threshold [b]			
												Onset of Physical Injury [b]			Behavior [c]
												Peak	Cumulative SEL dB		RMS
						Peak	SEL	RMS	Reference Distance (m)			dB	Fish ≥ 2 g	Fish < 2 g	dB
												206 dB	187 dB	183 dB	150 dB
Stanislaus River (on land 65 feet from water's edge)	16-inch concrete	Impact Hammer	5	500	2500	180	149	161	10	183	15	<33	<33	<33	177

Notes:
[a] Source: Caltrans 2015. Table I.2-3A. 18-inch octagonal concrete pile in 2 to 4 meters of water. Reduced by 5 dB for pile driving on land
[b] Peak and cumulative SEL injury sound levels are not expected to be exceeded in the river.
[c] 150 dB RMS behavioral level may extend about 36 feet into the river.

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Table 4.4-7, on Page 4.4-43, in Section 4.4, *Biological Resources* is revised as follows:

Table 4.4-7. Phase I Improvements—Wetland and Other Aquatic Resource Impacts (acres)

Phase I Improvements [a]	Riverine Aquatic Feature	Seasonal Wetland
Oakland-Fresno Subdivision Connection	1.82	--
Ceres Extension Alignment	~~5.09~~ 0.25 [b]	0.28
Ceres Layover Facility, variant 2	--	0.16

Notes:

[a] Phase I improvements not listed in this table do not contain wetland or other water resource impacts.

[b] The **Ceres Extension Alignment** would affect two riverine aquatic features: Stanislaus River and Tuolumne River. It is anticipated that the bridge over the Stanislaus River would permanently impact 50 square feet (<0.01 acre) and temporarily impact 5,000 square feet (0.11 acre). It is anticipated that the bridge over the Tuolumne River would permanently impact 100 square feet (<0.01 acre) and temporarily impact 6,000 square feet (0.14 acre).

Mitigation Measure BIO-4.2 on Page 4.4-99 (Line 23) to Page 4.4-100 (Line 18), in Section 4.4, *Biological Resources* is revised as follows:

Mitigation Measure BIO-4.2: Compensate for impacts on jurisdictional wetlands and non-wetland waters of the United States (aquatic resources) due to ~~prior to~~ ACE Extension improvements impacts during construction

SJRRC will develop an aquatic resource (wetlands and non-wetland waters of the United States) mitigation plan, subject to approval by USACE, which will ensure no net loss of wetlands from ACE Extension improvements impacts. The plan will detail the amount and type of wetlands (based on the ACE Extension improvements verified wetland delineation) that will be compensated for (through preservation, creation, or restoration) for impacts on existing wetlands and non-wetland waters of the United States (aquatic resources), and outline the monitoring and success criteria for the compensation of wetlands and non-wetland waters of the United States. Additional enhancement options include fish barrier removal, riparian restoration, floodplain restoration, and streambank layback to improve overall ecologic function and connectivity of wetland and non-wetland waters. Enhancement sites will be located as near the impact location as possible but, in the event that local enhancement opportunities are not available, such activities will occur within the same stream system or watershed to provide improved ecologic function and connectivity of wetlands and non-wetland waters affected by ACE Extension improvements.

Monitoring and success criteria applicable to created or restored wetlands will require the following.

- At least two surveys by a qualified wetland biologist, botanist, or ecologist per monitoring year.
- At least 80 percent of the created or restored features support vegetation consistent with reference feature conditions.
- At least 80 percent of the created or restored features support hydrologic regimes similar to reference feature conditions.
- A minimum of 5 consecutive years of monitoring to ensure success criteria are met.

- Remedial actions to restore intended ecological function of created or restored features that fail to meet the success criteria for 3 consecutive years.

Once the plan is approved, SJRRC will implement the aquatic resource compensation measures ~~prior to the initiation of~~ at the same time as the ACE Extension improvements construction. SJRRC will be responsible for funding compensatory mitigation, monitoring of the created or restored features per the mitigation plan, and any remedial actions necessary. All conditions that are attached to the state and federal permits will be implemented as part of the ACE Extension improvements. The conditions will be clearly identified in the construction plans and specifications and monitored during and after construction to ensure compliance.

Mitigation Measure BIO-7.1 is modified on Page 4.4-107 after Line 6, in Section 4.4, *Biological Resources* with the addition of the following:

The SJRRC will be responsible to provide maintenance and monitoring of all replanted trees to assure their survival and/or remedial replanting in case they do not survive. All replanted trees will be maintained for a minimum 5-year period and monitored on an annual basis by a professional arborist. If at the end of 5 years, the tree is considered successfully established, then no further maintenance is required by the SJRRC. A professional arborist shall make the determination as to planting success. The SJRRC will be directly responsible for maintaining all trees within the UPRR ROW. For trees outside the UPRR ROW, the SJRRC will be responsible for maintenance costs for the first five years. If individual tree plantings are determined to be unsuccessful after five years, then the SJRRC will be required to either replace the tree (and provide an additional 5 years of maintenance) or extend the maintenance period on a year to year basis until the tree is successfully established. If the tree planting is successfully established, then all further maintenance will be responsibility of the landowner.

Section 4.5, Cultural Resources

Mitigation Measures CUL-2.4 and **CUL-2.5**, Page 4.5-27 (Lines 1 to 14), in Section 4.5, *Cultural Resources* is revised as follows:

Mitigation Measure CUL-2.4: Implement procedures in case of inadvertent archeological discoveries

During construction (any ground-disturbing activity), should there be an unanticipated discovery, work will stop within 100 feet of the discovery, and the construction contractor will call a qualified archaeologist to assess the significance of the find and to recommend appropriate measures. Should the discovery include human remains, all parties will comply with federal and state regulations and guidelines regarding the treatment of human remains, including relevant sections of NAGPRA (3(c)(d)), California Health & Saf. Code Section 8010 et seq., and Cal. Public Res. Code Section 5097.98, and consult with NAHC, tribal groups, and the State Historic Preservation Officer. The final disposition of archeological, historical, and paleontological resources recovered on state lands under the jurisdiction of the California State lands Commission must be approved by the Commission.

Mitigation Measure CUL-2.5: Conduct archaeological testing

In the event of an unanticipated archaeological discovery, testing will be performed by qualified archaeologists in order to determine the extent and nature of cultural deposits and whether or not the resource meets the eligibility criteria for the NRHP and/or CRHR. The final disposition of archeological, historical, and paleontological resources recovered on state lands under the jurisdiction of the California State lands Commission must be approved by the Commission.

Section 4.9, Hazardous Materials

Mitigation Measure HAZ-2.1, Page 4.9-30, in Section 4.9, *Hazardous Materials*, is revised as follows:

Mitigation Measure HAZ-2.1: Implement voluntary oversight agreement

Prior to construction, SJRRC will establish an agreement with a state regulatory agency to oversee the investigation and management (described in Mitigation Measures HAZ-2.2, HAZ-2.3, and SJVAPCD Regulation VII ~~AQ-2.5~~) of contaminated soil, ballast, and/or groundwater that would potentially be disturbed by construction and maintenance of the ACE Extension improvements. Regulatory agency oversight may be provided by, but is not limited to, the State Water Board under the Site Cleanup Program or the DTSC under the Voluntary Cleanup Program.

Mitigation Measure HAZ-2.3, Page 4.9-32, in Section 4.9, *Hazardous Materials*, is revised as follows:

Health and safety procedures described in the CRMP will include requirements for an air quality monitoring program during excavation in areas with elevated contaminants of concern to ensure that fugitive dust emissions do not pose an unacceptable health risk to workers or the public. The air monitoring program will identify action levels for total particulates that require respiratory protection, implementation of engineering controls, and ultimately work stoppage. This monitoring program will be in addition to the fugitive dust controls required under SJVAPCD Regulation VII ~~Mitigation Measure AQ-2.5~~.

Section 4.10, Hydrology and Water Quality

The impact summary box for Impact HYD-1 on the bottom of Page 4.10-22, in Section 4.10, *Hydrology and Water Quality* is revised to include Mitigation Measure HAZ-2.2, as follows:

Impact HYD-1	Construction of Phase I improvements could violate water quality standards or waste discharge requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality.
Level of Impact	Potentially significant
Mitigation Measures	HAZ-2.2: Conduct Site Investigations
	HAZ-2.3: Implement construction risk management plan
	HYD-1.1: Avoid water quality impacts from groundwater or dewatering discharges
	HYD-1.2: Avoid water quality impacts from construction adjacent to, within, and crossing over surface waters

Impact HYD-1	Construction of Phase I improvements could violate water quality standards or waste discharge requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality. HYD-7.1: Limit groundwater or dewatering discharge flow rates
Level of Impact after Mitigation	Less than significant

Page 4.10-27 (Lines 12 to 28), in Section 4.10, *Hydrology and Water Quality* is revised as follows:

Significance with Application of Mitigation

Mitigation Measure HAZ-2.2 requires site investigations to evaluate the chemical quality of soil and groundwater that could be disturbed during construction. Mitigation Measure HAZ-2.3 requires a CRMP that provides a framework for proper characterization and management of contaminated soil and groundwater that could be disturbed during construction. Mitigation Measure HYD-1.1 requires specific procedures for the construction of Phase I improvements entailing the discharge of groundwater or dewatering effluent. Mitigation Measure HYD-1.2 requires specific procedures for construction work for Phase I improvements adjacent to, within, or crossing surface water. Mitigation Measure HYD-7.1 requires dewatering discharge to be performed at appropriate flow rates to ensure that erosion of stream banks, which could affect water quality, would not occur. With implementation of Mitigation Measures HAZ-2.2, HAZ-2.3, HYD-1.1, ~~and~~ HYD-1.2, and HYD-7.1, impacts on water quality during construction of Phase I improvements would be less than significant.

Mitigation Measures

Mitigation Measures HAZ-2.2, HAZ-2.3, HYD-1.1, and HYD-7.1 would apply to the **North Lathrop Station, Oakland-Fresno Subdivision Connection, Ceres Extension Alignment, Ripon Station,** and **Ceres Layover Facility, variant 2** for construction activities involving the discharge of groundwater or dewatering effluent. Mitigation Measure HYD-1.2 would apply to the **Existing Lathrop/Manteca Station, Oakland-Fresno Subdivision Connection, Ceres Extension Alignment, and Ceres Layover Facility, variants 1 and 2** for construction work adjacent to, within, or crossing surface water. Descriptions of Mitigation Measures HAZ-2.2, HAZ-2.3, HYD-1.1, HYD-1.2, and HYD-7.1 ~~is~~ are presented in Section 4.9, Hazardous Materials, and Impact HYD-7, respectively.

Mitigation Measure HAZ-2.2: Conduct Site Investigations

Mitigation Measure HAZ-2.3: Implement construction risk management plan

Section 4.11, Land Use and Planning

The text on Page 4.11-11 (Lines 24 to 32), in Section 4.11, *Land Use and Planning*, is revised as follows:

The **Livingston Bus Stop** is located within the existing city ROW where no land use designations are identified. The **Livingston Station** is located within areas designated for

downtown commercial uses per the City of Livingston general plan map (City of Livingston 1999 ~~2008~~). This land use designation is defined as follows by the City of Livingston.

- *Downtown Commercial* land use designation provides for mixed-use activity in the downtown area and is intended for a wide range of uses to promote feasibility and vitality of downtown. Professional office land uses and office development, including medical, dental, law, or other professional offices are permitted. Commercial uses may include business support and support restaurant and medical services (City of Livingston 1999 ~~2008~~).

Table 4.11-3 on Page 4.11-30 through Page 4.11-31 has been revised as follows:

Policy Document	Applicable Policy	Consistency Analysis
City of Livingston ~~2025~~ General Plan (City of Livingston 1998 ~~2008~~)	Transportation System and Congestion Management Policy 4.5-1. The City encourages the use of energy efficient and non-polluting modes of transportation.	**Consistent**. With Phase I operations, an interim bus bridge would operate between Ceres and Merced, with a stop in Livingston (**Livingston Bus Stop**). Electric buses would be used to operate the bus bridge service.
	Transportation System and Congestion Management Policy 4.5-3. Promote the long-term shifting of peak hour commute trips from the single occupant automobile to ridesharing, buses, pedestrian, and bicycles.	**Consistent.** Refer to consistency analysis for Transportation System and Congestion Management Policy 4.5-1.
	Parking and Alternatives~~~~ Transportation Modes ~~Policy 1~~ Objective B. ~~Foster alternative forms of transportation aimed at reducing vehicle trips and encouraging pedestrian and bicycle mobility, carpooling, and use of transit.~~ Provide various types of transportation modes throughout the City.	**Consistent.** Refer to consistency analysis for Transportation System and Congestion Management Policy 4.5-1.
City of Livingston ~~2025~~ General Plan (City of Livingston 1998 ~~2008~~)	Transportation System ~~Pedestrian Facility~~ Policy 4.9-C-7. Transit centers/stops shall be established to encourage the interface between commercial centers, high-density residential uses, and the transit system.	**Consistent.** With Phase I operations, an interim bus bridge would operate between Ceres and Merced, with a stop in Livingston. The **Livingston Bus Stop** would be co-located at an existing bus stop serviced by a Merced County Transit intercity route.

[a] The City of Ceres is in the process of updating their 20-year general plan. These proposed goals and policies are from the public review draft of the general plan, which has yet to be formally adopted by the City. The City is currently collecting comments on the public review draft general plan and starting work on the general plan EIR.

1 Table 4.11-4 on Page 4.11-44 through Page 4.11-45 has been revised as follows:

Policy Document	Applicable Policy	Consistency Analysis
City of Livingston ~~2025~~ General Plan (City of Livingston 1998 ~~2008~~)	Land Use Policy 3.1-A-1. No development shall be approved unless it is found to be consistent with the adopted Land Use Map and policies of the General Plan.	**Consistent.** The **Livingston Station** would be located adjacent to the UPRR ROW and in the city's downtown area. The City identifies the land use at the Livingston Station for downtown commercial uses, which provides for mixed-use activity in the downtown area and is intended for a wide range of uses to promote feasibility and vitality of downtown. New passenger rail service to Livingston and the siting of the **Livingston Station** would increase access to/from downtown Livingston from cities throughout the Central Valley and the Bay Area. The location of the **Livingston Station** would be compatible with adjacent uses and would support the vitality and redevelopment of the downtown area.
	Transportation System and Congestion Management Policy 4.5-1. The City encourages the use of energy efficient and non-polluting modes of transportation.	**Consistent.** Phase II operations would offer an energy-efficient transportation alternative compared to single-occupant vehicles. As described in Section 4.6, *Energy*, Phase II operations, having similar characteristics as Phase I improvements, would reduce VMT compared to the No Project Alternative. Although the reduction in VMT has not been quantified, it is anticipated that VMT reductions with Phase II operations would be greater than Phase I operations.
	Transportation System and Congestion Management Policy 4.5-3. Promote the long-term shifting of peak hour commute trips from the single occupant automobile to ridesharing, buses, pedestrian, and bicycles.	**Consistent.** Refer to consistency analysis for Transportation System and Congestion Management Policy 4.5-1.
	Parking and Alternatives~~-~~ Transportation Modes ~~Policy 1~~ Objective B. ~~Foster alternative forms of transportation aimed at reducing vehicle trips and encouraging pedestrian and bicycle mobility, carpooling, and use of transit.~~ Provide various types of transportation modes throughout the City.	**Consistent.** Refer to consistency analysis for Transportation System and Congestion Management Policy 4.5-1.

Policy Document	Applicable Policy	Consistency Analysis
	Transportation System ~~Pedestrian Facility~~ Policy 4.9-C-7. Transit centers/stops shall be established to encourage the interface between commercial centers, high-density residential uses, and the transit system.	**Consistent.** Refer to consistency analysis for Land Use Policy 4.5-1.
City of Livingston ~~2025~~ General Plan (City of Livingston 1998 ~~2008~~)	Urban Boundary Policy 6.1-A-3. Priority shall be given to development of vacant, underdeveloped, and/or redevelopable land where urban services are or can be made available. Parcels should be substantially contiguous to existing development~~, meaning that 20 percent of a parcel's perimeter is contiguous to existing urban development.~~	**Consistent.** Refer to consistency analysis for Land Use Policy 4.5-1.

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Section 4.12, Noise and Vibration

Table 4.12-1 under subheading Section 4.12.2.3, Regional and Local, on Page 4.12-6 has been revised as follows:

Document Title	Summary
~~*City of Livingston 2025 General Plan* (City of Livingston 2008)~~	~~Policy Noise 3 requires noise created by new transportation sources be mitigated as not to exceed 65 dB L_{dn} for residential and other noise-sensitive land uses.~~
City of Livingston General Plan (City of Livingston 1999)	Policy Noise 4. Noise created by new transportation sources, including roadway improvement projects, shall be mitigated so as not to exceed the following noise levels: 55 dB (daytime hourly L_{eq}), 50 dB (nighttime hourly L_{eq}), 75 dB (daytime maximum), 70 dB (nighttime maximum).

Mitigation Measure NO-2.1, Page 4.12-29 to Page 4.12-30, in Section 4.12, *Noise and Vibration*, is revised as follows:

Mitigation Measure NOI-2.1: Implement a phased program to reduce train noise along the ACE Extension as necessary to address noise increases over Federal Transit Administration's severe impact thresholds

Project Noise Impacts

This mitigation applies to three locations in Manteca where the ACE extension results in severe project noise impacts: Two residences along the northbound side of the alignment between South Airport Way and West Louise Avenue; and one residence along the northbound side of the alignment between West Louise Avenue and North Union Road. Mitigation for these project impacts will be implemented by SJRRC as part of project implementation and will be completed prior to ACE extension operations.

The following is the recommendation for methods to reduce severe noise impacts along the ACE Extension for Phase I operations.

- In cooperation with the City of Manteca, create a quiet zone between South Airport Way and North Union Road, which would mitigate all Phase I severe noise impacts. Creation of a quiet zone is only feasible if the City of Manteca approves as the FRA gives local jurisdictions the right to approve or deny a quiet zone establishment. With this option, SJRRC would fund the physical improvements necessary to establish this quiet zone, coordinate with UPRR, and support the City of Manteca in applying to the FRA for its approval. If the SJRRC selects this method and the City of Manteca agrees with a quiet zone, it shall be established prior to Phase I operations.
- If a quiet zone is not selected by SJRRC or agreed to by City of Manteca or is otherwise infeasible, then SJRRC shall evaluate the feasibility of wayside horns at the nearby grade crossings, building insulation at the 3 residences, and/or noise barriers. The evaluation and implementation of the feasible solution shall be completed prior to Phase I operations.

Cumulative Noise Impacts

SJRRC will also coordinate with other rail operators, local jurisdictions, transportation funding agencies, and state and federal agencies to implement incremental noise reduction measures at the locations of severe cumulative noise impacts as funding becomes available, where measures are acceptable to the local community, and where measures are determined feasible. This mitigation applies to the locations where the ACE Extension would substantially contribute to cumulative noise impacts. Where the ACE Extension does not contribute to cumulative noise impacts, SJRRC is not responsible to participate in mitigation for cumulative impacts, even if the cumulative noise impacts are severe.

SJRRC will work with local, state, and federal partners to establish priorities for cumulative noise reduction measures to be implemented as funding becomes available. SJRRC will also work with other willing rail operators to seek additional funding from other parties that contribute to cumulative train noise levels.

This cumulative noise mitigation program is expected to be implemented over a period of decades. Improvements will be phased as needed to address changes in rail service over time and the associated rail noise over thresholds. If funding participation by other parties is limited, SJRRC ~~may~~ will not be able to fund ~~all~~ potential noise mitigation ~~on its own, particularly in cases in which the mitigation to address cumulative noise impacts far~~ that exceeds SJRRC's fair share of the impact.

Wayside Horns and Residential Building Sound Insulation

When funding is available, SJRRC, in cooperation with local jurisdictions, other funding partners, and UPRR, will evaluate the potential to reduce cumulative noise impacts through the installation of wayside horns and building sound insulation improvements at residences projected to have a sound increase greater than the FTA severe ~~moderate~~ impact criteria. Building sound insulation methods may include extra wall insulation, window glazing, and sealing of exterior surfaces.

~~During final design,~~ When funding is available, a technical study will be completed to evaluate the effectiveness of reducing impacts to below the FTA severe ~~moderate~~ impact threshold through these methods. If the study determines it is feasible to reduce the impact to below the threshold at an affected sensitive noise receptor, then no additional mitigation at that location will be required. Building sound insulation measures will only be installed to the extent necessary to meet the impact threshold at the receptor location and will only be installed if building owners are willing to accept such measures.

Quiet Zones

The lead agency for a quiet zone designation is the local jurisdiction (typically the city or county) responsible for traffic control and law enforcement on the roads at the at-grade crossings.

When funding is available, SJRRC, in cooperation with affected local jurisdictions and other funding partners and cumulative rail noise contributors, will implement a phased program considering the potential establishment of quiet zones along the ACE Extension at all locations where cumulative train noise is predicted to exceed FTA severe impact thresholds. SJRRC will work closely with local jurisdictions and other funding partners to prepare the engineering studies and coordination agreements to design, construct, and enforce potential quiet zones.

FRA has established a process by which a local jurisdiction can designate a specific area containing at-grade crossings as a "quiet zone," provided that certain supplemental safety measures (SSMs) are used in place of the locomotive horn to provide an equivalent level of safety at the at-grade crossing (Federal Transit Administration 2006). The SSMs commonly used for quiet zones include four-quadrant gates, gates with medians or channelization devices, one-way street with gates, and street closure. In addition to these pre-approved SSMs, FRA also identifies a range of other measures that may be used to establish a quiet zone. These measures could be modified SSMs or non-engineering measures that might involve law enforcement or public awareness programs. Such alternative safety measures must be approved by FRA based on the prerequisite that they provide a level of safety equivalent to the sounding of train horns.

~~Options for establishing quiet zones could include implementation of the following FRA pre-approved SSMs.~~

- ~~**Four-quadrant gate system**. This measure involves the installation of at least one gate for each direction of traffic to fully block vehicles from entering the crossing.~~
- ~~**Gates with medians or channelization devices**. This measure keeps traffic in the proper travel lanes as it approaches the crossing, thus denying the driver the option of circumventing the gates by travelling in the opposite lane.~~
- ~~**One-way street with gates**. This measure consists of one-way streets with gates installed so that all approaching travel lanes are completely blocked. This option may not be feasible or acceptable to local jurisdictions at all locations.~~
- ~~**Road closure**. This measure consists of closing the road to through travel at the at-grade crossing. This option may not be feasible or acceptable to local jurisdictions at all locations.~~

In addition to these pre-approved SSMs, FRA also identifies a range of other measures that may be used to establish a quiet zone. These measures could be modified SSMs or non-engineering measures that might involve law enforcement or public awareness programs. Such alternative safety measures must be approved by FRA based on the prerequisite that they provide a level of safety equivalent to the sounding of train horns.

Wayside horns can also be utilized as part of a quiet zone. While not avoiding the sounding of a horn, wayside horns affect a smaller area than train-mounted horns. Wayside horns can be used when quad gates, medians, channelization, one-way streets, and/or road closures are not adequate to avoid the use of a horn or not acceptable to the local jurisdiction.

The lead agency for a quiet zone designation is the local public authority, which is the only authority that can implement a quiet zone. SJRRC or the other rail operators cannot, on their own, designate the quiet zone. However, only with the implementation of the quiet zone can SJRRC, other tenant railroads, and freight operators be relieved of the requirement to sound their horns when crossing at-grade crossings. Thus, if a local city does not accept the quiet zone, then even if the required SSMs are present, SJRRC, freight and other rail operators would continue to use train horns as a safety device in compliance with FRA requirements.

~~*Grade Separations*~~

~~Grade separations are not being considered for the mitigation of severe noise impacts due to the relatively higher cost and the existence of other feasible mitigation measures.~~

Noise Barriers

When funding is available and after determination of whether quiet zones, wayside horns, and/or building sound insulation are feasible or not to address severe impacts, SJRRC, in cooperation with affected local jurisdictions and other funding partners and cumulative rail noise contributors, will implement a phased program for implementing noise barriers where cumulative noise impacts exceed FTA several noise thresholds. For noise barriers to be effective, these barriers are constructed to intercept the line of sight between a noise source and receptors. Noise barriers can be constructed from concrete, brick or masonry blocks, metals, wood, rubber, or transparent panels. The height of each noise barrier would depend on engineering design on the conditions at each specific location, but typical noise barriers are 8 to 10 feet in height.

~~*Recommended Noise Reduction Methods for the ACE Extension (Phase I Operations)*~~

~~The following is the recommendation for methods to reduce severe noise impacts along the ACE Extension for Phase I operations.~~

- ~~Manteca—Create a quiet zone between South Airport Way and North Union Road, which would mitigate all severe impacts in this section.~~

The top of Page 4.12-36 has been revised as follows:

Impact NOI-6	Increased passenger rail on the existing ACE route and new passenger rail on new routes with Phase II operations could result in severe noise impacts.
Level of Impact	Potentially ~~less than~~ significant
Mitigation Measures	~~If significant impacts identified in subsequent project-level detailed analysis, then the following mitigation measure may be necessary:~~ NOI-2.1: Implement a phased program to reduce train noise along the ACE Extension as necessary to address noise increases over Federal Transit Administration's severe impact thresholds
Level of Impact after Mitigation	Less than significant

Table 4.12-11 on Page 4.12-37 has been revised as follows:

Table 0-1. Overview of Operational Noise Impacts for Phase II Improvements

	Noise Impact	
Phase II Improvements	**Moderate**	**Severe**
Lathrop to Stockton[a]	**0**	**0**
Lathrop to Ceres[a]	**~~44~~ 45**	**~~0~~ 1**
Ceres to Merced[a]	**80[c]**	**0[c]**
Merced Extension Alignment	80	0
Turlock Station	0[b]	0[b]
Livingston Station	0[b]	0[b]
Atwater Station	0[b]	0[b]

Phase II Improvements	Noise Impact	
	Moderate	Severe
Merced Layover Facility	0	0
Merced Station	0[b]	0[b]

Notes:

[a] Impacts in these segments are related to the increase in passenger train traffic.

[b] There are no sensitive receptors within the screening distance; therefore, no impacts are anticipated.

[c] Because the Union Pacific Railroad train volume is the same from Lathrop through Merced, the same existing noise levels were used to estimate the number of impacts in this segment.

The subheading Lathrop to Ceres on Page 4.12-37 has been revised as follows:

Lathrop to Ceres

As shown in Table 4.12-15, there would be 45 ~~44~~ moderate noise impacts and one ~~no~~ severe noise impact~~s~~ on residential receptors and no noise impacts on institutional receptors along this segment related to Phase II operations. The one severe noise impact is projected at a residence in Manteca, which is located near the **Lathrop Wye Double Track**.

The subheading, Significance Conclusion and Mitigation Measures, on the top of Page 4.12-38 has been revised as follows:

Significance Conclusion and Mitigation Measures

Phase II operations would result in 125 ~~124~~ moderate noise impacts and one severe impact because of the new passenger rail service. ~~There would be no severe noise impacts.~~ All moderate impacts would be at locations where train horns are sounded at grade crossings. Phase II operations would ~~not~~ cause an increase in ambient noise levels that exceed the FTA severe impact criteria, which is considered a less than significant impact. As shown in Impact NOI-2, Mitigation-Measure NOI-2.1 would apply to locations within a significant impact due to Phase II operations. It would be feasible to mitigate noise impacts at this one location; thus, the impact at this location could be mitigated to a less than significant level.

As noted above, a general noise assessment was performed for the Phase II improvements, and thus existing noise levels were not measured. Existing noise measurements would be conducted for the subsequent project-level analysis for Phase II improvements. It is possible that the conclusion in this document may change and that the project-level analysis could indicate additional noise impacts exceeding the FTA severe impact criteria. ~~If that is identified, then as shown in Impact NOI-2 for Phase I operations, a significant impact may be identified, in which case Mitigation Measure NOI-2.1 would also apply to locations with a significant impact due to Phase II operations.~~

~~No significant impacts are identified for Phase II operations and thus no mitigation is required.~~

Mitigation Measures

Mitigation Measure NOI-2.1 would apply to the Phase II improvements for operational-period noise impacts.

Mitigation Measure NOI-2.1: Implement a phased program to reduce train noise along the ACE Extension as necessary to address noise increases over Federal Transit Administration's severe impact thresholds

Section 4.13, Population and Housing

The fifth paragraph under Impact POP-3 on Page 4.13-15 has been revised as follows:

The **Livingston Station** would entail constructing a new station platform and parking areas in the downtown area. This station would be consistent with the *City of Livingston ~~2025~~ General Plan* which support transit centers/stops to be established in order encourage the interface between commercial centers, high-density residential uses, and the transit system, per the Circulation Policy 4.9-C-7 (City of Livingston 1999 ~~2008~~). As a result, existing planning policies already propose increased growth in this area, and potential future population that may be associated with a station at these locations would not be substantial or unplanned.

Section 4.14, Public Services

Table 4.14-2 under subheading Section 4.15.3.2, Law Enforcement, on Page 4.17-7 has been revised as follows:

Jurisdictions	Police Department and Sheriff's Office Information
City of Livingston	**Staffing:** The Livingston Police Department consists of 18 sworn officers in Operations Division; 34 total sworn staff. **Services:** Patrol (crime suppression and calls for service), school resource officer, animal services, police reserves, detective bureau, gang suppression, narcotics enforcement, and intelligence **Headquarter/station in the study area:** 1446 C Street, Livingston **Service ratio goal:** ~~1.5~~ 1 officers for every 1,000 citizens.
City of Atwater	**Staffing:** The Atwater Police Department consists of 32 sworn officers. **Services:** Patrol unit, code enforcement, and field services **Headquarter/station in the study area:** There is no headquarter/station located in the study area. The Atwater Police Department headquarter is located at 750 Bellevue Road, Atwater. **Service ratio goal:** 1.1 officers for every 1,000 citizens.
City of Merced	**Staffing:** The Merced Police Department consists of 84 sworn officers. **Services:** Patrol division, crime prevention, code enforcement, communications division, bomb unit, SWAT, K-9 unit, and bicycle patrol **Headquarter/station in the study area:** 611 West 22nd Street, Merced (Main Station) and 470 West 11th Street (South Station) **Service ratio goal:** 1.32 officers for every 1,000 citizens.

Sources: San Joaquin County Sheriff's Office 2018; San Joaquin County 2004; Lathrop Police Department 2018; Terras pers. comm.; Manteca Police Department 2018; Smigelski pers. comm.; Ripon Police Department 2018; City of Ripon 2006; Stanislaus County Sherriff's Office 2018; Stanislaus County Police Department pers. comm.; Modesto Police Department 2018; City of Modesto 2008; Ceres Police Department 2018; City of Ceres 2017; Turlock Police Department 2018; City of Turlock 2009; Merced County Sheriff's Office 2018; Merced County 2013; Livingston Police Department 2018; City of Livingston 1999 ~~2008~~; Atwater Police Department 2018; Ceres Department of Public Safety 2009; Merced Police Department 2018; City of Merced 2012

HNT = Hostage Negotiation Team.

SWAT = special weapons and tactics.

Section 4.17, Transportation and Traffic

Table 4.17-1 under subheading Section 4.17.2.3, Regional and Local, on Page 4.17-5 has been revised as follows:

Policy Title	Summary
~~*City of Livingston 2025 General Plan* (City of Livingston 2008)~~	~~No stated LOS goal, but notes most streets operate at LOS A, which is widely considered acceptable operations for local jurisdictions.~~
City of Livingston General Plan (City of Livingston 1999)	The City designates Service Level "C" as defined in the Highway Capacity Manual (published by the Transportation Research Board of the National Research Council) as the minimum desirable service level at which arterial streets and collector streets should operate. All new facilities in these categories shall be designed to operate at this level or better for a period of at least 20 years following their construction.

Section 4.18, Utilities and Service Systems

Mitigation Measure USS-1, Page 4.18-21 (Line 27), in Section 4.18, *Utilities and Service Systems,* is revised as follows:

Mitigation Measure USS-1: Utility Coordination and Utility Relocation Plan ~~Implement construction road traffic control plans~~

Chapter 5, Other CEQA-Required Analysis

The text on Page 5-45 (Lines 10 to 12), in Chapter 5, *Other CEQA-Required Analysis*, is revised as follows:

"The water quality degradation and contribution to flooding events associated with the ACE Extension and other reasonably foreseeable projects could ~~would~~ result in a significant cumulative impact on hydrology and water quality."

Chapter 6, Alternatives

The text on Page 6-24 (Lines 4 to 36), in Chapter 6, *Alternatives*, is modified as follows:

- OPS-1: Split Train Scenario. This alternative would involve operating two separate consists, one departing from the existing Stockton station and one from the **Ceres Station** in Phase I (and from Merced in Phase II). Once both consists arrive at the Lathrop-area station, the two separate consists would be joined. The combined consists would then proceed along the existing ACE corridor to San Jose. On the return trip, a single consist would be split into two separate consists at the Lathrop-area station and one consist would proceed to the Stockton Station and the other consist would proceed to the **Ceres Station** in Phase I (and to the **Merced Station** in Phase II).

There might be potential one-seat convenience and ridership benefits for this alternative under the right conditions in the future. However, at present there are multiple operational concerns including the time necessary for coupling and splitting, the risk of mechanical failure, safety, and the lack of precedent to do train splitting in North America using existing/proposed Bombardier equipment.

- Train coupling or train splitting requires two separate actions: 1) physical coupling or splitting – 5 to 10 minutes; and 2) re-establishing the Positive Train Control (PTC) system for each new consist – 15 minutes. If the PTC can be brought up at the same time as the actual coupling/splitting, then the duration would be 15 minutes. If it cannot, then the delay could be a total of 20 to 25 minutes. As shown in the prototypical schedules in the draft EIR, the delay time with the proposed time transfers in Lathrop is between 5 and 10 minutes, with most transfers taking less than 10 minutes (see the prototypical schedule in Table 2-4 in Chapter 2, *Description of Phase I Improvements*). As such, a train splitting scenario will add between 5 and 15 minutes to each commute direction and up to 10 to 30 minutes for a daily commute.
- When doing mechanical work, such as when joining or splitting a train, there is a risk of additional mechanical failure. The train also has to be re-inspected after joining, the air brake test has to be completed, and the PTC system has to be reengaged. Mechanical failure introduces the risk of additional service delay as well as concerns about safety, which is discussed in the next bullet.
- The crew would be doing the joining/splitting at the station on the railroad mainline; thus, there is a reduced amount of safety given the frequent passage of freight trains. Furthermore, this will tie up the mainline in single track territory, which will be a concern for UPRR and may not be permitted by UPRR.
- SJRRC has not identified any train splitting for revenue service conducted in North American using the Bombardier equipment intended for use for the Proposed Project. This lack of precedent means that this is untested on U.S. railroads operating under FRA regulations, which raises the potential for additional delay, mechanical, and safety issues than those described above. European regulations are different and not applicable to U.S. operations.

The existing ACE service and the extended ACE service during the weekdays is dominated by San Joaquin Valley workers travelling to the Tri-Valley and Silicon Valley for work. As such, their commute mode choices are heavily influenced by time. For existing service from Stockton to San Jose, train coupling would nominally add 5 to 15 minutes additional travel time each way. For proposed service from Ceres and Merced, the proposed transfer at Lathrop would be on the same platform for westbound passengers in the morning and eastbound in the evening, which is the most efficient transfer for these passengers. Thus, train coupling/splitting would extend the service time for riders along the extension to Ceres and Merced.

This alternative was dismissed because it does not meet the project purpose and need because it would increase service times, increase risk of mechanical failures, and increase safety risks to workers. Due to the unprecedented nature of train splitting using proposed Bombardier equipment in the U.S., there remain unresolved mechanical and safety concerns of doing such operations on a busy railroad mainline. Furthermore, this alternative would not avoid or substantially reduce significant adverse environmental impacts of the Proposed Project.

Nothing in the Proposed Project precludes SJRRC from considering train splitting in the future. In the future, SJRRC may purchase equipment that may make splitting more practicable and that addresses the delay, potential for mechanical failure, safety, and may then be able to address UPRR concerns about train splitting/coupling on a freight mainline. However, with the present equipment and the current challenges, this is not an option today.

- OPS-2: DMU Extension. This alternative would include the use of light-weight DMUs instead of a conventional locomotive push/pull service for the connection from Ceres and Merced to Lathrop. DMUs are self-propelled diesel-mechanical vehicles with engines located below the passenger compartment. In this alternative, the DMUs would only operate between Merced and Lathrop and would not be used for the service from Stockton to San Jose.

  As a point of information, if UPRR were to allow light-weight DMUs at some point in the future on the ACE Extension, it is possible that benefits in terms of performance, ability to scale trains, and increase ridership and associated environmental benefits (VMT, air pollution, and GHG reduction) might occur. But, as explained below, this is not a feasible option now, as SJRRC must work with UPRR current conditions, which preclude the use of DMUs at present.

  While there are heavy-weight DMUs that are FRA compliant and can share tracks with freight, due to their weight, they are less efficient and have lesser performance advantages than European style light-weight DMUs, and as such present less of an attractive alternative to conventional locomotives, which is why Alternative OPS-2 is focused on light-weight DMUs. In a 2016 survey of DMU operations in North America (Nelson, Blakey, and O Neill 2017), only four light-weight non-FRA compliant DMU operations in the U.S. that shared lines with freight, were identified in 2016: DCTA, Denton, Texas; Capital MetroRail, Austin, Texas; Sprinter, San Diego County, California; and River Line, New Jersey. All four required FRA waivers, which required temporal separation between light-weight DMUs and freight trains. None of these four were using UPRR tracks. Other DMU operations in California include BART's E-BART, which is on a dedicated track that is not shared with freight, and SMART, which uses heavy-weight FRA compliant DMUs and not light-weight DMUs. Temporal separation is a big issue for a host railroad, especially on busy mainline freight routes such as the Fresno Subdivision, because it requires them to give up operational hours to the exclusive use of passenger trains on the same tracks, which can create logistical delays for freight service.

  SJRRC contacted UPRR to examine whether or not DMUs would be acceptable on the extension. UPRR replied that, due to concerns about the crash-worthiness of current DMU designs, it will not allow DMUs to operate on the extension (Sheridan pers. comm.). ~~The DMU designs usually consist of lightweight equipment and to date have only been permitted by the FRA in limited circumstances and areas where temporal separation between heavyweight freight trains and lightweight DMUs on the same line is provided or where operations are on separate lines.~~

  The Fresno Subdivision between Lathrop and Merced would be shared by ACE and freight, and UPRR is concerned about the mixing of heavyweight and lightweight equipment on this line. It is possible that in the future, development of the DMU technology would result in equipment that would satisfy UPRR's safety concerns, but at this time, this alternative is not considered feasible for the extension to Ceres and Merced.

- OPS-3: DMU ACE Service. This alternative would use DMUs for the extension to Lathrop and Ceres and Merced and for operations between Stockton and San Jose. In other words, ACE service would be entirely with DMUs. This alternative is similar to the description provided in

OPS-2 for DMU operations along the extension to Ceres and Merced, but this alternative ~~does not change the number of trains in service~~ would replace the use of locomotives and carriages for the existing ACE service between Stockton and San Jose with DMUs instead. ~~Thus, this alternative is beyond the scope of this project. Also, since the project does not change the number of trains between Stockton and San Jose, the use of DMUs on that section is not related to any impacts caused by the Proposed Project and thus this alternative would not lower any potential impacts of the project between Stockton and San Jose~~.

There are feasibility concern about Alternative OPS-3 in regards to ridership capacity for the service to San Jose. As described in the ACE*forward* EIR, ACE's existing trackage rights with UPRR limits the number of daily round trips to San Jose to only 4 daily roundtrips. UPRR has identified that it will require additional track capacity to be installed between Stockton and San Jose in order to allow additional passenger rail slots. As ACE*forward* is not being advanced at this time, ACE is limited to only 4 daily round trip slots. Thus, any DMU alternative would be subject to the same constraint.

The current ACE service has a seated capacity of approximately 840 passengers per train based on 120 seats per each of the 7 bi-level carriages. As explained in Chapter 2, *Description of Phase I improvements* (Section 2.3.3, *Core Capacity*, Page 2-22) of the draft EIR, ACE has plans to expand the core capacity of the system to address ridership demands over time through adding additional carriages up to 10 per train, which would increase the seated capacity up to 1,200 passengers per train. SJRRC reviewed available DMU equipment for regional service, such as the Alstom Coradia Lint, which is one of the most common DMU systems in use for regional service in Europe. The Coradia Lint has a per car capacity of perhaps 60 to 90 seats/car (Alstom n.d.), comes in one to three-car sets, and up to four sets can be combined in a single 12-car consist, indicating a maximum seated capacity of 720 to 980 seats per train (Stadler n.d.). Other light-weight DMU systems in use in the U.S. have similar seated capacities per car as the Coradia Lint. For example, Stadler DMU's used for eBART (2 car sets, 104 seats total), Capital Metro in Texas (2 car sets, 108 seats total), Fort Worth Transportation Authority in Texas (4 car sets, 224 seats total), and New Jersey Transit (2 car sets, 90 seats) have similar or smaller seated capacities as the Coradia Lint (Stadler n.d.). Most of these U.S. system are using the Stadler GTW equipment for which up to 4 sets can be combined in one consist, meaning a maximum capacity of approximately 900 seats per train (for a 16-car consist of four 4-car sets), which is still short of the proposed locomotive and carriage capacity. None of the current U.S. DMU uses are operationally using such long consists, which is what would be necessary for Alternative OPS-3. While a DMU alternative could meet today's seated capacity, it would provide 220 to 480 seats less per train than the Proposed Project, which relies on the current plans for longer conventional train sets. As such, an all DMU Alternative would result in lower ridership than the Proposed Project and thus less congestion, air pollution, and greenhouse gas reduction benefits.

In addition, as described for Alternative OPS-2, UPRR will not allow DMUs on their Class 1 railroads. Thus, this alternative would not meet the project objectives due to substantially lower ridership potential in the future compared to the Proposed Project and is considered infeasible because UPRR will not permit DMUs at this time.

If UPRR later allows the use of light-weight DMUs and also allows more passenger train slots westward to San Jose, then it might be possible for a DMU service to provide as much or possibly even more ridership than the Proposed Project and the associated environmental benefits of greater ridership, but that is not the case today.

The text on Page 6-25 (Lines 6 to 9), in Chapter 6, *Alternatives*, is modified as follows:

- OPS-5: Weekend ACE Service to Union City or existing ACE stations in the Bay Area. The Proposed Project does not change the amount of ACE service to the Bay Area and does not include weekend service. The Proposed Project would not require weekend service, but would not hinder the provision of weekend service in addition to the Proposed Project, should SJRRC choose to implement weekend service separately. Thus, this alternative is beyond the scope of the project and would not lower any project adverse significant impacts. This option is under consideration by SJRRC separate from the ACE Extension.

The text on Page 6-25 (Line 22) to Page 6-26 (Line 6), in Chapter 6, *Alternatives*, is modified as follows:

- OUT-1: West Side Line. This alternative was suggested in scoping and consists of reactivating the West Side line between Tracy and Fresno (distance of approximately 123 ~~124~~ miles) for use as an exclusive freight line, so that the Fresno Subdivision could be primarily used for passenger trains. The West Side Line exists today between Tracy and 2nd Street in Los Banos (approximately 55.2 ~~57~~ miles including mileage for a new 0.4 mile connector from the Oakland subdivision to the West Side Line), is owned by UPRR and leased to California Northern, and is rated for 10 to 25 mile per hour speeds only. Southern Pacific abandoned the rail line from Los Banos to Oxalis (approximately 20 miles) and removed the rails in 1993. This segment of the former railroad is now used for non-railroad purposes. South of Oxalis, the rail line exists and proceeds south along SR 33 to Mendota and then eastward through Kerman Fresno (approximately 47.3 miles) and is operated by the San Joaquin Valley Railroad. From Tracy to Los Banos and Oxalis to Fresno, the rail line is in limited use. This alternative would require acquisition of ROW for the 20 miles from Los Banos to Oxalis and construction of trackbed and track through agricultural areas including a 0.5-mile section where the former bed had deteriorated and is now part of larger wetland area. In addition, given the age and status of the other active railroads, it ~~is likely that they~~ would need substantial upgrades to Class 4 ~~1~~ freight track standards.

UPRR's Position

UPRR's comment on the draft EIR clearly states their position that SJRRC will be required to address any impacts to freight capacity prior to UPRR allowing extension of passenger service. SJRRC followed up with UPRR about the West Side Line Alternative and UPRR stated that it will not consider a relocation of their main line (aka the Fresno Subdivision) and they declined to consider that as a feasible option (Sheridan pers. comm.).

Freight Routing and Distances

There are three freight routes to and from Fresno that are of concern for evaluation of this Alternative:

- From Stockton to Fresno via the Fresno Subdivision. Based on the 2018 State Rail Plan (Caltrans 2018), the average existing (2013) daily freight train traffic between Stockton and Fresno is approximately 22 daily trains. In 2040, freight trains will rise to 40. The distance from Stockton to Fresno via the Fresno Subdivision is approximately 118 miles compared to the distance from Stockton to Fresno via Lathrop and the West Side line, which is approximately 139 miles. Because this is longer, it is hard to see any motivation for freight between Stockton and Fresno (including Pacific Northwest through-freight or freight from the Bay Area via Martinez and Stockton) to be routed by the West Side Line accordingly.

- From Tracy to Fresno via the Oakland Subdivision and Fresno Subdivision. Based on the 2018 State Rail Plan (Caltrans 2018), the average existing (2013) daily freight train traffic on the Oakland Subdivision east of Niles is only 4 daily trains, rising to 8 trains in 2040. The Oakland Subdivision east of Niles is constrained by the sharp curves in Niles Canyon and the grades and curves in the Altamont Hills, which is why current and projected use is limited. The distance from Tracy to Fresno via Lathrop and the Fresno Subdivision is approximately 123 miles, which is the same 123-mile distance from Tracy to Fresno via the West Side Line. Given these distances are approximately the same, the difference in travel time would be nominal and this is not expected to result in a substantial shift to use of the southerly route. At this moment, it is not reasonably foreseeable that the number of freight trains will increase along the Oakland Subdivision from the Bay Area beyond that forecasted in the State Rail Plan due to the track capacity constraints in Niles Canyon (single track and winding curves) and the Altamont Pass (single track, elevated grade and winding curves) and due to the lack of any planned, programmed, and funded improvements to the Oakland Subdivision east of Niles. It is possible that some of the Bay Area freight routed via Niles and Tracy might use the West Side Line, but given the expense (see below) it is hard to see a financial case for restoring the West Side Line, for little to no gain in travel time.
- Local deliveries between Lathrop and Fresno. Local deliveries will still need to be made via the Fresno Subdivision.

As such, only some of the Fresno freight traffic would be re-routed to the West Side Line because the current and projected Fresno Subdivision freight will, in all likelihood, remain on the Fresno Subdivision even if the West Side Line were available. Even if all of the Oakland Subdivision freight were to use a West Side Line (which is not certainty as the West Side Line is the same distance current route via the Fresno Subdivision), the Fresno Subdivision freight level in 2040 is nearly 5 times the projected amount of Oakland Subdivision freight from Tracy, and thus the Fresno Subdivision would remain in operation to accommodate the majority of through freight operations to Fresno as well as local deliveries.

West Side Line Alternative Costs

It would be more expensive to restore the West Side Line from Tracy to Fresno than build a second track between Lathrop and Merced. Alternative OUT-1 would require upgrading of the track owned by UPRR from Tracy (Lyoth) to Los Banos from current Class 1 and 2 track standards (allowing only 10 to 25 mph) to Class 4 standards (freight 60 mph, like the Fresno Subdivision); construction of new track including construction in 0.5 miles of wetlands from Los Banos to Oxalis (and acquisition of ROW predominantly in agricultural land); and upgrade of the track from Oxalis to Fresno (and acquisition of trackage rights or purchase of the rail road from the San Joaquin Valley Railroad). A rough cost estimate was developed for the final EIR for a new connector at Lyoth from the Oakland Subdivision to the West Side Line, 103 miles of track upgrades, 20 miles of new track and ROW between Los Banos and Oxalis, and new passing sidings every 20 miles (to allow two-way travel). Using these assumptions, the track and ROW cost of re-establishing the West Side line is estimated as approximately $735 million. This estimate does not include any estimate of the cost of purchasing or acquiring track rights from

the San Joaquin Valley Railroad. This cost is much higher than the $477 million cost of the second track from Lathrop to Merced (excluding any station or layover facility costs).[1]

West Side Line Alternative and ACE Service and Ridership

Alternative OUT-1 would not provide higher speeds and ridership than the Proposed Project because interference with freight would not be minimized. As noted above, most of the Fresno Subdivision freight would not be diverted to the West Side Line and thus it is unlikely that UPRR would agree to priority for passenger service use of the Fresno subdivision between Lathrop and Merced. Since the Proposed Project includes a second track for the Fresno subdivision, there will be opportunities to schedule freight and passenger service to minimize, but not avoid all, potential delays to ACE service. Even if passenger train priority on a single line could be provided, the additional cost (see above) and the remote possibility that UPRR would agree to this alternative (see above) mean that benefits of higher speed and ridership would not likely be realized.

West Side Line Alternative Funding

This alternative would cost $258 million for track improvements (not including PTC) more than the Proposed Project. UPRR has no intention to move its mainline (see above) and thus will not provide more than $250 million in additional funding for a freight line that is longer than the Fresno Subdivision for all of its traffic from Stockton and the same length as its minor freight route from the Bay Area (via the Oakland Subdivision) and thus SJRRC would have to fund the full cost of this Alternative.

MOCOCO Line Variant of the West Side Line Alternative

The TRAC NOP scoping comment letter includes a map that in addition to the West Side Line improvement also notes ”potential upgraded Union Pacific freight access to Ports of Oakland and Richmond” as applying to the MOCOCO line from Tracy to Port Chicago. Neither the TRAC NOP comment letter nor the TRAC draft EIR comment letter says anything in text about the MOCOCO line upgrade.

A MOCOCO line upgrade variant to the West Side Line Alternative is analyzed in this EIR, which would include a MOCOCO line upgrade in addition to reestablishment and upgrade of the West Side Line.

Freight from the Bay Area and Port of Oakland to and from Fresno via Martinez is currently routed through Stockton and the Fresno Subdivision, a distance of 198 miles. This variant would allow freight from the Bay Area and Port of Oakland to travel via Martinez, then to Port Chicago, then to Tracy via the upgraded MOCOCO line, then the upgraded West Side Line to Fresno, a slightly longer distance of 201 miles. According to the State Rail Plan (Caltrans 2018), approximately 10 trains (in 2013) currently travel on the BNSF line from Port Chicago to Stockton and freight is projected to increase to 20 trains (by 2040). State Rail Plan states there is

[1] In addition to the track upgrades, it is probable that Positive Train Control will need to be installed, as the PTC regulation requires the addition of PTC to any track that has passengers (which the West Side Line would not have) or toxic inhalation hazard (TIH) chemicals which can include chlorine, anhydrous ammonia and other industrial chemicals. As the intent of the West Side Line Alternative is to, in essence, make the West Side Line a freight main line to provide freight traffic relief to the Fresno Subdivision, it cannot preclude chemical transport, and thus PTC is expected. The estimated cost of adding PTC to the West Side Line would be an additional $123 million (estimated as $1 million per mile), which would be on top of the track upgrades noted above.

no current or projected freight use of the MOCOCO line. It is not known how many of the 10 to 20 trains on the BNSF line to Stockton are headed south from Stockton and how many of those use the UPRR Fresno Subdivision instead of the BNSF line from Stockton to Fresno. Lacking such data, for the sake of an illustrative example for 2040, it is assumed that 10 trains (50%) go south in Stockton and of those 5 trains (50% of the southward heading trains) go on the UPRR Fresno Subdivision to Fresno and points south. Given these trains are using a BNSF line from the Bay Area, these assumptions are generous. These assumed 5 trains would be out of the 40 trains using the Fresno Subdivision estimated by the State Rail Plan in 2040. Even though the MOCOCO and West Side Line route is longer than the route via Stockton and the Fresno Subdivision (201 miles versus 198 miles), for the sake of this analysis, it is assumed that these 5 trains are UPRR trains and UPRR would choose to route them via an upgraded MOCOCO line (owned by UPRR today) and the upgraded West Side Line to Fresno (owned in part by UPRR and presumed to be owned and/or have trackage rights for UPRR in the future). Even if all of the Oakland Subdivision trains in 2040 (8, see above),use the West Side Line in addition to these additional 5 trains, there would only be a total of 13 trains using the West Side line compared to 35 trains using the Fresno Subdivision in 2040. As such, the EIR's conclusion remains valid that only "some", and certainly not "most" of the Fresno Subdivision freight operations would continue on the Fresno Subdivision even if the West Side Line were placed back into operation and the MOCOCO line were upgraded. In that scenario, UPRR would still require a second track on the Fresno Subdivision (like that in the Proposed Project) in order to provide additional passenger slots for ACE.

The MOCOCO Line from Port Chicago to Tracy is Class 2, rated for up to 25 mph only. This variant would upgrade approximately 42 miles of the line between Port Chicago and Tracy to Class 4 standards (up to 60 mph freight) along with upgrading and restoring the 123 miles of the West Side Line between Tracy and Fresno. Using the same cost estimating methods as described above for the West Side Line, the MOCOCO line track upgrade would cost approximately $206 million. These costs would be in addition to the costs for West Side Line upgrade, with totals for this variant of approximately $941 million for track improvements and ROW.[2]

Environmental Impact

As shown above, there is no realistic scenario in which UPRR would divert most of its freight to the West Side Line and not require SJRRC to construct a second track along the Fresno Subdivision prior to allowing ACE service. Thus, if this alternative were advanced, it would include upgrading both the West Side Line (and the MOCOCO upgrade in the variant) as well as constructing the Fresno Subdivision second track. This would result in substantially more environmental impact than the Proposed Project.

Conclusion

For the reasons cited above, this alternative (the West Side Line Alternative and the MOCOCO Line Variant of the West Line Alternative described above) is considered infeasible. As noted above, UPRR will not consider a relocation of their main line from the Fresno Subdivision, so the West Side Line, at best, would be an auxiliary line and would not provide priority for passenger

[2] Using the same cost estimating methods as described above for the West Side Line, adding PTC to the MOCOCO line would cost an additional $42 million. With PTC, the total for track improvements and PTC for both the West Side Line and the MOCOCO line would be $1.1 billion.

service on the Fresno Subdivision. Furthermore, the additional cost compared to the Proposed Project of upgrading the West Side Line (and the MOCOCO line in the variant) make this alternative cost-prohibitive. Since there is no scenario in which the UPRR allows ACE to add passenger service to the Fresno Subdivision without constructing an additional track, if the West Side Line were upgraded, then the construction/upgrade along both lines would result in substantially higher construction environmental impacts than the Proposed Project.

~~Despite these construction challenges and costs, even if the West Side Line could be put into full freight operations, UPRR will not let ACE use the Fresno Subdivision from Lathrop to Merced without installation of a new second track. The Fresno Subdivision is UPRR's primary freight route in the northern San Joaquin Valley and serves many customers between Lathrop and Merced that cannot be served by the West Side Line and thus UPRR will want to maintain its freight capacity on the Fresno Line. If the West Side Line were to be put back into action, it would be to serve freight from the Bay Area to Fresno and points south and not customers between Fresno and Lathrop. Thus, this alternative would have to include both the second line from Lathrop to Merced (for UPRR to allow ACE to use the Fresno Subdivision) and the West Side Line. While this alternative might divert some freight traffic from the Fresno Subdivision, it would be cost prohibitive to ACE and would not deliver any meaningful improvements in ACE service from Merced compared to the Proposed Project.~~

Thus, due to financial costs, logistical constraints with UPRR's approach to maintaining freight capacity, and greater construction environmental impacts than the Proposed Project, this alternative was dismissed from further consideration.

Chapter 9, References

Section 4.2, Agricultural Resources

The text on Page 9-6 (Lines 31 to 34), in the subheading Section 4.2, Agricultural Resources in Chapter 9, *References* is revised as follows:

City of Livingston. 1999. *General Plan*. December.

~~City of Livingston. 2008. 2025 *General Plan*. Adopted October 2008. Available: http://www.livingstoncity.com/index.asp?Type=B_BASIC&SEC=%7B1476A705-58D2-4F07-944B-384BA40EC0E6%7D&DE=%7B1AF178A4-F115-4EDF-9972-5FD907BB6FDD%7D. Accessed: March 2018.~~

Section 4.3, Air Quality

The text on Page 9-8 (Line 37), in the subheading Section 4.3, Air Quality in Chapter 9, *References* is revised as follows:

City of Livingston. 1999. *General Plan*. December.

~~City of Livingston. 2008. City of Livingston 2025 General Plan. Adopted October 2008.~~

Section 4.4, Biological Resources

The text on Page 9-12 (Lines 1 to 5), in the subheading Section 4.4, Biological Resources in Chapter 9, *References* is revised as follows:

———. 2018b. *The CNPS Ranking System*. Available: http://www.cnps.org/cnps/rareplants/ranking.php. Accessed: February 2018.

Caltrans. 2015. Technical guidance for assessment and mitigation of the hydroacoustic effects of pile driving on fish. November. Sacramento, CA.

City of Atwater. 1991. Municipal Code: *Chapter 12.32 – Trees*. Available: https://www.municode.com/library/ca/atwater/codes/code_of_ordinances?nodeId=TIT12STSIPUPL_CH12.32TR. Accessed: January 2016.

The text on Page 9-12 (Line 1 to 5), in the subheading Section 4.4, Biological Resources in Chapter 9, *References* is revised as follows:

National Oceanic and Atmospheric Administration. 2016. *Essential Fish Habitat Mapper*. Available: http://www.habitat.noaa.gov/protection/efh/habitatmapper.html. Accessed: February 2018.

Popper, A. N., T. J. Carlson, A. D. Hawkins, B. L. Southall, and R. L. Gentry. 2006. Interim Criteria for Injury of Fish Exposed to Pile-Driving Operations: A White Paper. May.

San Joaquin County. 1995. *Municipal Code: Chapter 9, Division 15: Natural Resources Regulations, Section 1505: Trees*. Available: https://www.sjgov.org/commdev/cgi-bin/cdyn.exe/handouts-planning_ca_sjc_dev_T09-D15?grp=handouts-planning&obj=ca_sjc_dev_T09-D15. Accessed: January 2016.

Section 4.11, Land Use and Planning

The text on Page 9-24 (Line 13), in the subheading Section 4.11, Land Use and Planning in Chapter 9, *References* is revised as follows:

City of Livingston. 1999. *General Plan*. December.

~~City of Livingston. 2008. City of Livingston 2025 General Plan. Adopted October 2008.~~

Section 4.12, Noise and Vibration

The text on Page 9-26 (Line 15), in the subheading Section 4.12, Noise and Vibration in Chapter 9, *References* is revised as follows:

City of Livingston. 1999. *General Plan*. December.

~~City of Livingston. 2008. City of Livingston 2025 General Plan. Adopted October 2008.~~

The text on Page 9-26 (Lines 34 to 35), in the subheading Section 4.12, Noise and Vibration in Chapter 9, *References* is revised as follows:

Federal Railroad Administration. 2006. *Transit Noise and Vibration Impact Assessment.* FTA Report FTA-VA-90-1003-06. May 2006.

~~Federal Transit Administration. 2006. Transit Noise and Vibration Impact Assessment. FTA Report FTA-VA-90-1003-06. May 2006.~~

Section 4.13, Population and Housing

The text on Page 9-27 (Line 18), in the subheading Section 4.13, Population and Housing in Chapter 9, *References* is revised as follows:

City of Livingston. 1999. *General Plan*. December.

~~City of Livingston. 2008. *City of Livingston 2025 General Plan*. Adopted October 2008.~~

Section 4.14, Public Services

The text on Page 9-28 (Line 31), in the subheading Section 4.14, Public Services in Chapter 9, *References* is revised as follows:

City of Livingston. 1999. *General Plan*. December.

~~City of Livingston. 2008. *City of Livingston 2025 General Plan*. Adopted October 2008.~~

Section 4.17, Transportation and Traffic

Printed References

The text on Page 9-36 (Line 13), in the subheading Section 4.17, Transportation in Traffic in Chapter 9, *References* is revised as follows:

City of Livingston. 1999. *General Plan*. December.

~~City of Livingston. 2008. *City of Livingston 2025 General Plan*. Adopted October 2008.~~

Personal Communications

The text on Page 9-39 (Line 8), in the subheading Section 4.17, Transportation in Traffic in Chapter 9, *References* is revised as follows:

McWethy, Laura. Associate Travel Demand Forecaster. AECOM, August 31, September 20, 22, 23, October 3, 20, 21, 2016; February 9, 14, 15, 24, 27, March 1, 9, and 14, 2017—Email communications regarding ACE*forward* ridership model.

Chapter 6, Alternatives

The text on Page 9-46 (Lines 20 to 26), in the subheading Chapter 6, Alternatives in Chapter 9, *References* is revised as follows:

Alameda County Transportation Commission. 2016. Alameda County Goods Movement Plan. February. Available: http://www.alamedactc.org/files/managed/Document/18249/AlamedaCTC_GoodsMovementPlan_FINAL.pdf.

Alstom. No Date. Coradia Lint Regional Train. Available: http://www.alstom.com/products-services/product-catalogue/rail-systems/trains/products/coradia-lint-regional-train/. Accessed: July 2018.

City of Merced. 2015. *Merced City General Plan Map, Amended*. April. Available: https://www.cityofmerced.org/civicax/filebank/blobdload.aspx?BlobID=11489. Accessed: January 2018.

Merced County. n.d. *Merced County GIS Information Portal, Merced County General Plan Designation Application*. Available: https://mercedcounty.maps.arcgis.com/apps/View/index.html?appid=3d1bf43838f34d06b84346df4bacf1ef. Accessed: January 2018.

Nelson, David, Blakey and O'Neill. 2017. Diesel Multiple Units in 21st Century North America: A Comparative Survey and Evaluation of Services, Demand, and Costs. Transportation Research Record: Journal of the Transportation Research Board. Volume 2648. Available: https://trrjournalonline.trb.org/doi/abs/10.3141/2648-05.

San Joaquin Regional Rail Commission. 2017. ACEforward Draft Environmental Impact Report. May. Available: http://www.acerail.com/About/Public-Projects/ACEforward/DEIR.

Sheridan, Kevin. Director of Capital Projects. San Joaquin Regional Rail Commission. June 5, 2018 and July 15, 2018— emails from Clint Schelbitzki, Union Pacific Railroad regarding DMU Use on UPRR and potential relocation of the Fresno Subdivision mainline.

Stadler. No Date. Overview of References. Available: https://www.stadlerrail.com/en/references/overview-references/. Accessed: July 2018.

Appendix G, Regional Plans and Local General Plans

Table G-1 on page G-3 has been revised as follows:

City of Livingston
~~City of Livingston 2025 General Plan (City of Livingston 2008)~~
City of Livingston General Plan (City of Livingston 1999)

G.1 Aesthetics

Pages G-14 to G-15 have been revised as follows:

~~City of Livingston 2025 General Plan (City of Livingston 2008)~~ City of Livingston General Plan (City of Livingston 1999 ~~2008~~)

- **Land Use Policy 3.1-A-10 ~~11~~.** Exterior area lighting for non-residential land uses shall be shielded to prevent line of sight visibility of the light source from abutting property planned for single-family residential.
- **Land Use Policy 3.4-A-~~5~~4.** Industrial development should not create significant off-site circulation, noise, dust, odor, visual, and hazardous materials impacts that cannot be adequately mitigated.

- **Land Use Policy 3.4-A-5**. Major streets, which serve as entrances to the City, shall receive special design treatment to reduce aesthetic impacts and traffic concerns.
- ~~**Open Space, Conservation, and Recreation Policy 5.2-A-19.** New development should incorporate native vegetation into landscape plans and discourage the use of invasive, non-native plant species.~~
- ~~**Open Space, Conservation, and Recreation Policy 5.3-A-2.** Encourage the use of recycled water and drought-tolerant landscaping in municipal facilities, public roadway landscape, and new development projects.~~
- **Community Design Objective 7.1-A**. Improve the appearance of city streets and reduce visual clutter along the City's main thoroughfares/corridors.
- **Community Design Policy 7.1-A-5.** Establish coordinated and distinctive signage, accent plantings and paving materials for entries into the City. Locations for this treatment are Winton Parkway, Hammett Avenue, Main Street at Magnolia and Olive. As primary entrances to the City, these streets should reflect higher standards of development. Standards should contain provisions for minimum building setbacks, landscaping, sidewalk pattern and street furniture, with distinction made between upgrade of existing uses and new development. Proper orientation, design and architectural features shall be regulated through zoning and the site plan review process.
- **Community Design Policy 7.1-A-7.** Development standards shall be adopted for the gateways to the City to improve the practical function and aesthetic quality of those areas. Policy 3.4.A.5 shall be used as an interim standard until other standards are adopted.
- ~~**Community Design Policy 7.1-A-9.** All development proposals shall include preparation and implementation of a lighting plan to ensure compatibility with and to minimize impacts to adjoining land uses.~~
- **Community Design Policy 7.3-A-1~~2~~3.** The planting of street trees is encouraged for all existing and new commercial, industrial, and public facilities development.
- **Community Design Policy 7.3-A-1~~3~~4.** Buildings, landscaping, parking, and other development features shall be arranged in a manner that is compatible with the size, scale, and appearance of nearby development.
- **Community Design Policy 7.3-A-15.** Landscaped areas should be clustered on a site to maximize their effect on the public view.
- **Community Design Policy 7.3-A-16.** Landscaping should be used to define areas such as entrances to building and parking lots, define edges of various land uses, provide transition between neighboring properties (buffering), and provide screening for outdoor storage, loading and equipment areas.
- **Community Design Policy 7.3-A-17.** Landscaping should be in scale with adjacent buildings and be of appropriate size at maturity to accomplish its intended purpose.
- **Community Design Objective 7.3-B.** Ensure that industrial development is attractive and of high-quality design, to enhance the image of the city.
- **Community Design Policy 7.3-B-3.** Encourage the planning of street trees for existing and new industrial development.

- ~~**Community Design Policy 7.3-A-26.** All new commercial and public facilities development shall comply with the City of Livingston Design Guide.~~
- ~~**Community Design Policy 7.3-A-27.** Vegetative screening shall be installed around all new water detention facilities including detention basins and water tanks. (MM)~~

G.2 Agricultural Resources

Page G-24 has been revised as follows:

~~City of Livingston 2025 General Plan (City of Livingston 2008)~~ City of Livingston General Plan (City of Livingston 1999 ~~2008~~)

- ~~**Land Use Policy 3.5-C-1a. Resource Conservation Area**. This land use category provides for an area of separation between the City of Livingston and the City of Atwater. It is intended that this category be preserved as a permanent agriculture/open space area.~~
- ~~**Land Use Policy 3.5-C-2.** Urban development is not permitted within the Resource Conservation Area land use designation.~~
- ~~**Land Use Policy 3.5-C-5.** The City should establish a program for the purchase of development rights on the lands within the Resource Conservation Area by establishing a fee imposed on all development that displaces agricultural land.~~
- **Open Space, Conservation, and Recreation Objective 5.1-A.** Preserve prime farmland, farmland of statewide importance, and important agricultural operations within the City of Livingston Sphere of Influence until logical and orderly urban growth is appropriate.
- **Open Space, Conservation, and Recreation Policy 5.1-C-1.** Maintain a 20-acre minimum parcel size for Reserve designated parcels to encourage viable agricultural operation and to prevent parcelization into rural residential or "ranchette" developments.
- ~~**Urban Boundary Objective 6.1-B.** Preservation of the productive agricultural land around Livingston and minimization of conflicts between agricultural and urban uses.~~

G.3 Air Quality

Page G-31 has been revised as follows:

~~City of Livingston 2025 General Plan (City of Livingston 2008)~~ City of Livingston General Plan (City of Livingston 1999 ~~2008~~)

- **Circulation Objective 4.5-A.** Maximize the efficiency of the existing street system.
- **Circulation Objective 4.5-B.** Encourage the proximity of compatible land uses to reduce unnecessary automobile travel.
- **Circulation Policy 4.5-B-1.** The City encourages the use of energy efficient and non-polluting modes of transportation.
- ~~**Circulation Policy 4.8-C-2.** A multi-modal transportation system shall be planned that meets the needs of the community and improves air quality.~~

- **Circulation Objective 4.9-C.** A safe and convenient public transit system that meets the needs of all the economic segments of the community.
- **Open Space, Conservation, and Recreation Policy 5.2-B-~~2~~5.** To assist the City in meeting the clean air quality requirements of the federal and state Clean Air Acts, the San Joaquin Valley Unified Air Pollution Control District will be consulted to provide community planning guidance to help reduce potential air quality impacts.
- **Open Space, Conservation, and Recreation Policy 5.2-B-~~3~~8.** New construction activities shall comply with the PM-10 control measures as set forth by the San Joaquin Valley Unified Air Pollution Control District's *Guide for Assessing and Mitigating Air Quality Impacts.*
- **Open Space, Conservation, and Recreation Policy 5.2-B-~~9~~4.** The Guide for Assessing and Mitigating Air Quality Impacts ~~shall~~ will be used to evaluate and mitigate the effects of new developments to the extent feasible.

G.4 Energy

Page G-35 has been revised as follows:

~~City of Livingston 2025 General Plan (City of Livingston 2008)~~ City of Livingston General Plan (City of Livingston 1999 ~~2008~~)

- **Circulation Policy 4.5-B-1.** The City encourages the use of energy efficient and non-polluting modes of transportation.
- **Circulation Policy 4.5-B-3.** Promote the long term shifting of peak hour commute trips from the single occupant automobile to ridesharing, buses, pedestrian, and bicycles.
- **Circulation Objective 4.9-C.** A safe and convenient public transit system that meets the needs of all the economic segments of the community.
- ~~**Open Space, Conservation, and Recreation Objective 5.3-A.** Reduce consumption of non-renewable energy sources in Livingston.~~
    - ~~**Open Space, Conservation, and Recreation Policy 5.3-A-7.** The City shall encourage energy-efficient "green buildings" as certified by the U.S. Green Building Council's LEED (Leadership in Energy and Environmental Design) Program or equivalent certification.~~
    - ~~**Open Space, Conservation, and Recreation Policy 5.3-A-9.** During development review, the City shall require facilities in new developments to accommodate and encourage recycling.~~
    - ~~**Open Space, Conservation, and Recreation Policy 5.3-A-12.** The increased use of public transit, bicycles, and pedestrian access shall be promoted to reduce dependence on the automobile as the primary means of transportation.~~

G.5 Biological Resources

Pages G-48 to G-49 have been revised as follows:

~~City of Livingston 2025 General Plan (City of Livingston 2008)~~ City of Livingston General Plan (City of Livingston 1999 ~~2008~~)

- **Open Space, Conservation, and Recreation Objective 5.2-A.** Protect natural resources, including groundwater, soils, and air quality, to meet the needs of present and future generations.
    - **Open Space, Conservation, and Recreation Policy 5.2-A-6**. Promote biological diversity and the use of plant species compatible with the bio-region
    - **Open Space, Conservation, and Recreation Policy 5.2-A-7.** If street trees are removed, they shall be replaced with tree species specified on the City's Street Tree Master Plan
    - **Open Space, Conservation, and Recreation Policy 5.2-A-~~8~~10.** Properties which have the potential to support listed plant and animal species will be required to have a biological investigation as a condition of development. Surveys for species shall follow both federal and state protocols
    - ~~**Open Space, Conservation, and Recreation Policy 5.2-A-9.** The City shall protect and preserve open space and undisturbed natural areas. The City shall protect sensitive habitat, including creeks, from encroachment by livestock and human activities~~
    - ~~**Open Space, Conservation, and Recreation Policy 5.2-A-10.** The City shall protect all remaining riparian habitat to ensure there is "no net loss". This shall be achieved through avoidance, restoration, ore creation of new riparian habitat~~
    - ~~**Open Space, Conservation, and Recreation Policy 5.2-A-11.** The City shall protect all significant trees that are six inches or greater in dbh. Significant trees are those making substantial contribution to natural habitat or to the urban landscape due to their species, size or rarity.~~
    - ~~**Open Space, Conservation, and Recreation Policy 5.2-A-16.** Continuous wildlife habitat, including corridors free of human disruption, shall be preserved and where necessary, created by interconnecting open spaces, wildlife habitat, and corridors. The City shall consider loss of wildlife habitat and connectivity when evaluating new development projects. The City shall strive to retain and connect existing wildlife habitat within the city limits through open space, trails, or other corridors.~~
    - ~~**Open Space, Conservation, and Recreation Policy 5.2-A-18.** Construction activities shall be regulated to inhibit the establishment of noxious weeds through accidental seed import.~~
    - ~~**Open Space, Conservation, and Recreation Policy 5.2-A-19.** New development should incorporate native vegetation into landscape plans and discourage the use of invasive, non-native plant species.~~

G.10 Hydrology and Water Quality

Pages G-142 to G-143 have been revised as follows:

~~City of Livingston 2025 General Plan (City of Livingston 2008)~~ City of Livingston General Plan (City of Livingston 1999 ~~2008~~)

- **Open Space, Conservation, and Recreation Objective 5.2-A**. Protect natural resources, including groundwater, soils, and air quality, to meet the needs of present and future generations.
    - **Open Space, Conservation, and Recreation Policy 5.2-A-1.** Protect areas of natural groundwater recharge from land uses and disposal methods, which combine stormwater control, and water recharges. ~~would degrade groundwater quality. Promote activities that combine stormwater control and water recharges.~~
    - **Open Space, Conservation, and Recreation Policy 5.2-A-3.** No urban level development shall be approved in the City unless the development is, or can be served by the City sewer system.
- **Open Space, Conservation, and Recreation Objective 5.2-B.** Ensure that environmental hazards~~,~~ including potential flooding and impacts from agricultural practices ~~and urban development,~~ are adequately addressed in the development process within the City and the Livingston Sphere of Influence.
    - ~~**Open Space, Conservation, and Recreation Policy 5.2-B-1.** The City shall encourage the use of Low Impact Development (LID) standards in new development projects to reduce the impacts of stormwater runoff and to reduce pollutant loads in waterways. LID techniques that may be considered include bio-swales, bio-retention, green roofs, permeable paving, cisterns, tree box filters, and other appropriate techniques.~~
- **Public Services and Facilities Policy 9.1-~~A-7~~C-10.** Development in floodway areas shall be in accordance with regulations of the Federal Emergency Management Agency.
- **Public Services and Facilities Policy 9.1-~~A-1~~C-20.** Conditions of approval shall be implemented with each development to assure that the necessary water production, distribution, and/or treatment facility is in place prior to issuance of a building permit.
- **Public Services and Facilities Policy 9.1-~~B-4~~C-13.** Temporary drainage facilities such as ponding basins may be constructed by the developer if the major facilities are not available, subject to City determination and approval. ~~Approval will only be granted under the agreement that a permanent solution that would allow for the decommissioning of applicable temporary storm drainage basins within a reasonable time frame is imminent.~~ The developer will also be required to pay all applicable drainage fees in addition to constructing temporary facilities at his own cost.
- **Public Services and Facilities Objective 10.4-A.** Protect the lives and property of residents from the hazards of flooding.
    - **Public Services and Facilities Objective 10.4-A-1.** Consistent with ~~f~~Federal standards, the City shall plan for storm drainage facilities sufficient to address a 100-year flood event and require adequate storm drainage facilities to prevent flooding within the community.
    - **Public Services and Facilities Objective 10.4-A-2.** The City will maintain the ~~S~~storm ~~D~~drainage ~~M~~master ~~P~~plan for the City, including planned growth areas~~,~~ and require that development conform to it.

- **Public Services and Facilities Objective 10.4-A-3.** Development proposals shall be analyzed according to the ~~Storm Drainage Master Plan~~ *Storm Drain Collection System Study and Master Plan*. Development not within an existing ~~m~~Master ~~p~~Plan watershed area may be included in the boundaries of an adjacent area and subject to a revision of facilities and cost allocation thereof.

G.11 Land Use and Planning

Page G-157 has been revised as follows:

~~City of Livingston 2025 General Plan (City of Livingston 2008)~~ City of Livingston General Plan (City of Livingston 1999 ~~2008~~)

- **Land Use Policy 3.1-A-1.** No development shall be approved unless it is found to be consistent with the adopted Land Use Map and policies of the General Plan.
- **Land Use Policy 3.1-A-6.** The Conditional Use Permit process shall be used where site conditions or project location will affect land use compatibility. Findings required for approval shall include:
  a. The site for the proposed use is adequate in size and shape to accommodate said use and all yards, spaces, walls and fences, parking, loading, landscaping, and other features required by the applicable zone district.
  b. The site for the proposed use is served by streets and highways adequate to carry the quantity and kind of traffic generated by the proposed use.
  c. Public facilities are currently adequate to serve the proposed use or improvements are included in an approved Capital Improvement Plan or otherwise will be complete prior to the issuance of building permits.
  d. The proposed development is consistent with the General Plan Land Use Map and policies.
- **Land Use Policy 3.3-~~C~~B-2.** In order to encourage the integration of neighborhood and community commercial uses into neighborhoods, designs should de-emphasize the usage of walls as buffers where they create barriers to pedestrian access. Continuous block walls shall be discouraged, and offsets, landscaping pockets and openings shall be encouraged.

G.12 Noise and Vibration

Pages G-164 to G-166 have been revised as follows:

~~City of Livingston 2025 General Plan (City of Livingston 2008)~~ City of Livingston General Plan (City of Livingston 1999 ~~2008~~)

- **Circulation Policy 4.9-B-4.** Ensure that heavy vehicles utilize Livingston's truck routes as a guide for maintaining an efficient circulation system.
- **Noise Objective 8.1-A.** To protect the citizens of the City from the harmful and annoying effects of exposure to excessive noise.

- **Noise Objective 8.1-B.** To protect the economic base of the City by preventing incompatible land uses from encroaching upon existing or planned noise-producing uses.
- **Noise Objective 8.1-C.** To preserve the tranquility of residential areas by preventing noise-producing uses from encroaching upon existing or planned noise-sensitive uses.
- **Noise Objective 8.1-E**. To emphasize the reduction of noise impacts through careful site planning and project design, giving second preference to the use of noise barriers and/or structural features to buildings containing noise-sensitive land uses.
    - **Noise Policy 8.1-1.** Table 8-1 depicts the ranges of noise exposure from transportation noise sources which are considered to be acceptable, conditionally acceptable, or conditionally unacceptable for the development of different land uses. Table 8-1 shall be used to determine whether mitigation is needed for development of land uses near major transportation noise sources.
        a) In areas where the noise environment is acceptable, new development may be permitted without requiring noise mitigation.
        b) For areas where the noise environment is conditionally acceptable, new development shall be allowed only after noise mitigation has been incorporated into the design of the project to reduce noise exposure to the levels specified by the Noise Element.
        c) For areas where the noise environment is conditionally unacceptable, new development in compliance with the policies of the Noise Element may not be feasible.
    - **Noise Policy 8.1-~~3~~4.** Noise created by new transportation noise sources, including roadway improvement projects, shall be mitigated so as not to exceed the noise levels specified in Table 8-2.
    - ~~**Noise Policy 8.1-7.** Ensure that heavy vehicles utilize Livingston's truck routes as a guide for maintaining an efficient circulation system.~~
    - **Noise Policy 8.1-~~11~~7.** The preferred method of noise control is thoughtful site design. Secondarily, noise control should be achieved through the use of noise barriers.
    - **Noise Policy 8.1-~~12~~8.** Development plans, programs, and proposals shall not be approved unless they are in compliance with the policies of the Noise Element.
    - **Noise Policy 8.1-~~13~~9.** Prior to approval of the proposed development in a noise impacted area, or the development of an industrial, commercial, or other noise generating land use in or near an area containing existing or planned noise-sensitive land uses, an acoustical analysis may be required if:
        a) The existing or projected future noise exposure at the exterior of buildings which will contain noise sensitive uses or within proposed outdoor activity areas (patios, decks, backyards, pool areas, recreation areas, etc.) may exceed 65 dB Ldn (or CNEL).
        b) Interior residential noise levels resulting from off-site noise may exceed 45 dBA.
    - **Noise Policy 8.1-~~14~~10.** When noise studies are necessary they shall:
        a) Be the responsibility of the applicant.

b) Be prepared by an individual or firm with demonstrable experience in the fields of environmental noise assessment and architectural acoustics.

c) Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions.

d) Include estimated noise levels for existing and projected future (10-20 years hence) conditions, with a comparison made to the adopted policies of the Noise Element.

e) Include recommendations for appropriate mitigation measures to achieve compliance with the adopted policies and standards of the Noise Element.

f) Include estimate of noise exposure after the prescribed mitigation measures have been implemented.

G.14 Public Services

Page G-175 has been revised as follows:

~~City of Livingston 2025 General Plan (City of Livingston 2008)~~ City of Livingston General Plan (City of Livingston 1999 ~~2008~~)

- **~~Urban Boundary Policy 6.2-B-2.~~** ~~The City will only approve development proposals adequately funded through the developer, City, or other funding mechanism that ensures an ongoing level of public service and facilities that meets the City's established service levels. The initial cost of improving facilities and services, as well as the ongoing operation and maintenance of these facilities and services, will be taken into consideration.~~
- **Public Services and Facilities Policy 10.2-A-2**. The standard of one fire company for every 10,000 residents shall be used to evaluate fire protection services.
- **Public Services and Facilities Policy 10.2-A-3**. The City's fire service response goal shall be ~~6~~six minutes from "tone-out" to arrival on scene.
- **Public Services and Facilities Policy 10.3-A-1**. Maintain a police staffing ratio of one sworn officer for every 1,000 residents.

G.15 Recreation

Page G-177 has been revised as follows:

~~City of Livingston 2025 General Plan (City of Livingston 2008)~~ City of Livingston General Plan (City of Livingston 1999 ~~2008~~)

- **Open Space, Conservation, and Recreation Objective 5.3~~4~~-A.** To provide recreational opportunities for the existing community and projected population in future growth areas~~ in accordance with the Parks and Recreation Master Plan~~.
  - **~~Open Space, Conservation, and Recreation Policy 5.4-A-6.~~** ~~Encourage developers to design and build parks, especially neighborhood parks, in lieu of paying fees.~~
  - **Open Space, Conservation, and Recreation Policy 5.4-A-~~32~~27.** Efforts should be made to reuse abandoned railroad rights-of-way for regional recreational bike trails.

G.16 Safety and Security

Page G-186 has been revised as follows:

~~City of Livingston 2025 General Plan (City of Livingston 2008)~~ City of Livingston General Plan (City of Livingston 1999 ~~2008~~)

- **Circulation Policy 4.4-A-2~~4.3/A/2~~**. The street network shall provide a quick and efficient route for emergency vehicles, including police, fire and other vehicles, when responding to calls for service. The length of single-entry access routes shall be restricted.

G.17 Transportation and Traffic

Page G-196 has been revised as follows:

~~City of Livingston 2025 General Plan (City of Livingston 2008)~~ City of Livingston General Plan (City of Livingston 1999 ~~2008~~)

- **Circulation Policy 4.~~1~~9-A-~~11~~9**. The City designates Service Level "~~D~~C" as defined in the Highway Capacity Manual (published by the Transportation Research Board of the National Research Council) as the minimum desirable service level at which arterial streets and collector streets should operate. All new facilities in these categories shall be designed to operate at this level or better for a period of at least 20 years following their construction.
- **Circulation Policy 4.~~1~~2-A-1~~6~~4**. No development shall be approved unless it is found to be consistent with the adopted Circulation Element and policies of the General Plan.
- ~~**Circulation Policy 4.2-A-1**. Move heavy truck traffic efficiently through the City using truck routes as designated on Figure 4-5.~~
- **Circulation Policy 4.~~2~~3-A-2**. Route heavy traffic to designated ~~Major Arterial, Minor Arterial, and Collector~~ arterial and collector streets only and away from Local Residential Streets.
- **Circulation Policy 4.~~2~~3-A-3**. Provide adequate access to busy destination points such as shopping centers, recreational sites, and employment centers.
- **Circulation Policy 4.~~2~~3-B-1**. Pursue expansion of industrial facilities that will use railroad freight services.
- **Circulation Policy 4.~~3~~4-A-2**. The street network shall provide a quick and efficient route for emergency vehicles, including police, fire and other vehicles, when responding to calls for service. The length of single-entry access routes shall be restricted.
- **Circulation Policy 4.~~3~~4-A-3**. SH 99, Livingston-Cressey Road, Main Street, B Street, Campbell Avenue, and Walnut Avenue are designated as vehicular evacuation routes out of the City (Figure 4-~~6~~4).
- **Circulation Policy 4.~~3~~4-B-1**. Minimize hazardous encounters among all transportation modes by utilizing special safety techniques and precautions at intersecting points.
- **Circulation Policy 4.~~3~~4-C-~~7~~8**. Developers shall mitigate traffic impacts associated with their projects.

- **Circulation Policy 4.4~~5-A~~5-A-1**. The City encourages the use of energy efficient and non-polluting modes of transportation.
- **Circulation Policy 4.8-A-1**. Foster alternative forms of transportation aimed at reducing vehicle trips and encouraging pedestrian and bicycle mobility, carpooling, and use of transit.

G.18 Utilities and Service Systems

Page G-203 has been revised as follows:

~~City of Livingston 2025 General Plan (City of Livingston 2008)~~ City of Livingston General Plan (City of Livingston 1999 ~~2008~~)

- **Community Design Policy 7.1-A-2.** The undergrounding of utilities along the City's main corridors is a priority. In developing areas, new development projects shall place all utility lines underground. The City will also explore a range of options for undergrounding utilities in existing developed areas.
- **Public Services and Facilities Policy 9.1-A-1~~1~~9**. The City shall require the connection of existing and new businesses, residences, and industries to the City's water and sewer system. The City shall establish fees which enable it to recover the costs of such connection.
- **Public Services and Facilities Policy 9.1-A-~~12~~24.** Conditions of approval shall be implemented with each development to assure that the necessary sewer collection facility is in place and/or wastewater treatment plant and adequate disposal capacity is available prior to issuance of a building permit.
- ~~**Public Services and Facilities Policy 9.1-A-16.** Conditions of approval shall be implemented with each development to assure that the necessary sewer collection facility is in place and/or wastewater treatment plant and adequate disposal capacity is available prior to issuance of a building permit.~~
- **Public Services and Facilities Policy 9.1-~~B-1~~5.** Developers shall prepare an infrastructure and public services assessment as part of each annexation application to determine infrastructure needs, feasibility, timing, and financing.

G.19 References

Pages G-207 to G-208 have been revised as follows.

~~**City of Tracy**~~

~~City of Tracy. 2002. City of Tracy Municipal Code, Chapter 7.08 Trees and Shrubbery.~~

~~———. 2005a. City of Tracy Bikeways Master Plan. April.~~

~~———. 2005b. City of Tracy Municipal Code, Chapter 11.34 Stormwater Management and Discharge Control.~~

~~———. 2009. City of Tracy Downtown Specific Plan. March.~~

~~———. 2011. City of Tracy General Plan.~~

~~———. 2012. Ellis Specific Plan. Amended December 2012. Prepared by: The Surland Companies.~~

~~———. 2013. City of Tracy Municipal Code, Chapter 11.30 Recycled and Non-Potable Water.~~

~~———. 2015. City of Tracy Municipal Code, Chapter 9.52 Floodplain Regulations.~~

~~———. 2016. Tracy Hills Specific Plan. Adopted April 5, 2016.~~

Page G-209 has been revised as follows.

City of Livingston

City of Livingston. 1993. *City of Livingston Municipal Code, Chapter 9-11 Water Efficient Landscaping and Irrigation*.

———. 1995. *City of Livingston Municipal Code, Chapter 4-5 Floodplain Management*.

———. 1999. *General Plan*. December.

———. 2000. *City of Livingston Municipal Code, Chapter 9-6 Sewers Service Systems*.

———. 2005. *City of Livingston Municipal Code, Chapter 5-4 General Site Development Regulations*.

———. 2006. *City of Livingston Municipal Code, Chapter 8-2 Waste and Recyclable Materials*.

~~———. 2008. *City of Livingston General Plan 2025*. October.~~

———. 2009. *City of Livingston Municipal Code, Chapter 4-6 Grading, Erosion, and Sedimentation Control*.

Appendix L-1, ACE Extension Archeological Inventory Report

Chapter 3, Environmental and Cultural Setting

Page 3-1, in Chapter 3, Environmental and Cultural Setting of Appendix L-1, ACE Extension Archeological Inventory Report is revised as follows:

The geologic history of the study area represents the complex and diverse tectonic development of the California continental margin from a convergent margin to a transform boundary. Much of the deformation and uplift is thought to be largely caused by transverse and compressional deformation of blocks of the Pacific and North American plates along the various faults of the region (Montgomery 1993; ~~Saucedo et al. 2016~~). The mountains and ridges that comprise the Coastal Ranges began to deform during the middle to late Miocene epoch (i.e., around 23 to 5.3 million years before present) and continued into the late Pliocene and early Pleistocene. The present day topography is thought to be largely resultant from Miocene and younger tectonic activity (Montgomery 1993\). As the region uplifted, the ranges were incised by streams and sediments collected in the valleys that parallel the mountains and ridges. This process has continued into the present. The Great Valley, with exception of the Los Angeles Basin and along

major fault zones, has undergone only relatively minor internal deformation in comparison to the Coastal Ranges. The San Andreas fault is a prominent structural feature in the mountains of the Southern Coastal Range and runs through the southwest side of the Santa Cruz Mountains and Gavilin Ranges to the west of the study area (Montgomery 1993). The Hayward Fault zone is a prominent structural feature throughout the eastern side of the Coastal range and bounding the Great Valley to the east.

Chapter 9, Bibliography

Page 9-2, in Chapter 9, Bibliography of Appendix L-1, ACE Extension Archeological Inventory Report is revised as follows:

~~Morton, D M., and F. K. Miller. 2006. Geologic map of the San Bernardino and Santa Ana 30' x 60' quadrangles, California: Version 1.0: California Geological Survey, Geologic Maps California 1:100,000. Department of Conservation.~~

Office of the Federal Registrar. 1970. Code of Federal Regulations: Title 33, Part 200 to End Title 34. Washington, D.C.: Office of the Federal Registrar.

Ragir, S. 1972. The Early Horizon in Central California Prehistory. Contributions of the University of California Archaeological Research Facility 15.

Rosenthal, J. S., G. G. White, and M. Q. Sutton. 2007. The Central Valley: A View from the Catbird's Seat. California Prehistory: Colonization, Culture, and Complexity. Terry L. Jones and Kathryn A. Klar, eds. Lanham, MD: AltaMira Press.

~~Saucedo, G.J., H. G Greene, M P. Kennedy, and S. P. Bezore. 2006. Geologic Map of the Long Beach 30' x 60' Quadrangle, California: Version 2.0: California Geological Survey, Preliminary Geologic Maps California 1:100,000. Department of Conservation.~~

Page 9-3, in Chapter 9, Bibliography of Appendix L-1, ACE Extension Archeological Inventory Report is revised as follows:

~~Wentworth et al. 1999. REFERENCE PENDING.~~

Chapter 5
Lathrop Wye Double Track Description and Impact Analysis

As described in Chapter 1, *Introduction*, during the preparation of the final EIR, SJRRC and UPRR identified the need for an additional track improvement in one location to support the ACE Extension to Ceres and Merced. This chapter provides a description of the **Lathrop Wye Double Track** improvement and the environmental effects of the physical changes related to the improvement. Appendix C, *Lathrop Wye Double Track 15% Preliminary Engineering Plans* of this final EIR contains the track plans and section drawings, structure plans, roadway plans, utility plans, and ROW plans for this improvement.

5.1 Description of Lathrop Wye Double Track

The **Lathrop Wye Double Track** is a Phase I improvement. The Lathrop Wye is located between the city of Lathrop and the city of Manteca, where the Fresno Subdivision, Tracy Subdivision, and Oakland Subdivisions interface. The Fresno Subdivision travels south through Lathrop as a double track railroad. As it gets to the Lathrop Wye, the western track continues south and becomes the Tracy Subdivision. The eastern track turns east and continues on a generally south-eastern alignment, remaining the Fresno Subdivision. Just to the east of this curve is where the Fresno Subdivision crosses the Oakland Subdivision.

As shown in Figure 5-1, improvements that are part of the **Lathrop Wye Double Track** are as follows.

- Construction of a new 1.7-mile track connecting the Fresno Subdivision at MP 93.03 to the Fresno Subdivision at MP 94.70.
- Realignment of portions of the existing track between the Fresno Subdivision at MP 93.03 to the Fresno Subdivision at MP 94.70 and the Tracy Subdivision at MP 81.83 to the Oakland Subdivision at MP 84.44.
- New at-grade crossing at McKinley Avenue at MP 93.33 on the Fresno Subdivision.
- Modification of the existing McKinley Avenue at-grade crossing at MP 81.89 on the Tracy Subdivision and MP 93.33 on the Fresno Subdivision.
- New at-grade crossing at S Airport Way at MP 94.47 on the Fresno Subdivision.
- 15-feet extension of the existing culvert crossing over an irrigation canal at MP 93.87 on the Fresno Subdivision
- Reconnection to the existing turnouts on the Oakland Subdivision and the northern spur track just east of McKinley Ave.

The new 1.7-mile second main track would cross over from the existing Fresno Subdivision at MP 93.03 to the Fresno Subdivision at MP 94.70. To accommodate the additional track, the existing tracks would also be realigned between the Fresno Subdivision at MP 93.03 to the Fresno Subdivision at MP 94.70 and between the Tracy Subdivision at MP 81.83 to the Oakland Subdivision

at MP 84.44. Following the same alignment as the existing tracks, the new track would cross McKinley Avenue at MP 93.33 on the Fresno Subdivision. The new track would also cross S Airport Way at MP 94.47 on the Fresno Subdivision. Modifications to the McKinley Avenue at grade crossing for the third track would include installing concrete crossing panels[1] where the tracks cross the roadway, removing the two existing railroad crossing signals and guard/gates between the two existing tracks, and installation of a new signal house to operate the new crossing as one long crossing. Modifications to the S. Airport Way at grade crossing for the second main track would include installing concrete crossing panels where the tracks cross the roadway, relocating the stop bar,[2] and relocating the existing railroad crossing signal, guard/gate, and signal house.[3] The new track connection would cross an existing irrigation canal north of East Louise Avenue. The existing culvert over an irrigation canal at MP 93.87 on the Fresno Subdivision would be extended by 15 feet. All improvements for the **Lathrop Wye Double Track** would be located within the existing UPRR ROW, and no new ROW would be acquired for this improvement.

5.1.1 Construction Equipment and Schedule

The construction equipment used for the **Lathrop Wye Double Track** would be the same as the equipment described in Chapter 2 for the Lathrop to Ceres second track. The duration for construction of the **Lathrop Wye Double Track** would be 12 months. The overall schedule for ACE Extension would remain the same. As described in Section 2.5.2, *Construction Schedule and Durations* on page 2-32 of the draft EIR, SJRRC proposes to implement the ACE service extension to Ceres possibly as soon 2020, no later than 2023.

5.1.2 Costs

The cost for the **Lathrop Wye Double Track** would be $26,729,033. The **Lathrop Wye Double Track** would increase the total Phase I cost of the Proposed Project from $303,263,690 to $329,992,724. The **Lathrop Wye Double Track** would increase the range of potential costs with alternatives from $269,152,206 – $328,160,470 to $295,881,240 – 356,463,789. Appendix D, *Updated ACE Extension Opinion of Probable Cost Report* of this final EIR contains the updated cost estimate.

[1] *Crossing panels* are installed so that the tracks lie flush with the roadway.

[2] A *stop bar* is placed near an at-grade crossing to warn drivers and pedestrians of an approaching railroad crossing.

[3] A *signal house* stores the electrical devices used to operate the at-grade crossing signals.

ICF Graphics – 197.18 (6-15-2018)

ACE ALTAMONT CORRIDOR EXPRESS

Figure 5-1
Lathrop Wye Double Track
ACE Extension Lathrop to Ceres/Merced

5.2 Environmental Impacts of the Lathrop Wye Double Track

5.2.1 Aesthetics

5.2.1.1 Impact Analysis

The improvements associated with the **Lathrop Wye Double Track** would occur entirely within the UPRR ROW and would have similar impact to visual aesthetics as other track improvements located within the UPRR ROW.

Construction of the **Lathrop Wye Double Track** would include the same construction equipment and activities as other Phase I track improvements. Impact AES-1 in Section 4.1, *Aesthetics*, identifies that construction of the Phase I improvements would result in a potentially significant visual changes due to the introduction of construction activities and equipment into the viewsheds and due to fugitive dust created during construction. Construction of the **Lathrop Wye Double Track** would result in the same potentially significant impact because construction of the **Lathrop Wye Double Track** would use the same equipment and would require the same construction activities as other Phase I improvements. As described in Impact AES-1 in Section 4.1, *Aesthetics*, implementation of Mitigation Measures AES-1.1, AES-1.2, AES-1.3, and AQ-2.5 would reduce construction impacts to a less-than-significant level by installing visual barriers between construction and sensitive receptors, limiting work to daylight hours adjacent to sensitive receptors, limiting construction lighting near sensitive receptors, and limiting fugitive dust. Thus, the impacts on visual changes from construction of the **Lathrop Wye Double Track** would be less than significant after mitigation.

As explained in Impact AES-2 in Section 4.1, *Aesthetics*; visual changes resulting from operation would only occur if an improvement directly affected a landscaped freeway or if the improvement introduced a significant visual feature into the landscape. Like the **Oakland-Fresno Subdivision** Connection, the **Lathrop Wye Double Track** would be limited to track improvements in the rail corridor and would not be located near a landscaped freeway. The **Lathrop Wye Double Track** would not include any new features, such as platforms, parking lots, pedestrian bridges, or utility lines. Because the **Lathrop Wye Double Track** would be limited to the rail corridor and because no new substantial visual features would be introduced, the operational visual impact would be less than significant.

Like other Phase I improvements, there are no officially designated and eligible state scenic highways, or county- and city-designated scenic roadways within 3 miles of the **Lathrop Wye Double Track**. Thus, the operation of the **Lathrop Wye Double Track** would result in no impact on scenic resources within a state scenic highway.

As explained in Impact AES-4 in Section 4.1, *Aesthetics*; light and glare impacts would result from the installation of new lighting and from the removal of trees and landscaping associated with the project. No nighttime lighting is proposed along the **Lathrop Wye Double Track**; however, incremental increases in glare would occur along areas where trees and shrubs are removed to accommodate construction of the **Lathrop Wye Double Track**. These changes would not substantially increase glare because vegetation outside the ROW would remain to shade the corridor. Thus, the light and glare impacts associated with the **Lathrop Wye Double Track** would be less than significant.

5.2.1.2 Overall Impact Conclusion

Construction and operation of the **Lathrop Wye Double Track** would result in additional impacts to aesthetic resources previously identified in Section 4.1, *Aesthetics*; however, these impacts can be reduced to a less than significant level with previously identified mitigation. Operational impacts would be the same as disclosed in Section 4.1, *Aesthetics*. The significance conclusions in Section 4.1, *Aesthetics* are not changed with the addition of the **Lathrop Wye Double Track**.

5.2.2 Agricultural Resources

5.2.2.1 Impact Analysis

The improvements associated with the **Lathrop Wye Double Track** would occur entirely within the UPRR ROW and would have similar impact to agricultural improvements as other improvements located within the UPRR ROW.

The **Lathrop Wye Double Track** contains areas mapped as Important Farmland within the existing UPRR ROW (see Figure 5-2). As explained in Impact AG-1 in Section 4.2, *Agricultural Resources*, areas that are mapped as Important Farmland and are located within the existing UPRR ROW are not currently used for agricultural purposes. As such, the **Lathrop Wye Double Track** would not result in the permanent or temporary use of agricultural resources and there would be no impact on Important Farmlands. Furthermore, the **Lathrop Wye Double Track** would not affect agricultural infrastructure because the land mapped as Important Farmland within the existing UPRR ROW are not currently being used for agricultural purposes. Thus, implementation of the **Lathrop Wye Double Track** would not affect Important Farmland or agricultural infrastructure because the areas of Important Farmland mapped at **Lathrop Wye Double Track** are within the existing UPRR ROW and are not being used for agricultural purposes.

The **Lathrop Wye Double Track** is not located on lands protected under a Williamson Act contract or other agricultural land protection mechanisms; thus, the **Lathrop Wye Double Track** would not conflict with a Williamson Act contract or other agricultural lands protection mechanism.

Construction of the **Lathrop Wye Double Track** would not result in any impacts to confined animal facilities because there are no confined animal facilities located within 2,500 feet of the **Lathrop Wye Double Track** improvement. The closest confined animal facilities are located off of Austin Road, south of Manteca. These facilities are located approximately 4.5 miles south east of the **Lathrop Wye Double Track**. The operation of ACE Extension with the **Lathrop Wye Double Track** would be the same as the operational scenarios analyzed in the draft EIR. Therefore, the impact of operating the **Lathrop Wye Double Track** would be the same as the less than significant impact identified in Impact AG-4 in Section 4.2, *Agricultural Resources*.

The draft EIR identified potential impacts from the creation of unviable agricultural remnant parcel due to the severance of agricultural parcels. The **Lathrop Wye Double Track** is located within the existing UPRR ROW, which is currently being used for railroad operation and not for agricultural use. Therefore, the **Lathrop Wye Double Track** would not create any unviable agricultural remnant parcels and therefore there would be no additional impacts due to unviable agricultural remnant parcels beyond that disclosed in Section 4.2, *Agricultural Resources*.

Figure 5-2
Lathrop Wye Double Track - Important Farmlands
ACE Extension Lathrop to Ceres/Merced

5.2.2.2 Overall Impact Conclusion

Construction and operation of the **Lathrop Wye Double Track** would not result in any additional impact to agricultural resources beyond that disclosed in Section 4.2, *Agricultural Resources* for the reasons disclosed above. The significance conclusions in Section 4.2, *Agricultural Resources* are not changed with the addition of the **Lathrop Wye Double Track**.

5.2.3 Air Quality

5.2.3.1 Impact Analysis

Construction and operation of the **Lathrop Wye Double Track** would have the same impact (less than significant after mitigation) associated with conflicting with applicable air quality plans, as described in Impact AQ-1 in Section 4.3, *Air Quality*. Like the other Phase I improvements, construction and operation of the **Lathrop Wye Double Track** would be consistent with the growth anticipated by the relevant land use plans and would thus be consistent with the current Bay Area Air Quality Management District (BAAQMD) and San Joaquin Valley Air Pollution Control District (SJVAPCD) air quality plans. As described in Impact AQ-1 in Section 4.3, *Air Quality*, SJVAPCD establishes thresholds for NO_X emissions and construction of the Phase I improvements, including the **Lathrop Wye Double Track** would exceed those thresholds. However, as shown in Table 5-2, Mitigation Measures AQ-2.1 through AQ-2-4 would reduce construction-related NO_X emissions below SJVAPCD's annual threshold. Accordingly, construction of the Phase I improvements, including the **Lathrop Wye Double Track** would not conflict with applicable air quality plans with implementation of mitigation. The impact would be less than significant after mitigation.

Like other Phase I Improvements, construction of the **Lathrop Wye Double Track** has the potential to create air quality impacts through the use of construction equipment and fugitive emissions from site grading and asphalt paving. Criteria pollutant emissions generated by construction of the **Lathrop Wye Double Track** were quantified using the same methodology described in Impact AQ-2a in Section 4.3, *Air Quality*. Table 5-1 summarizes estimated construction-related emissions in the SJVAPCD with implementation of Mitigation Measures AQ-2.1 through AQ-2.4 for construction of just the **Lathrop Wye Double Track**. Table 5-2 summarizes estimated construction-related emissions in SJVAPCD with implementation of Mitigation Measures AQ-2.1 through AQ-2.4 for construction of all Phase I improvements, including the **Lathrop Wye Double Track**.

Table 5-1. Estimated Mitigated Construction Criteria Pollutant Emissions from Construction of the Lathrop Wye Double Track in the San Joaquin Valley Air Pollution Control District

Construction Year	Average Pounds per Day						Tons per year					
	ROG	NO_X	CO	PM10	PM2.5	SO_2	ROG	NO_X	CO	PM10	PM2.5	SO_2
2019	0	2	5	3	1	0	0	0	1	0	0	0
2020	0	1	1	1	0	0	0	0	0	0	0	0
2021	0	0	1	1	0	0	0	0	0	0	0	0
Threshold [a]	*100*	*100*	*100*	*100*	*100*	*100*	*10*	*10*	*100*	*15*	*15*	*27*

Exceedances of air district thresholds are shown in underline. Emissions include implementation of Mitigation Measures AQ-2.1 through AQ-2.4 and compliance with SJVAPCD Regulation VIII.

[a] The 100-pound-per-day threshold is a screening-level threshold to help determine whether increased emissions from a proposed project will cause or contribute to a violation of CAAQS or NAAQS. Projects with emissions below the threshold will not be in violation of CAAQS or NAAQS. Projects with emissions above the threshold would require an AAQA to confirm this conclusion (San Joaquin Valley Air Pollution Control District 2015).

ROG = reactive organic gases
NO_X = nitrogen oxide
CO = carbon monoxide
PM10 = particulate matter that is 10 microns in diameter and smaller
PM2.5 = particulate matter that is 2.5 microns in diameter and smaller
SO_2 = sulfur dioxide
SJVAPCD = San Joaquin Valley Air Pollution Control District
AAQA = ambient air quality analysis

Table 5-2. Estimated Mitigated Construction Criteria Pollutant Emissions from Phase I Construction, including the Lathrop Wye Double Track in the San Joaquin Valley Air Pollution Control District

Construction Year	Average Pounds per Day						Tons per year					
	ROG	NO_X	CO	PM10	PM2.5	SO_2	ROG	NO_X	CO	PM10	PM2.5	SO_2
2019	5	52	<u>126</u>	80	30	0	1	6	15	10	4	0
2020	1	13	31	20	8	0	0	2	4	2	1	0
2021	0	4	10	6	2	0	0	0	0	0	0	0
Threshold [a]	*100*	*100*	*100*	*100*	*100*	*100*	*10*	*10*	*100*	*15*	*15*	*27*

Exceedances of air district thresholds are shown in <u>underline</u>. Emissions include implementation of Mitigation Measures AQ-2.1 through AQ-2.4 and compliance with SJVAPCD Regulation VIII.

[a] The 100-pound-per-day threshold is a screening-level threshold to help determine whether increased emissions from a proposed project will cause or contribute to a violation of CAAQS or NAAQS. Projects with emissions below the threshold will not be in violation of CAAQS or NAAQS. Projects with emissions above the threshold would require an AAQA to confirm this conclusion (San Joaquin Valley Air Pollution Control District 2015).

ROG = reactive organic gases
NO_X = nitrogen oxide
CO = carbon monoxide
PM10 = particulate matter that is 10 microns in diameter and smaller
PM2.5 = particulate matter that is 2.5 microns in diameter and smaller
SO_2 = sulfur dioxide
SJVAPCD = San Joaquin Valley Air Pollution Control District
AAQA = ambient air quality analysis

Table 4.3-12 in Section 4.3, *Air Quality* identifies that Mitigation Measures AQ-2.1 through AQ-2.4 would minimize impacts below thresholds for all criteria pollutants except for carbon monoxide (CO), which would exceed the ambient air quality analysis (AAQA) trigger for construction of the Phase I improvements (without the **Lathrop Wye Double Track**). Table 5-2 shows that, after implementation of Mitigation Measures AQ-2.1 through AQ-2.4, the only impact from construction of the **Lathrop Wye Double Track** would be for CO emissions, which would be increased from 120 pounds per day without the **Lathrop Wye Double Track** to 126 pounds per day with the **Lathrop Wye Double Track** in 2019. Impact AQ-2a in Section 4.3, *Air Quality* identifies that dispersion modeling confirms that CO concentrations from construction activity would not violate California ambient air quality standards (CAAQS). Even with the addition of the **Lathrop Wye Double Track** the dispersion modeling would still apply because the model identifies the worst-case maximum CO impact from all stations and track improvements. This worst-case scenario would occur during construction of **Ripon Station** and the associated track improvements. The addition of the **Lathrop Wye Double Track** would not change the worst-case scenario; therefore, the impact identified in Impact AQ-2a in Section 4.3, *Air Quality* would apply for construction of the **Lathrop Wye Double Track**. The impact associated with a violation of air quality standards for construction of the **Lathrop Wye Double Track** would be less than significant after mitigation.

Operation of ACE with the **Lathrop Wye Double Track** would be the same as the operational scenarios described in the draft EIR. Thus, operation of ACE with the **Lathrop Wye Double Track** would result in the same less than significant impact on criteria pollutant emissions as described in Impact AQ-2b in Section 4.3, *Air Quality*.

As discussed in Impact AQ-3 in Section 4.3, the project level thresholds consider relevant past, present, and reasonably foreseeable future projects within the San Francisco Bay Area Air Basin (SFBAAB) and the San Joaquin Valley Air Basin (SJVAB). Thus, the project level thresholds represent the maximum emissions the improvement may generate before contributing to a cumulative impact on regional air quality. As described above, Mitigation Measures AQ-2.1 through AQ-2.4 would reduce construction-related NO_X emissions below SJVAPCD's significance threshold and the operational emissions would be below emission thresholds. Thus, construction and operation of the Phase I improvements, including the **Lathrop Wye Double Track** would result in a less than significant impact after mitigation on cumulative air quality impacts.

Impact AQ-4a in Section 4.3, *Air Quality* identifies that modeling was conducted to assess the potential impacts from additional motor vehicles at existing and new ACE stations and at railway crossings. CO concentrations in Impact AQ-4a were estimated at North 9th Street and Coldwell Avenue in Modesto in the SJVAPCD, which represent the most affected CMP intersections (i.e., highest traffic volumes and worst levels of congestion/delay). Even with the addition of the **Lathrop Wye Double Track** the modeling would still apply because the model identifies the worst-case maximum CO impact. The addition of the **Lathrop Wye Double Track** would not change the worst-case scenario; therefore, the impact identified in Impact AQ-4a in Section 4.3, *Air Quality* would apply for construction of the **Lathrop Wye Double Track**. The impact associated with exposing sensitive receptors to substantial CO concentrations form increased passenger rail tragic due to of the **Lathrop Wye Double Track** would be less than significant.

Impact AQ-4b in Section 4.3, *Air Quality* identifies the estimated inhalation health risk for the Phase I improvements. The sensitive receptors located at the southern portion of the **Lathrop Wye Double Track** were identified to be located in the same proximity to sensitive receptors as the **Ceres**

Extension Alignment (Lathrop-Modesto alignment). Thus, the cancer risk and chronic hazard index from construction of the **Lathrop Wye Double Track** would be the same as the Lathrop-Modesto alignment, as shown in Table 4.3-17 in Section 4.3, *Air Quality*. The cancer risk for the **Lathrop Wye Double Track** (<0.1 per million) would be below the SJVAPCD threshold (20.0 per million). The chronic health index for the **Lathrop Wye Double Track** (<0.01) would be below the SJVAPCD threshold (1.0). Thus, construction of the **Lathrop Wye Double Track** would not result in increased cancer or chronic health hazards in excess of SJVAPCD thresholds and the impact would be less than significant.

Impacts AQ-4c through AQ-4g in Section 4.3, *Air Quality* identify the potential health risks from increased exposure to diesel particulate matter and PM2.5 from operation of the Phase I improvements. Operation of ACE with the **Lathrop Wye Double Track** would be the same as the operational scenarios described in the draft EIR. Thus, the addition of the **Lathrop Wye Double Track** would not change the impacts associated with operation of the Phase I improvements, and which were described in Impacts AQ-4c through 4g in Section 4.3, *Air Quality*. Thus, the impact from the potential health risks from increased exposure to diesel particulate matter and PM2.5 from due to operation of ACE with the **Lathrop Wye Double Track** would be the same less than significant impact identified in Impacts AQ-4c through 4g in Section 4.3, *Air Quality*.

Like other Phase I improvements, construction of the **Lathrop Wye Double Track** would require earthmoving activities within San Joaquin County. As described in Impact AQ-4h in Section 4.3, *Air Quality*, disturbance of soil in San Joaquin County could expose the receptors adjacent to the construction site to spores known to cause Valley Fever. Construction of the **Lathrop Wye Double Track** would be required to adhere to the same dust controls described in Impact AQ-4h in Section 4.3, Air Quality. Thus construction of the **Lathrop Wye Double Track** would result in the same less than significant impact associated with exposing sensitive receptors to increased Valley Fever risk during construction, as identified in Impact AQ-4h in Section 4.3, *Air Quality*.

Like other Phase I improvements, construction of the **Lathrop Wye Double Track** could result in short-term odors typical of most construction sites. Construction of the **Lathrop Wye Double Track** would be required to adhere to the same air district rules described in Impact AQ-5 in Section 4.3, *Air Quality*. Thus, construction of the **Lathrop Wye Double Track** would have the same less than significant impact on odors as identified in Impact AQ-5 in Section 4.3, *Air Quality*. Operation of ACE with the **Lathrop Wye Double Track** would be the same as the operational scenarios described in the draft EIR. Thus, operation of ACE with the **Lathrop Wye Double Track** would result in the same less than significant impact on odors from operation as identified in Impact AQ-5 in Section 4.3, *Air Quality*.

5.2.3.2 Overall Impact Conclusion

Construction of the **Lathrop Wye Double Track** would result in additional construction impacts to air quality; however, these impacts can be reduced to a less than significant level with previously identified mitigation. Operational impacts would be the same as disclosed in Section 4.3, *Air Quality*. The significance conclusions in Section 4.3, *Air Quality* are not changed with the addition of the **Lathrop Wye Double Track**.

5.2.4 Biological Resources

5.2.4.1 Impact Analysis

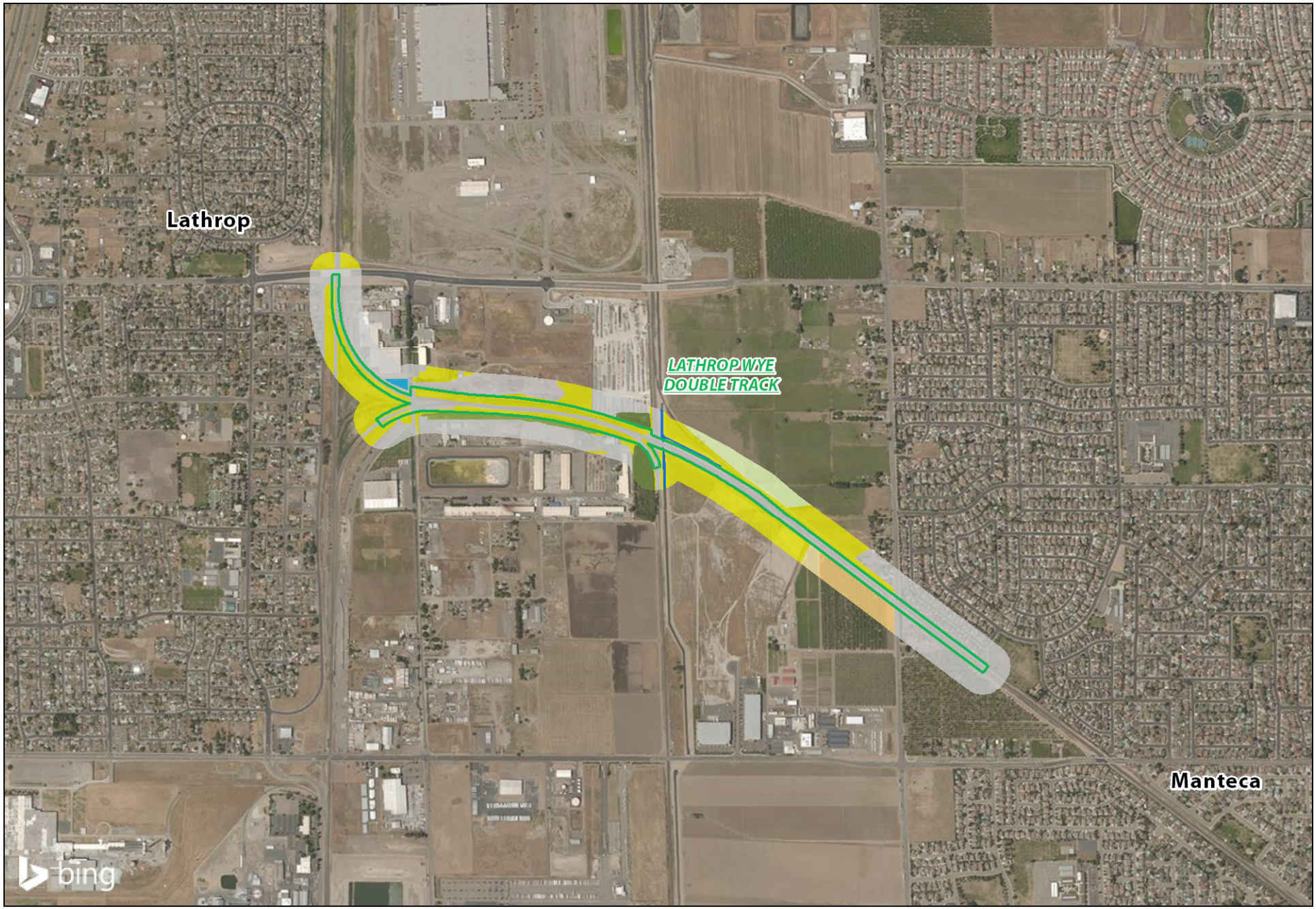
The **Lathrop Wye Double Track** would be located near other Phase I improvements; in fact, the **Lathrop Wye Double Track** is located between the **North Lathrop Station** and the **Oakland-Fresno Subdivision Connection.** The land cover for the **Lathrop Wye Double Track** would, therefore, be similar to the land cover that was previously mapped in the area. The land cover for the **Lathrop Wye Double Track** was mapped by reviewing previous mapping that was conducted for the ACE Extension and by reviewing aerial imagery. Table 5-3 identifies the land covers located within the environmental footprints. Figure 5-3 depicts the land cover types in the study rea.

Table 5-3. Lathrop Wye Double Track - Land Cover Types in the Environmental Footprint (acres)

	Aquatic			Woodland		
	Riverine	Developed/ Landscaped	Ruderal	Mixed Oak Forest	Valley Oak Woodland	Total
Lathrop Wye Double Track	0.03	16.93	10.67	0.23	0.08	27.95

Special-Status Plants

Construction of the **Lathrop Wye Double Track** would have similar impacts to special-status plant species as the impacts identified in Impact BIO-1 in Section 4.4, *Biological Resources*. The majority of the **Lathrop Wye Double Track** is located within developed or ruderal land cover, with small pockets of areas that support natural land cover such as aquatic riverine and woodland habitat (see Table 5-3). In these natural land cover areas, construction of the **Lathrop Wye Double Track** would remove vegetation and have the potential to affect special-status plants. Table 5-4 identifies the area of land cover potentially containing suitable habitat for special-status plant species that could be removed or affected by habitat removal or degradation during construction of the **Lathrop Wye Double Track**. Construction of the **Lathrop Wye Double Track** would not impact any additional special-status plant species that were not previously identified in the draft EIR. Table 4.4-4, in Section 4.4, *Biological Resources* includes the special-status plant species that could potentially be affected by construction of the **Lathrop Wye Double Track**. The impacts on special-status plant species associated with the construction of the **Lathrop Wye Double Track** would be the same as the impact identified in Impact BIO-1 in Section 4.4, *Biological Resources*. The impact would be potentially significant because if special-status plant species are present within the area of the **Lathrop Wye Double Track**, special-status plant species would be removed or their habitat would be eliminated or degraded. The impact would be minimized to a less than significant level after implementation of Mitigation Measures BIO-1.1, BIO-1.2, BIO-1.3, BIO-1.4, and HYD-1.2.



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Direct Impact Study Area

Lathrop Wye Double Track (Phase I)

Land Cover

Aquatic, Pond

Aquatic, Riverine

Cropland

Cropland, Orchard

Developed

Grassland, California Annual Grassland

Ruderal

Woodland, Mixed Oak Woodland

Woodland, Valley Oak Woodland

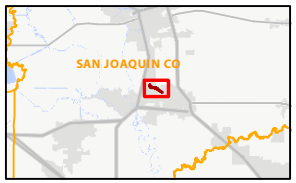


Figure 5-3
Lathrop Wye Double Track - Land Cover
ACE Extension Lathrop to Ceres/Merced

Table 5-4. Lathrop Wye Double Track —Impacts on Land Covers That May Contain Suitable Habitat for Special-Status Plant Species (acres)

Special-Status Plant Species	Impact (acres)
Bent-flowered fiddleneck	0.31
Legenere	0.03
Recurved larkspur	0.31
Round-leaved filaree	0.31
Sanford's arrowhead	0.03
Showy golden madia	0.31
Slender-leaved pondweed	0.03
Slough thistle	0.03
Woolly rose-mallow	0.03
Wright's trichocornis	0.03

Special-Status Wildlife

Construction of the **Lathrop Wye Double Track** would have similar impacts to special-status wildlife species as the impacts identified in Impact BIO-2 in Section 4.4, *Biological Resources*.

The **Lathrop Wye Double Track** is generally located within developed and ruderal land covers. These land covers are characterized by areas where natural vegetation has been removed or significantly degraded by past or current human activity and have a low likelihood to affect special-status wildlife given the lack of suitable habitat. Figure 5-4 shows the location of suitable habitat for special-status species. Construction of the **Lathrop Wye Double Track** could affect nesting bird species and roosting bat species, including Swainson's hawk, northern harrier, white-tailed kite, short-eared owl, loggerhead shrike, song sparrow (Modesto population), other nesting migratory birds, pallid bat, Townsend's big-eared bat, hoary bat, western mastiff bat, and western red bat through noise and vibration generated during construction, or tree and vegetation removal. A small portion of the **Lathrop Wye Double Track** would be located in and near aquatic riverine habitat (irrigation canal) and pond habitat that could affect California red-legged frog, California tiger salamander, western spadefoot toad, western pond turtle, giant garter snake, bank swallow, tricolored blackbird, and yellow-headed blackbird. Ground disturbance and removal of open ruderal could affect burrowing owl directly if present within burrows or indirectly through foraging habitat loss. Due to the proximity of nearby grasslands, the **Lathrop Wye Double Track** could affect San Joaquin kit fox and American badger directly if individuals are present or indirectly through habitat loss for movement or foraging. The **Lathrop Wye Double Track** may result in the removal of elderberry shrubs with stems 1 inch in diameter or more and could affect valley elderberry longhorn beetle.

Construction of the **Lathrop Wye Double Track** would not impact any additional special-status wildlife species that were not previously identified in the draft EIR. The impacts on special-status wildlife species associated with the construction of the **Lathrop Wye Double Track** would be the same as the impact identified in Impact BIO-2 in Section 4.4, *Biological Resources*. The impact would be potentially significant because if special-status wildlife species are present within the environmental footprint, special-status wildlife species could be killed or injured, and their habitat

eliminated or degraded. Impact BIO-2 in Section 4.4, *Biological Resources* identifies the mitigation that has been developed to minimize impacts on these wildlife species. The impact would be minimized to a less than significant level after implementation of Mitigation Measures BIO-2.1, BIO-2.2, BIO-2.4, BIO-2.5, BIO-2.6, BIO-2.8, BIO-2.9, BIO-2.10, BIO-2.12, BIO-2.13, BIO-2.14, BIO-2.15, BIO-2.18, and BIO-2.19.

Special-Status Fish

Construction of the **Lathrop Wye Double Track** would cross the same irrigation canal that the **Oakland-Fresno Subdivision Connection** would cross. As described in Impact BIO-3, this irrigation canal does not provide suitable habitat for special-status fish species because it does not have any riparian vegetation and the water in the creek is controlled by irrigation extraction and runoff and may not have water year-round. Thus, the **Lathrop Wye Double Track** would have no impact on special-status fish species.

Wetlands and Aquatic Resources

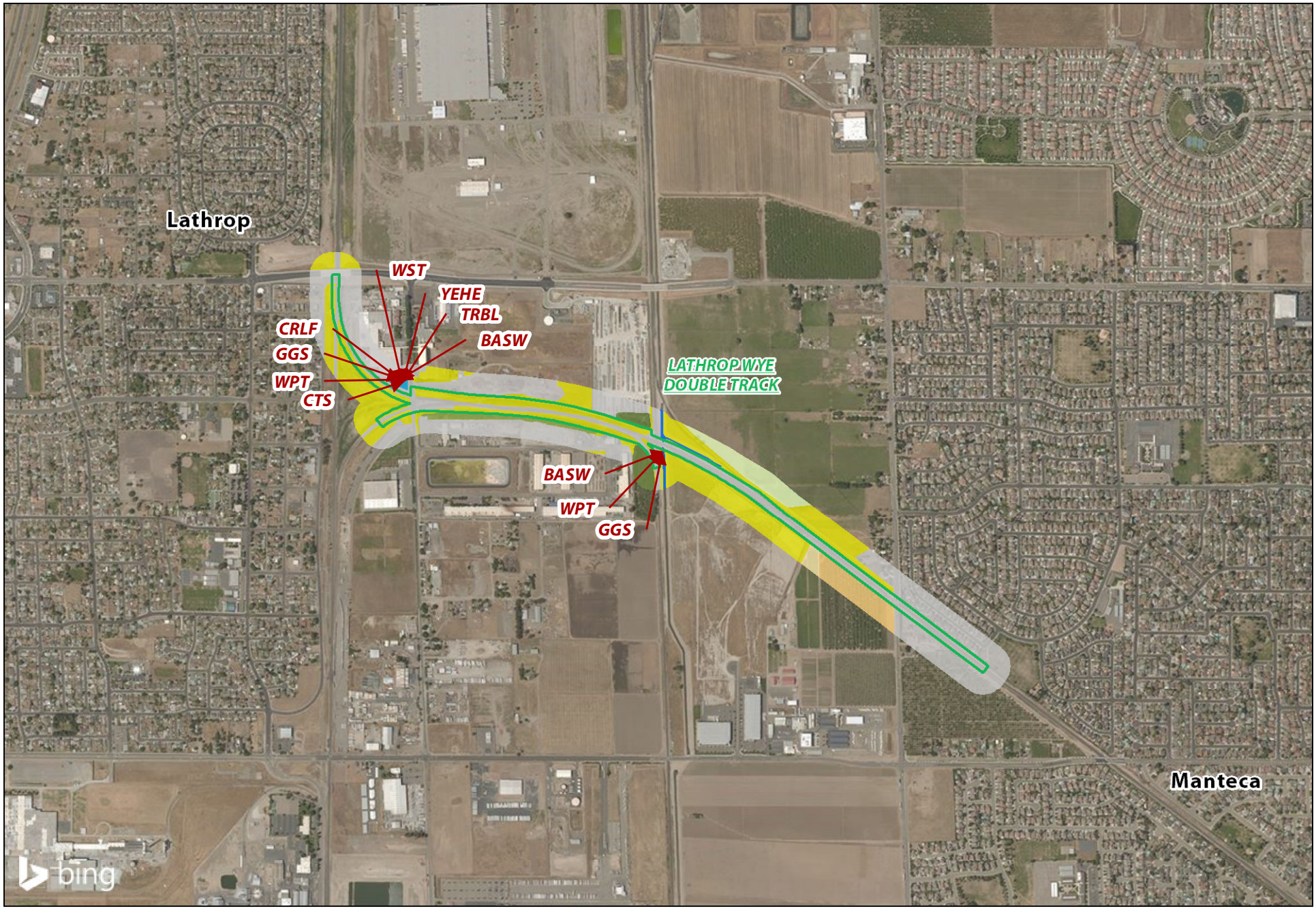
The **Lathrop Wye Double Track** would include construction of a culvert extension over an irrigation canal that is classified as riverine land cover. Construction of the **Lathrop Wye Double Track** would impact approximately 0.03 acre of riverine land cover. This irrigation canal is the same irrigation canal that the **Oakland-Fresno Subdivision Connection** would affect. Impact BIO-4 in Section 4.4, *Biological Resources* identifies that the impact to this irrigation canal is potentially significant because it is a potentially federally regulated aquatic resource. Thus, the impact from the **Lathrop Wye Double Track** would also be potentially significant and, as described in Impact BIO-4 in Section 4.4, *Biological Resources*, would be minimized to a less than significant level after implementation of Mitigation Measure BIO-4.1 and BIO-4.2.

Sensitive Natural Communities

Construction of the **Lathrop Wye Double Track** would affect 0.23 acre of Mixed Oak Forest and 0.08 acre of Valley Oak Woodland, which are considered sensitive natural communities. Where present within the affected area, portions of sensitive natural communities, including Mixed Oak Forest and Valley Oak Woodland, would be removed or degraded. Impacts on sensitive natural communities would be significant. Impact BIO-5 in Section 4.4, *Biological Resources* identifies that impacts to these sensitive natural communities would be mitigated to a less than significant level after implementation of Mitigation Measure BIO-5.1 and BIO-5.3.

Native, Resident, or Migratory Fish or Wildlife Movement

As described in Impact BIO-6 in Section 4.4, *Biological Resources*, construction in riverine aquatic habitat and associated riparian habitat could directly and indirectly deter fish or wildlife movement. Construction of the **Lathrop Wye Double Track** would not impact riparian habitat but would, however, affect riverine aquatic land cover (irrigation canal). Construction of the **Lathrop Wye Double Track** would have a similar impact to native resident or migratory fish and wildlife species movement as the **Oakland-Fresno Subdivision Connection** because both improvements affect the same irrigation canal that is classified as riverine land cover. However, as described in Impact BIO-6 in Section 4.4, *Biological Resources*, migratory fish species would not be present in the irrigation canal due to lack of suitable habitat. Therefore, construction of the **Lathrop Wye Double Track** would have no impact on native and resident fish or wildlife migration or movement corridors



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Direct Impact Study Area

Lathrop Wye Double Track (Phase I)

Suitable Habitat for Wildlife Species Present

Bank swallow (BASW)

California red-legged frog (CRLF)

California tiger salamander (CTS)

Giant garter snake (GGS)

Tricolored blackbird (TRBL)

Western pond turtle (WPT)

Western spadefoot toad (WST)

Yellow-headed blackbird (YEHE)

Widely distributed species commonly found in many land types: Valley Elderberry Longhorn Beetle, Swainson's Hawk, Northern Harrier, White-tailed Kite, Short-eared Owl, Burrowing Owl, Loggerhead Shrike, Song Sparrow (Modesto population), Migratory nesting birds, Pallid Bat, Townsend's Big-eared Bat, Hoary Bat, Western Mastiff Bat, and Western Red Bat

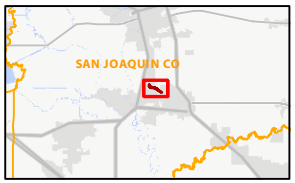


Figure 5-4
Lathrop Wye Double Track –
Special-Status Wildlife Species Habitat
ACE Extension Lathrop to Ceres/Merced

Biological Resource Policies

Construction of the **Lathrop Wye Double Track** would have the same impact on conflicts with biological resources policies as the impact identified in Impact BIO-7 in Section 4.4, *Biological Resources*. Similar to other improvements, the **Lathrop Wye Double Track** may potentially require tree removal during construction. As described in Impact BIO-7 in Section 4.4, *Biological Resources*, this impact would be less than significant after implementation of Mitigation Measure BIO-7.1.

Habitat Conservation Plans and Natural Community Conservation Plans

The **Lathrop Wye Double Track** is located within San Joaquin County; therefore, the **Lathrop Wye Double Track** is located within the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) Habitat Conservation Plan (HCP) coverage area. The **Lathrop Wye Double Track** would potentially conflict with the SJMSCP HCP because the improvement would affect riverine, Mixed Oak Forest, and Valley Oak Woodland. This would be a potentially significant impact. Implementation of Mitigation Measures BIO-1.1, BIO-1.2, BIO-1.3, BIO-1.4, BIO-2.1, BIO-2.2, BIO-2.4, BIO-2.5, BIO-2.6, BIO-2.8, BIO-2.9, BIO-2.10, BIO-2.12, BIO-2.13, BIO-2.14, BIO-2.15, BIO-2.18, BIO-2.19, BIO-4.1, BIO-4.2, BIO-5.1, BIO-5.3, BIO-7.1, and HYD-1.2 would avoid conflicts with the approved HCP and compensate for impacts consistent with the SJMSCP. Therefore, construction of **Lathrop Wye Double Track**, with implementation of these mitigation measures, would have a less-than-significant impact.

Operational Impacts

Operation of ACE with the **Lathrop Wye Double Track** would be the same as the operational scenarios described in the draft EIR. Therefore, the impacts on biological resources due to operation of ACE with the **Lathrop Wye Double Track** would be the similar to the impacts identified in Impact BIO-9 through Impact BIO-13 in Section 4.4, *Biological Resources*.

Operation of ACE with the **Lathrop Wye Double Track** could result in a potentially significant impact on nesting birds and roosting bats. This impact would be minimized to a less than significant level after implementation of Mitigation Measure BIO-9.1 and BIO-9.2, as described in Impact BIO-9 in Section 4.4, *Biological Resources*.

Operation of the **Lathrop Wye Double Track** would not affect special-status fish species because no bridges are associated with the **Lathrop Wye Double Track**. Thus, no impact to special-status fish species would occur due to operation of the **Lathrop Wye Double Track.**

Operation of ACE with the **Lathrop Wye Double Track** would result in the same less than significant impact on fish movement, migration, corridors, and nursery areas because operation is not expected to be significant different from the existing operations.

Operation of ACE with the **Lathrop Wye Double Track** would require routine vegetation management, including tree pruning. As explained in Impact BIO-12 in Section 4.4, *Biological Resources*, local tree ordinances would not legally apply to tree removal or pruning associated with operation. Furthermore, operational tree removal would be limited because tree removals necessary for the Phase I improvements would be removed during construction. Thus operation of ACE with the **Lathrop Wye Double Track** would not conflict with local biological resource policies, including tree preservation policies or ordinances, and the impact would be less than significant.

Operation of ACE with the **Lathrop Wye Double Track** would be located in an area covered by the SJMSCP HCP and as explained in Impact BIO-12 in Section 4.4, *Biological Resources*, increased train traffic would not conflict with provisions in the SJMSCP HCP and no impact would occur.

5.2.4.2 Overall Impact Conclusion

Construction of the **Lathrop Wye Double Track** would result in additional impacts to biological resources previously identified in Section 4.4, *Biological Resources*; however, these impacts can be reduced to a less than significant level with previously identified mitigation. Operational impacts would be the same as disclosed in Section 4.4, *Biological Resources*. The significance conclusions in Section 4.4, *Biological Resources* are not changed with the addition of the **Lathrop Wye Double Track**.

5.2.5 Cultural Resources

5.2.5.1 Impact Analysis

Cultural resources staff submitted requests to the California Historical Resources Information System at the Central Coast Information Center (CCIC) on June 28, 2018. For the purposes of this analysis the records search area was defined as the environmental footprint for the **Lathrop Wye Double Track**, plus a 50-foot radius. No built resources were identified within the environmental footprint based on review of aerial imagery.

The results of the records search did not identify any new historical resources that weren't already previously considered in the draft EIR. Thus, based on these results and based on the review of aerial imagery, there are no built environmental historical resources located within study areas for the **Lathrop Wye Double Track**. The **Lathrop Wye Double Track** would have no impact on built environment historical resources.

The results of the records search did not identify any new archeological resources that weren't already previously considered in the draft EIR. There are no known archaeological resources are present within study areas for the **Lathrop Wye Double Track**. As described in Impact CUL-2 in Section 4.5, *Cultural Resources*, even if improvements are located in areas with no known archeological resources, there remains the potential for construction and operation of improvements to disturb previously undocumented archaeological resources. This would constitute a potentially significant impact. Although, there are no known archaeological resources within the **Lathrop Wye Double Track** footprint, there is still a chance that construction and operation would disturb previously undocumented archaeological resources. As described in Impact CUL-2 in Section 4.5, *Cultural Resources*, this potentially significant impact would be minimized to a less than significant level after implementation of Mitigation Measures CUL-2.1, CUL-2.2, CUL-2.3, CUL-2.4, CUL-2.5, CUL-2.6, and CUL-2.7.

Impact CUL-3 in Section 4.5, *Cultural Resources* identifies that there is the possibility of disturbing human remains across all areas of the ACE Extension and that this is a possibility significant impact. Like other Phase I improvements, there is the possibility for construction of the **Lathrop Wye Double Track** to affect human remains, even though the **Lathrop Wye Double Track** would be located within the UPRR ROW. Thus, the impact on human remains due to construction of the **Lathrop Wye Double Track** would be the same as the impact identified in Impact CUL-3 in Section

4.5, *Cultural Resources*. Thus construction of the **Lathrop Wye Double Track** would result in a less than significant impact after implementation of Mitigation Measure CUL-3.

5.2.5.2 Overall Impact Conclusion

Construction and operation of the **Lathrop Wye Double Track** would result in additional impacts to cultural resources; however, these impacts can be reduced to a less than significant level with previously identified mitigation. The significance conclusions in Section 4.5, *Cultural Resources* are not changed with the addition of the **Lathrop Wye Double Track**.

5.2.6 Energy

5.2.6.1 Impact Analysis

Like other Phase I improvements, during construction of the **Lathrop Wye Double Track**, energy in the form of gasoline and diesel would be consumed to produce and transport construction materials, operate and maintain construction equipment, and transport construction workers to and from work sites. Like the other Phase I improvements, natural gas and electricity would not be used and energy consumption associated with construction would be temporary and would cease when construction activities are complete, anticipated to be completed prior to 2020. Table 5-5 summarizes the estimated expenditure of diesel and gasoline associated with construction of the **Lathrop Wye Double Track**. Impact EN-1 in Section 4.6, *Energy* identifies that non-renewable energy resources would not be consumed in a wasteful, inefficient, or unnecessary manner during construction due to incentives for energy efficient investments; the efficient production of materials based on the economic incentive for efficiency; reuse and recycling of demolition materials; and use of newer construction equipment, locomotives, and on-road vehicles that are generally more fuel efficient than older models. Construction of the **Lathrop Wye Double Track** would adhere to the same requirements identified above; thus, construction of the **Lathrop Wye Double Track** would result in the same less than significant impact from the wasteful, inefficient, and unnecessary consumption of energy as identified in Impact EN-1 in Section 4.6, *Energy*.

Operation of ACE with the **Lathrop Wye Double Track** would be the same as the operational scenarios described in the draft EIR. Thus, operation of ACE with the **Lathrop Wye Double Track** would result in the same net energy savings as described in Impact EN-1 in Section 4.6, *Energy*. Impact EN-1 in Section 4.6, *Energy* identifies that energy benefits achieved through Phase I operations would offset the short-term construction energy use in less than one year. This would still be true even with construction of the **Lathrop Wye Double Track.** Construction of the **Lathrop Wye Double Track** would require the consumption of 1.8 Btu of fuel, which would increase the total fuel consumed for construction of all Phase I improvements from 38.8 Btu to 40.6 Btu. As descried in Table 4.6-9 in Section 4.6, *Energy*, the net energy reductions from Phase I operations would be approximately 61.5 billion Btu per year. Thus, even with the additional fuel (equivalent to 1.8 Btu, bringing the total to a maximum of 42.4 Btu) that would be consumed for the construction of the **Lathrop Wye Double Track**, Phase I operations would still offset the total short-term construction energy use in less than one year. Operation of the **Lathrop Wye Double Track** would have the same less than significant (beneficial) impact on energy as identified in Impact EN-1 in Section 4.6, *Energy.*

Table 5-5. Lathrop Wye Double Track—Construction Fuel Consumption

Phase I Improvement	Fuel Consumption, Diesel and Gasoline (Gallons)	Btu (billions)[a]
Lathrop Wye Double Track	12,777	1.8

Notes:
[a] Diesel heat content used for conversion to Btu: 138,700 Btu/gallon (Davis, Diegel and Boundy 2015).

The fuel that would be requires for construction of the **Lathrop Wye Double Track** would be obtained from the same refinery that would supply the fuel for the other Phase I improvements. As described in Impact EN-1 in Section 4.6, *Energy*, the Chevron Richmond Refinery is a large processing facility, and the demand for diesel fuel for construction of the Phase I improvements would be a small percentage of the production capacity of this refinery and others that could meet the construction energy needs. Like other Phase I improvements, construction of the **Lathrop Wye Double Track** would require the intermittent use of electricity. As described in Impact EN-1 in Section 4.6, *Energy*, electricity consumption during construction would not be substantial and, thus, would not affect the ability of PG&E, Modesto Irrigation District, Turlock Irrigation District, or Merced Irrigation District to serve the region with existing supplies. Thus, the impact on local and regional energy supplies from construction of the **Lathrop Wye Double Track** would be the same as the less than significant impact identified in Impact EN-1 in Section 4.6, *Energy*.

Operation of ACE with the **Lathrop Wye Double Track** would be the same as the operational scenarios described in the draft EIR. Thus, operation of ACE with the **Lathrop Wye Double Track** would result in the same less than significant impacts on local and regional energy supplies as described in Impact EN-1 in Section 4.6, *Energy*.

5.2.6.2 Overall Impact Conclusion

Construction of the **Lathrop Wye Double Track** would result in additional energy impacts; however, these impacts are less than significant and would be offset by the net energy reductions from Phase I operations. Operational impacts would be the same as disclosed in Section 4.6, *Energy*. The significance conclusions in Section 4.6, *Energy* are not changed with the addition of the **Lathrop Wye Double Track**.

5.2.7 Geology and Soils

5.2.7.1 Impact Analysis

Appendix M, *Supporting Geology, Soils, Seismicity, and Paleontological Information* of the draft EIR contains maps depicting the geographic distributions of the geologic, soil, and seismic conditions. The maps in this Appendix include the location of the **Lathrop Wye Double Track**. The environmental setting in Section 4.7.3, *Environmental Setting* in Section 4.7, *Geology and Soils* would apply for the **Lathrop Wye Double Track**.

Table 5-6 shows the potential geologic hazards for the **Lathrop Wye Double Track**. The **Lathrop Wye Double Track** would be constructed in areas associated with corrosive soils (low to moderate), erosion (moderate), difficult excavation (moderate to high), and strong groundshaking (high). The **Lathrop Wye Double Track** would be located in an area with a low potential for

expansive soils. The potential for landslides, subsidence, liquefaction, and earthquake induced landslides for the **Lathrop Wye Double Track** is low because there are no previous occurrences and the area is relatively flat.

Because, the **Lathrop Wye Double Track** would be located near improvements identified in the draft EIR, the geologic hazards associated with the **Lathrop Wye Double Track** would be the same as those identified in the draft EIR. Impact GEO-1 in Section 4.7, *Geology and Soils* identifies that impacts associated with geologic hazards would be less than significant due to implementation of standard design and construction measures as required by California Building Code and the American Railroad Engineering and Maintenance-of-Way Association (AREMA) standards. Thus, the impacts associated with geologic hazards due to the **Lathrop Wye Double Track** would also be less than significant.

Table 5-6. Lathrop Wye Double Track – Geologic Hazards

	Geologic Hazard							
ACE Extension Improvement	**Expansive Soils**	**Corrosive Soils**	**Erosion**	**Difficult Excavation**	**Strong Groundshaking**	**Liquefaction**	**Landslides & Earthquake-Induced Landslides**	**Ground Subsidence**
Lathrop Wye Double Track	nr to l	l to m	m	m to h	h	nr	l	nr

Notes:
l = low; m = moderate; h = high; nr = not rated; N/A = not applicable
Estimated hazard rating listed is the highest that exists along a given improvement.
If a portion of an improvement was not evaluated for a given hazard, and the hazard rating could not be estimated, it was left as "nr".

Because, the **Lathrop Wye Double Track** would be located near improvements identified in the draft EIR, the impacts associated with geologic resources, including oil and gas wells, mineral resources, or geothermal resources would be the same as the impact identified in the draft EIR. Impact GEO-2 in Section 4.7, *Geology and Soils* identifies that Phase I improvements are not located in an area supporting significant aggregate resources and that there are no active oil and gas wells or geothermal resources in the vicinity of the Phase I improvements. Similarly, the **Lathrop Wye Double Track** is not located in an area supporting those geologic resources and would result in no impact on aggregate mineral resources, oil or gas wells, or geothermal resources.

Because, the **Lathrop Wye Double Track** would be located near improvements identified in the draft EIR and because the improvements associated with the **Lathrop Wye Double Track** would be similar to other improvements identified in the draft EIR, the impacts on paleontological resources would be the same as the impacts identified in the draft EIR. The **Lathrop Wye Double Track** would be constructed on the Modesto Formation (Qm) and would take place on previously disturbed land. As described in Impact GEO-3 in Section 4.7, *Geology and Soils,* no surficial

disturbances would affect paleontological resources in areas that have previously been disturbed. Construction of the new and modified track, at-grade crossings, and culvert extensions for the **Lathrop Wye Double Track** would require surficial disturbance (less than 5 feet below ground surface) on previously disturbed land. Thus, the impact on paleontological resources due to construction of the **Lathrop Wye Double Track** would be less than significant.

Operation of ACE with the **Lathrop Wye Double Track** would be the same as the operational scenarios described in the draft EIR. Therefore, the operational impact on paleontological resources would be the same as the impact identified in Impact GEO-4 in Section 4.7, *Geology and Soils*. Because operations and maintenance associated with the **Lathrop Wye Double Track** would occur within previously disturbed areas, there would be no disturbance, damage, or loss of paleontological resources and no impact would occur.

5.2.7.2 Overall Impact Conclusion

Construction of the **Lathrop Wye Double Track** would result in additional impacts to geologic and paleontological resources previously identified in Section 4.7, *Geology and Soils*; however, these impacts can be reduced to a less than significant level with previously identified mitigation. Operational impacts would be the same as disclosed in Section 4.7, *Geology and Soils*. The significance conclusions in in Section 4.7, *Geology and Soils* are not changed with the addition of the **Lathrop Wye Double Track**.

5.2.8 Greenhouse Gas Emissions

5.2.8.1 Impact Analysis

Like other Phase I improvements, construction of the **Lathrop Wye Double Track** would create greenhouse gas (GHG) impacts through the use of heavy-duty construction equipment, construction worker vehicle trips, truck hauling trips, and locomotive trips. GHG emissions generated by these sources from construction of the **Lathrop Wye Double Track** were quantified using emission factors from CalEEMod, EMFAC2017, and other sources, as described in Section 4.8.4.1 in Section 4.8, *Greenhous Gas Emissions.* Table 5-7 summarizes the estimated construction-related GHG emissions in the SJVAPCD in metric tons per year for construction of the **Lathrop Wye Double Track**. Table 5-8 summarizes the estimated construction-related GHG emissions in the San Joaquin Valley Air Pollution Control District (SJVAPCD) in metric tons per year for construction of all Phase I improvements, including the **Lathrop Wye Double Track.** The emissions modeling assumes implementation of Mitigation Measures AQ-2.1 through AQ-2.4, which are required to reduce criteria pollutant emissions. As shown in Table 5-7, construction of the **Lathrop Wye Double Track** would generate a total of 291 metric tons CO2e during the construction period. These amounts are equivalent to adding about 61 typical passenger vehicles for 1 year (U.S. Environmental Protection Agency 2017).

Operation of ACE with the **Lathrop Wye Double Track** would be the same as the operational scenarios described in the draft EIR. Thus, operation of ACE with the **Lathrop Wye Double Track** would result in the same GHG emission reductions as described in Impact GHG-1 in Section 4.8, *Greenhouse Gas Emissions*. Impact GHG-1 in Section 4.8, *Greenhouse Gas Emissions* identifies that GHG benefits achieved through operation in the Phase I would offset the short-term construction emissions in less than 2 years. This is because operation after the first year of ACE Extension would offset 4,243 metric tons of CO2e and operation after the second year of ACE Extensions would also

offset 4,243 metric tons of CO2e. Thus, operation after two years of ACE Extension would offset a total of 8,486 metric tons of CO2e. The additional GHG emissions generated during construction of the **Lathrop Wye Double Track** (291 metric tons of CO2e) would still be offset within 2 years of operation of the ACE Extension. The GHG emissions of all Phase I improvements, including the **Lathrop Wye Double Track** (6,728 metric tons of CO2e) would be less than the GHG emissions offset by operation of ACE Extension for 2 years (8,486 metric tons of CO2e). Thus, the impact associated with generating GHG emissions from construction of the **Lathrop Wye Double Track** and operation of ACE with the **Lathrop Wye Double Track** would be the same less than significant (beneficial) impact as identified in Impact GHG-1 in Section 4.8, *Greenhouse Gas Emissions*.

Table 5-7. Estimated Construction Greenhouse Gas Emissions for the Lathrop Wye Double Track

	Metric Tons per Year			
Construction Year	**CO_2**	**CH_4**	**N_2O**	**CO_2e**
2019	226	<1	<1	231
2020	54	<1	<1	56
2021	4	<1	<1	4
Total	284	<1	<1	291

CO_2 = carbon dioxide
CH_4 = methane
N_2O = nitrous oxide
CO_2e = carbon dioxide equivalent

Table 5-8. Estimated Construction Greenhouse Gas Emissions for the Phase I Improvements Including the Lathrop Wye Double Track

	Metric Tons per Year			
Construction Year	**CO_2**	**CH_4**	**N_2O**	**CO_2e**
2019	5,219	<1	<1	5,342
2020	1,312	<1	<1	1,343
2021	43	<1	<1	44
Total	6,573	<1	<1	6,728

CO_2 = carbon dioxide
CH_4 = methane
N_2O = nitrous oxide
CO_2e = carbon dioxide equivalent

Operation of ACE with the **Lathrop Wye Double Track** would be the same as the operational scenarios described in the draft EIR. Thus, operation of ACE with the **Lathrop Wye Double Track** would result in the same GHG emission reductions as described in Impact GHG-2 in Section 4.8, *Greenhouse Gas Emissions*. Operation of ACE with the **Lathrop Wye Double Track** would, therefore, have the same less than significant (beneficial) impact as identified in Impact GHG-2 in Section 4.8, *Greenhouse Gas Emissions* for impacts associated with complying with plans, policies, and regulations adopted to reduce GHG emissions

5.2.8.2 Overall Impact Conclusion

Construction of the **Lathrop Wye Double Track** would result in additional construction GHG emissions; however, operation of ACE with the **Lathrop Wye Double Track** would result in approximately the same net GHG reductions as disclosed in Section 4.8, *Greenhouse Gas Emissions*.

The construction impacts would be offset by the GHG reductions due to operation within less than 2 years. The significance conclusions in 4.14, *Public Services* are not changed with the addition of the **Lathrop Wye Double Track**.

5.2.9 Hazardous Materials

5.2.9.1 Impact Analysis

Construction, operation, and maintenance of the **Lathrop Wye Double Track** would require the transport, use, and disposal of hazardous materials and would be required to comply with the same safety requirements as identified in Impact HAZ-1 in Section 4.9, *Hazardous Materials*. Thus, the impact identified in Impact HAZ-1 in Section 4.9, *Hazardous Materials* would be the same as the impact for the **Lathrop Wye Double Track**. Impacts related to the routine transport, use, disposal, or accidental release of hazardous materials during construction, operation, and maintenance of the **Lathrop Wye Double Track** would be less than significant.

The **Lathrop Wye Double Track** is located in the same area as other Phase I improvements. Thus, construction and maintenance of the Lathrop Wye Double Track is expected to involve the disturbance of the similar hazardous materials identified in Impact HAZ-2 in Section 4.9, *Hazardous Materials*. Table 5-9 presents the specific sources of hazardous materials that could have affected existing conditions within the environmental footprint of the **Lathrop Wye Double Track**. The impact associated with disturbing hazardous materials would be the same for the **Lathrop Wye Double Track** and other Phase I improvements. This is because the hazardous materials that could potentially be found in the **Lathrop Wye Double Track** are the same as those identified in Impact HAZ-2 in Section 4.9, *Hazardous Materials*. Thus, construction, operation, and maintenance of the **Lathrop Wye Double Track** would result in a less than significant impact after implementation of Mitigation Measures HAZ-2.1, HAZ-2.2, HAZ-2.3, and AQ-2.5.

Table 5-9. Lathrop Wye Double Track – Hazardous Materials Sources with Potential to Affect Existing Conditions

ACE Extension Improvement	Maximum Depth of Excavation (feet)	Hazardous Material Sources							
		Building Structures	Bridge/Overhead Structures	Roadway Structures	Railroad Corridors	Major Roadway Corridors	Agricultural Land	Petroleum Pipelines	Hazardous Materials Release Sites
Lathrop Wye Double Track	5	--	--	BM	BM, S, B	--	S	S, GW	GW

Notes:
BM = building materials
S = soil
B = ballast
GW = groundwater

As described in Impact HAZ-3 in Section 4.9, *Hazardous Materials*, construction and operation of improvements that are located more than 0.25 mile from a school would not create a potentially significant hazard for children from emissions or handling of hazardous or acutely hazardous materials. There are no schools located within 0.25 mile of the **Lathrop Wye Double Track**. Thus, the **Lathrop Wye Double Track** would have no impact associated with creating a hazard for children from emissions or handling of hazardous or acutely hazardous materials.

The State Water Board's GeoTracker database and the Department of Toxic Substance Control (DTSC) EnviroStor database were reviewed to identity any potential hazardous materials release sites of concern within the footprint of the **Lathrop Wye Double Track** (State Water Resources Control Board 2018, Department of Toxic Substances Control 2018). No open hazardous materials release sites were identified within the footprint of the **Lathrop Wye Double Track.** Table 5-10 identifies the open hazardous materials release sites within 0.25 mile of the **Lathrop Wye Double Track**, which is also within 0.25 mile of the proposed **North Lathrop Station**. Because the only adjacent site to the **Lathrop Wye Double Track** would be the same as the **North Lathrop Spagetation**, construction and maintenance activities for the **Lathrop Wye Double Track** would have a similar potential to encounter as groundwater contamination as the **North Lathrop Station** construction. Thus, the impact would be significant but it can be reduced to a less than significant level with implementation of Mitigation Measures AQ-2.5, HAZ-2.1, HAZ-2.2, and HAZ-2.3, which would require the implementation of fugitive dust controls, a voluntary oversight agreement, site investigations, and a CRMP, which would reduce impacts from the disturbance of potentially contaminated soil and/or groundwater during construction and maintenance activities to a less than significant level.

Table 5-10. Hazardous Materials Sites within 0.25 mile of Lathrop Wye Double Track Improvements

Name	Type of Site	Location	Status	Approximate distance from Lathrop Wye Improvements
Defense Distribution San Joaquin CA-Sharpe-Site P-1H	Military Clean-up Site	850 Roth Road	Open	1,200 feet

Sources: State Water Resources Control Board 2018, Department of Toxic Substances Control 2018

5.2.9.2 Overall Impact Conclusion

Construction, maintenance, and operation of the **Lathrop Wye Double Track** would result in additional impacts to hazardous materials previously identified in Section 4.4, *Biological Resources*; however, these impacts can be reduced to a less than significant level with previously identified mitigation. The significance conclusions in Section 4.9, *Hazardous Materials* are not changed with the addition of the **Lathrop Wye Double Track**.

5.2.10 Hydrology and Water Quality

5.2.10.1 Impact Analysis

Impact HYD-1 in Section 4.10, *Hydrology and Water Quality* identifies the following two activities that could violate water quality standards, waste discharge requirements, or provide substantial sources of polluted runoff:

- Improper management of soils, fill, and hazardous materials
- Dewatering or within or adjacent to surface waters

Construction of the **Lathrop Wye Double Track** would involve both of those activities. Construction of the **Lathrop Wye Double Track** would entail work near an irrigation canal and within the irrigation canal during installation of a culvert extension. Thus, the impacts and requirements identified in Impact HYD-1 in Section 4.10, *Hydrology and Water Quality* would apply for the **Lathrop Wye Double Track.** Due to the potential to discharge groundwater or dewatering effluent to nearby surface waters, and the potential for soil, sediment, construction materials, and hazardous materials to be released into surface water during work adjacent to, within, or crossing surface water, the impact on water quality is potentially significant. A SWPPP would be prepared under the Construction General Permit, and the BMPs described Section 4.10, *Hydrology and Water Quality* would be implemented during construction of the **Lathrop Wye Double Track**. Implementation of Mitigation Measures HYD-1.1 and HYD-1.2, which require specific procedures for discharge of groundwater or dewatering effluent and work adjacent to, within, or crossing surface water, impacts on water quality during construction of the **Lathrop Wye Double Track** would be less than significant.

Impact HYD-2 in Section 4.10, *Hydrology and Water Quality* identifies the following operation and maintenance activities that could violate water quality standards, waste discharge requirements, or provide substantial sources of polluted runoff:

- Reuse of contaminated soils or fill
- Alteration of existing drainage patterns and creation of new sources of polluted runoff
- Use of pesticides for track maintenance
- Train operations and accident conditions

Operation and maintenance of ACE with the **Lathrop Wye Double Track** would potentially involve the activities identified above. Thus, the impacts and requirements identified in Impact HYD-2 in Section 4.10, *Hydrology and Water Quality* would apply for the **Lathrop Wye Double Track**. The impact on water quality from the operation and maintenance of the **Lathrop Wye Double Track** would be less than significant after implementation of existing regulations and Mitigation Measure HAZ-3, as described in Impact HYD-2 in Section 4.10, *Hydrology and Water Quality*.

As described in Impact HYD-3 in Section 4.10, *Hydrology and Water* Quality, limited diversion of surface water may be required for Phase I improvements that include new bridges and culverts. The **Lathrop Wye Double Track** would require a culvert extension. Impacts from culvert extensions and other water diversion or dewatering scenarios were analyzed in Impact HYD-3 in Section 4.10, *Hydrology and Water Quality.* The impacts on groundwater supplies from the culvert extension for the **Lathrop Wye Double Track** would be similar to those described in Impact HYD-3 in Section

4.10, *Hydrology and Water* Quality. Since dewatering activities for construction of culverts would be short term and limited to culvert locations, and the discharged effluent would have the opportunity to recharge the aquifer, the dewatering activities associated with construction of the **Lathrop Wye Double Track** would be less than significant, the same as analyzed in Impact HYD-3 in Section 4.10, *Hydrology and Water Quality*.

As stated in Impact HYD-4 in Section 4.10, *Hydrology and Water Quality*, Phase I operations would not involve dewatering or other use of groundwater that could deplete groundwater resources. It is not anticipated that the **Lathrop Wye Double Track** would have any additional impact related to groundwater depletion. Like other Phase I improvements located within the UPRR ROW, the **Lathrop Wye Double Track** would involve the creation of only limited areas of impervious pavement surfaces that would impede stormwater runoff. The **Lathrop Wye Double Track** would be designed and constructed in accordance with the Construction General Permit and MS4 Permit, which contain BMPs to reduce impacts related to hydrology and water quality. Thus, the operational impact of the **Lathrop Wye Double Track** regarding substantially depleting groundwater supplies would be less than significant, the same as analyzed in Impact HYD-4 in Section 4.10, *Hydrology and Water Quality*.

Like other Phase I improvements, the **Lathrop Wye Double Track** would intersect areas with reduced flood risk due to levees, dam failure inundation areas, and 200-year flood zones. The potential impacts described in Impact HYD-5 in Section 4.10, *Hydrology and Water Quality* could also occur at the **Lathrop Wye Double Track**. Implementation of Mitigation Measure HYD-5.1, which would prevent construction workers, materials, and equipment from being exposed to storm flooding hazards, would reduce potential construction impacts related to flooding hazards to a less-than-significant level. This impact would be would be less than significant, with implementation of Mitigation Measure HYD-5.1, the same as analyzed in Impact HYD-5 in Section 4.10, *Hydrology and Water Quality*.

Impact HYD-6 in Section 4.10, *Hydrology and Water Quality* describes that Phase I improvements would include construction of new bridges and culverts across drainage courses, and improvements within flood zones. If these improvements are not appropriately designed, they could potentially impede or redirect flood flows during operation and railroad tracks could be inundated. The **Lathrop Wye Double Track** would have similar impacts to the other improvements located in a FEMA flood zone as described Impact HYD-6 in in Section 4.10, *Hydrology and Water Quality*. Implementation of Mitigation Measure HYD-6.1, which would require detailed hydraulic evaluations and modifications of improvement designs to reduce potential flooding hazards, would reduce potential flooding impacts during operation of Phase I improvements within drainage courses and flood zones to a less than significant level. This impact would be less than significant with implementation of Mitigation Measure HYD-6.1, the same as analyzed in Impact HYD-6 in Section 4.10, *Hydrology and Water Quality*.

Construction of the **Lathrop Wye Double Track** could involve dewatering activities for the culvert extension. This would have a similar potentially significant impacts on drainage patterns as those described in Impact HYD-7 in Section 4.10, *Hydrology and Water Quality*. The discharge of groundwater or dewatering effluent could exceed the capacity of storm drainage systems and cause flooding. However, implementation of Mitigation Measure HYD-7.1 would limit flow rates for groundwater or dewatering discharges and would reduce potential construction impacts on storm drainage system capacity to a less than significant level. Therefore, the impact on drainage patterns due to the **Lathrop Wye Double Track** would be less than significant with implementation of

Mitigation Measure HYD-7.1, the same as analyzed in Impact HYD-7 in Section 4.10, *Hydrology and Water Quality*.

Impact HYD-8 in Section 4.10, *Hydrology and Water Quality* describes that Phase I improvements would alter drainage patterns by modifying drainage systems and creating new impervious surfaces. Like other Phase I improvements located within the UPRR ROW, the **Lathrop Wye Double Track** would d alter existing drainage through construction of new tracks and extended culverts. Impact HYD-8 in Section 4.10, *Hydrology and Water Quality* identifies that these impacts would be mitigated to a less than significant level after compliance with existing regulations and Mitigation Measure HYD-8.1. Thus, the operational impact of the **Lathrop Wye Double Track** on the drainage system would be less than significant after mitigation.

5.2.10.2 Overall Impact Conclusion

Construction, operation, and maintenance of the **Lathrop Wye Double Track** would result in additional impacts on hydrology and water quality; however, these impacts can be reduced to a less than significant level with previously identified mitigation. The significance conclusions in Section 4.10, *Hydrology and Water Quality* are not changed with the addition of the **Lathrop Wye Double Track**.

5.2.11 Land Use and Planning

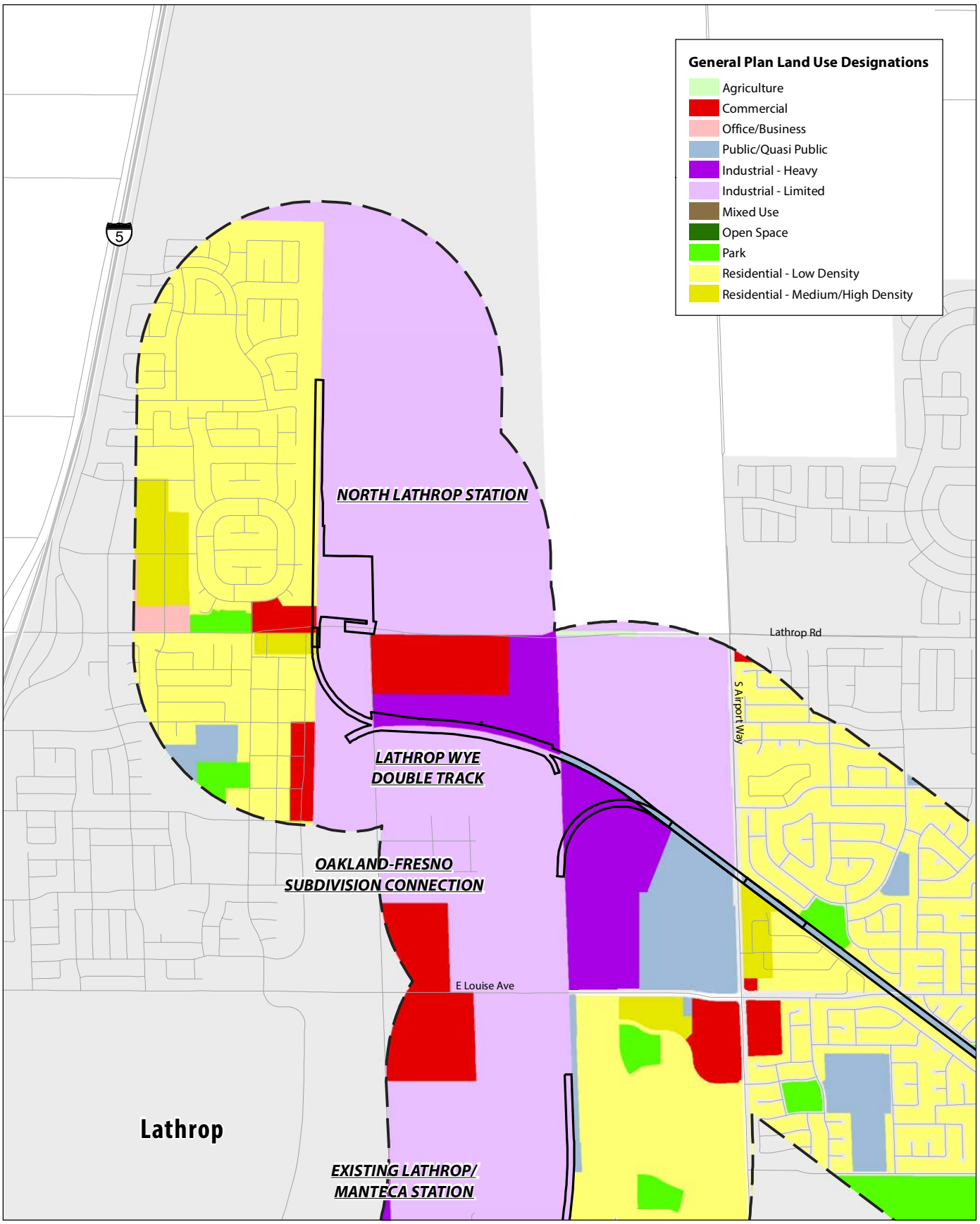
5.2.11.1 Impact Analysis

The improvements associated with the **Lathrop Wye Double Track** would occur entirely within the UPRR ROW and would have similar impact to Land Use and Planning as other improvements located within the UPRR ROW. Figure 5-5 shows the general plan-designated land uses in the study area, which is a 0.5 mile buffer from the **Lathrop Wye Double Track** environmental footprint.

The **Lathrop Wye Double Track** would have the same less than significant impact associated with physically dividing an established community as described in the draft EIR. As described in Impact LU-1, the impact associated with temporarily disrupting access during construction would be less than significant because detours or impeded access due to construction of Phase I improvements would be temporary, would last several days at a particular location, and would not result in a permanent impediment to circulation or access to common uses that define an established community. Furthermore, the **Lathrop Wye Double Track** would occur entirely within the UPRR ROW, which functions as a barrier and helps define established communities within the area. Thus, operation of the **Lathrop Wye Double Track** would not divide an established community and the impact would be less than significant.

The **Lathrop Wye Double Track** would not conflict with an applicable land use plan, policy, or regulation because the improvements would be located entirely within the existing UPRR ROW. As described in Impact LU-2, improvements located within the UPRR are exempt from local building and zoning codes and other land use ordinances. Thus, within UPRR ROW, no impacts on land use and planning are expected.

The **Lathrop Wye Double Track** is located within the coverage area of the SJMSCP HCP. As described above in Section 5.2.4, *Biological Resources,* construction of the **Lathrop Wye Double Track** would potentially conflict with the SJMSCP HCP; however, the impact would be less than



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Feet

ACE Extension Improvements

Study Area
(0.5 mile buffer from Improvement Area)

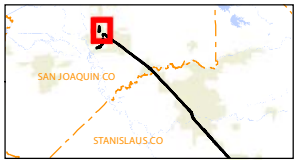


Figure 5-5
Lathrop Wye Double Track - Land Use Designations
ACE Extension
Lathrop to Ceres/Merced

significant after implementation of Mitigation Measures BIO-1.1, BIO-1.2, BIO-1.3, BIO-1.4, BIO-2.1, BIO-2.2, BIO-2.4, BIO-2.5, BIO-2.6, BIO-2.8, BIO-2.9, BIO-2.10, BIO-2.12, BIO-2.13, BIO-2.14, BIO-2.15, BIO-2.18, BIO-2.19, BIO-4.1, BIO-4.2, BIO-5.1, BIO-5.3, BIO-7.1, and HYD-1.2. Operation of ACE with the **Lathrop Wye Double Track**, including increased train traffic would not conflict with provisions in the SJMSCP HCP and no impact would occur.

5.2.11.2 Overall Impact Conclusion

Construction of the **Lathrop Wye Double Track** would result in additional impacts to land use and planning, previously identified in Section 4.11, *Land Use and Planning*. However, these impacts can be reduced to a less than significant level with previously identified mitigation. Operational impacts would be the same as disclosed in Section 4.14, *Public Services*. The significance conclusions in 4.14, *Public Services* are not changed with the addition of the **Lathrop Wye Double Track**.

5.2.12 Noise and Vibration

5.2.12.1 Impact Analysis

Construction of the **Lathrop Wye Double Track** would involve site work and rail work, similar to other Phase I improvements; however, the **Lathrop Wye Double Track** would not include any structures, so no structure work would be conducted during construction. The construction noise thresholds for the **Lathrop Wye Double Track** would be the same as the thresholds for site work and rail work identified for the Phase I improvements. As described in Table 4.12-8 in Section 4.12, *Noise and Vibration*, noise impacts would be limited to receptors within 135 to 150 feet from a **Lathrop Wye Double Track** construction site. Residences on Gianna Lane in Manteca are located near the southern portion of the **Lathrop Wye Double Track**. These residences are also located near the **Ceres Extension Alignment**, so construction noise impacts on these residences were considered in the draft EIR. These residences would be located within 135 feet of construction sites for the **Lathrop Wye Double Track**; therefore, the potential construction noise impacts on these sensitive receptors would be significant. The construction impact for the **Lathrop Wye Double Track** would be the same as the impact analyzed in Impact NOI-1 in Section 4.12, *Noise and Vibration*. Thus, construction of the **Lathrop Wye Double Track** would result in a significant and unavoidable impact even after implementation of Mitigation Measure NOI-1.1 and even though the construction noise would be short term and would cease after construction is completed.

The southern portion of the **Lathrop Wye Double Track** is located near the track that was identified for the **Ceres Extension Alignment**. There are residences on Gianna Lane in Manteca that are located within the vicinity of the proposed track. Impact NOI-2 in Section 4.12, *Noise and Vibration* (page 4.12-26) identifies the potential noise impacts to these residences, which are identified as being located between South Airport Way and West Louise Avenue in Manteca. Moderate noise impacts are projected at 25 residences and severe noise impacts are projected at 2 residences for operation of ACE with the Phase I improvements. The **Lathrop Wye Double Track** would be located closer to residences at certain locations; however, the closest distance from the track to any residence would remain 57 feet. Thus, the most severe noise impact identified in Impact NOI-2 in Section 4.12, *Noise and Vibration* (Table 4.12-13) would still apply for operation of ACE with the **Lathrop Wye Double Track**. The only difference would be that there would be greater noise at residences that are located closer to the track. Operational noise impacts were re-evaluated to account for the new distances from residences to the track. Table 5-11 identifies the

number of moderate and severe noise impacts (per the FTA noise level criteria) at the residences on Gianna Lane in Manteca, for operation of ACE with and without the **Lathrop Wye Double Track**. Operation of ACE with the **Lathrop Wye Double Track** would result in four less moderate noise impact locations and six additional severe noise impact location (all of which are between South Airport Way and West Louise Avenue). Figure 5-6 shows the location of these additional noise impacts. Although operation of ACE would result in several additional severe impact locations, Impact NOI-2 in Section 4.12, *Noise and Vibration* already identified that severe noise impacts would occur at nearby residences. As described in Impact NOI-2 in Section 4.12, *Noise and Vibration*, Mitigation Measure NOI-2.1 would be implemented and would help to reduce noise. The noise impact from operation of ACE with the **Lathrop Wye Double Track** would be the same as the significant and unavoidable noise impact identified in Impact NOI-2 in Section 4.12, *Noise and Vibration*.

Table 5-11. Overview of Phase I Operational Noise Impacts for Residences on Gianna Lane in Manteca

	Noise Impacts	
Operational Scenario	**Moderate**	**Severe**
Phase I Improvements (without the Lathrop Wye Double Track)	25	2
Phase I Improvements (with the Lathrop Wye Double Track)	21	8
Difference	*-4*	*+6*

Construction of the **Lathrop Wye Double Track** would involve the use of compactors and bulldozers during site work and rail work, similar to other Phase I improvements; however, construction of the **Lathrop Wye Double Track** would not involve the use of impact pile drivers because no structures would be constructed. Impact NOI-3 in Section 4.12, *Noise and Vibration* identifies that groundborne vibration from construction activities would cause only intermittent localized disturbance along the rail corridor and that processes such as earthmoving with bulldozers can create annoying vibration. These vibration impacts would be in isolated cases where it is necessary to use this type of equipment in close proximity to residential buildings. The vibration impacts from the **Lathrop Wye Double Track** would be lower than what was analyzed in Impact NOI-3 in Section 4.12, *Noise and Vibration* because construction of the **Lathrop Wye Double Track** would not require pile driving. Nonetheless, because residences on Gianna Lane in Manteca are located near the southern portion of the **Lathrop Wye Double Track**, It is possible that construction activities could result in vibration damage, and damage from construction vibration would be a potentially significant impact. As described in Impact NOI-3 in Section 4.12, *Noise and Vibration*, implementation of Mitigation Measure NOI-3.1 would reduce impacts to a less than significant level by requiring the preparation and implementation of a construction vibration control plan. Thus, the vibration impact from construction of the **Lathrop Wye Double Track** would be less than significant after mitigation.

Operation of ACE with the **Lathrop Wye Double Track** would be the same as the operational scenarios described in the draft EIR. Therefore, the impacts on vibration from operation of ACE with the **Lathrop Wye Double Track** would be the similar to the impacts identified in Impact NOI-3 in Section 4.12, *Noise and Vibration.* Because of the high volume of existing freight train traffic in the area where Phase I operations would occur, the very small increase in passenger trains with Phase I operations (including the **Lathrop Wye Double Track**), and because the new passenger rail service

would not result in vibration levels greater than existing levels, no vibration impacts are projected at locations with existing train operations.

5.2.12.2 Overall Impact Conclusion

Construction of the **Lathrop Wye Double Track** would result in additional impacts to noise and vibration, previously identified in Section 4.12, *Noise and Vibration*. Construction and operational vibration impacts would be reduced to a less than significant level with previously identified mitigation; however, as with other Phase I improvements, the construction and operational noise impacts would be significant and unavoidable even after implementation of previously identified mitigation. These significant and unavoidable noise impacts from the **Lathrop Wye Double Track** would affect residences on Gianna Lane in Manteca. Section 4.12, *Noise and Vibration* of the draft EIR already identified that there would be potentially significant and unavoidable impacts at these residences. The significance conclusions in 4.12, *Noise and Vibration* are not changed with the addition of the **Lathrop Wye Double Track**.

5.2.13 Population and Housing

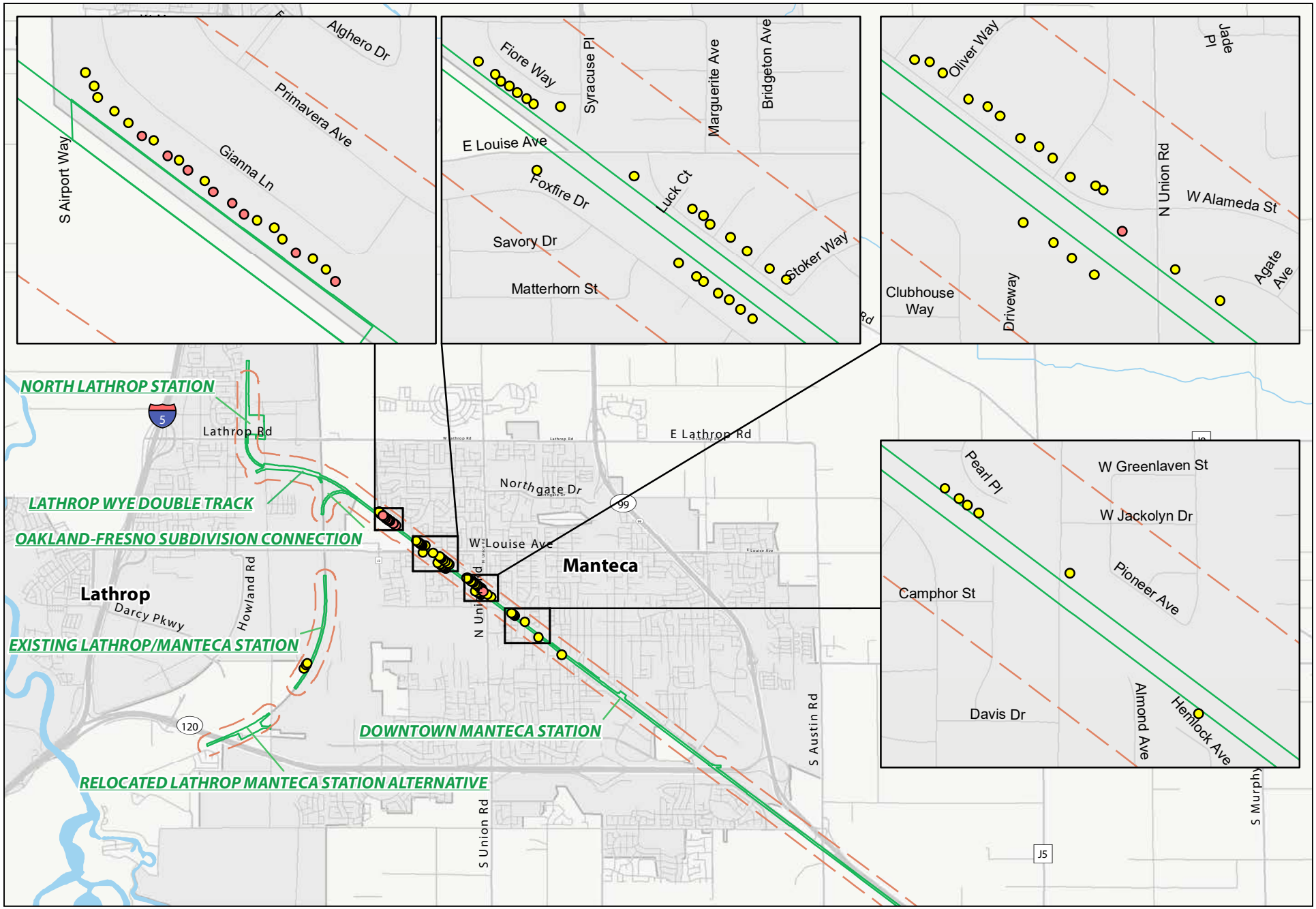
5.2.13.1 Impact Analysis

Impact POP-1 in Section 4.13, *Population and Housing* states that construction of the Phase I improvements has the potential to induce local population growth due to temporary employment opportunities. Like other Phase I improvements, construction of the **Lathrop Wye Double Track** would also create temporary employment opportunities that would induce temporary population growth. As described in Impact POP-1 in Section 4.13, *Population and Housing*, this temporary impact would be less than significant because some of the employment opportunities are anticipated to be filled by local workers; non-local labor would commute or temporarily relocate during the construction period and once construction is complete, non-local workers would return to their prior residence or move on to the next construction opportunity; and because it anticipated that the local municipalities would have the capacity to accommodate a temporary increase in population in the event construction workers are relocated. The impacts from construction of the **Lathrop Wye Double Track** would be the same as the less than significant impact identified in Impact POP-1 in Section 4.13, *Population and Housing*. Furthermore, operation of ACE Extension with the **Lathrop Wye Double Track** would be the same as the operational scenarios analyzed in the draft EIR. Therefore, the impact of operating the **Lathrop Wye Double Track** would be the same as the less than significant impact identified in Impact POP-1 in Section 4.13, *Population and Housing*.

The **Lathrop Wye Double Track** is located entirely within the UPRR ROW; thus, no parcel acquisition would be required. Therefore, the construction and operation of **Lathrop Wye Double Track** would be have no impact associated with the displacement of existing housing units or people.

5.2.13.2 Overall Impact Conclusion

Construction and operation of the **Lathrop Wye Double Track** would not result in any additional impact to population and housing resources beyond that disclosed in Section 4.13, *Population and Housing* for the reasons disclosed above. The significance conclusions in Section 4.13 are not changed with the addition of the **Lathrop Wye Double Track**.



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ACE Extension Lathrop to Ceres/Merced

Phase I

Phase I Noise Impacts

Moderate

Severe

Noise Study Area

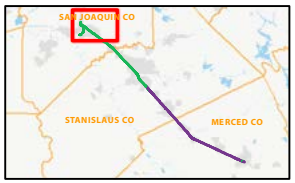


Figure 5-6
Lathrop to Ceres – Phase I Noise Impacts in Manteca
ACE Extension Lathrop to Ceres/Merced

5.2.14 Public Services

5.2.14.1 Impact Analysis

Impact PS-1 in Section 4.14, *Public Services* identifies that the demand for fire protection, law enforcement, and emergency response services could be affected in two primary ways.

- Construction activities occurring in roadways and streets could disrupt traffic and interfere with the response times for fire, police, and other emergency responders.
- Construction workers and areas where construction would occur could require additional fire, police, and other emergency responders' services.

Construction of the **Lathrop Wye Double Track** could affect fire protection, law enforcement, and emergency response services in a similar way. The modification of the at-grade crossings at McKinley Avenue and S Airport Way could affect traffic and accidents could occur during construction that would require local emergency response. As described in Impact PS-1 in Section 4.14, *Public Services,* these potential construction impacts would be minimized through the implementation of Mitigation Measure TR-7.1, which requires the preparation of a construction management plan; through the implementation of Cal/OSHA's Title 8, which requires that an emergency action plan be prepared to prevent and respond to medical emergencies; and through fencing and visual screening that would deter trespassers from accessing the construction site. Thus, construction activities associated with the **Lathrop Wye Double Track** would have a less-than-significant impact on public services with implementation of Mitigation Measure TR-7.1. Operation of the ACE Extension with the **Lathrop Wye Double Track** would be the same as the operational scenarios identified in the draft EIR. Therefore, the operational impacts on fire protection, law enforcement, and emergency response services would be the same as the less than significant impact analyzed in Impact PS-1 in Section 4.14, *Public Services.*

Construction of the **Lathrop Wye Double Track** could affect the demand for schools and other public services in a similar way to the less than significant impact identified in Impact PS-2 in Section 4.14, *Public Services*. Like the other Phase I improvements, the **Lathrop Wye Double Track** has the potential to induce local population growth temporarily through employment of workers during the construction period. However, construction would be temporary and would not result in a new permanent population that would require new or physically altered schools or other public services. The impact on schools and other public services, from construction of the **Lathrop Wye Double Track**, would be less than significant. Operation of the ACE Extension with the **Lathrop Wye Double Track** would be the same as the operational scenarios identified in the draft EIR. Therefore, the operational impacts on school and other public services would be the same as the less than significant impact analyzed in Impact PS-2 in Section 4.14, *Public Services.*

5.2.14.2 Overall Impact Conclusion

Construction of the **Lathrop Wye Double Track** would result in additional impacts to public services, previously identified in Section 4.14, *Public Services*. However, these impacts can be reduced to a less than significant level with previously identified mitigation. Operational impacts would be the same as disclosed in Section 4.14, *Public Services*. The significance conclusions in Section 4.14, *Public Services* are not changed with the addition of the **Lathrop Wye Double Track**.

5.2.15 Recreation

5.2.15.1 Impact Analysis

There are no new recreational resources located near the **Lathrop Wye Double Track**; however, the **Lathrop Wye Double Track** would be located within 0.25 mile of some recreational resources that were identified in the draft EIR in Section 4.15, *Recreation*. The **Lathrop Wye Double Track** would be located 950 feet from Woodfield Park; 260 feet from Green Belt Park; and 10 feet from Primavera Park. The **Lathrop Wye Double Track** would have a similar impact as identified in the draft EIR.

Users of recreational resources in the vicinity of the **Lathrop Wye Double Track** would experience impacts involving visual degradation, and increased noise and dust during the construction period, which would be potentially significant. As described in Impact REC-1 in Section 4.15, *Recreation*, potential visual degradation, and increased noise and dust impacts experienced by users of nearby recreational resources during the construction period would be minimized by Mitigation Measures AES-1.1, AQ-2.1 through AQ-2.5, and NOI-1.1. With implementation of these mitigation measures, construction-period impacts on nearby recreational resources from the **Lathrop Wye Double Track** would be less than significant.

Operation of the ACE Extension with the **Lathrop Wye Double Track** would be the same as the operational scenarios identified in the draft EIR. Therefore, the operational impacts on recreational resources would be the same as analyzed in the Impact REC-2 of the draft EIR Section 4.15, *Recreation* and would be less than significant.

The **Lathrop Wye Double Track** does not involve the construction or expansion of recreational facilities. Thus, like the analysis of Impact REC-3 in the draft EIR Section 4.15, *Recreation*, the **Lathrop Wye Double Track** would have no impact on the physical environment as result of new recreational facilities.

5.2.15.2 Overall Impact Conclusion

Construction of the Lathrop Wye Double Track would result in additional impacts to three adjacent recreational areas previously identified in Section 4.15, *Recreation*; however, these impacts can be reduced to a less than significant level with previously identified mitigation. Operational impacts would be the same as disclosed in Section 4.15, *Recreation*. The significance conclusions in Section 4.15, *Recreation* are not changed with the addition of the **Lathrop Wye Double Track**.

5.2.16 Safety and Security

5.2.16.1 Impact Analysis

Figure 5-7 shows that a small portion of the **Lathrop Wye Double Track** would be located on the southern boundary of the Stockton Metropolitan Airport's Airport Influence Area (AIA). Impact SAF-1 in Section 4.16, *Safety and Security* identifies the restrictions in the airport land use plan. The improvements associated with the **Lathrop Wye Double Track** (track improvements, at-grade crossing modifications, and a culvert extension) would be done at grade; therefore, the **Lathrop Wye Double Track** would not exceed applicable height restrictions. Like the improvements

analyzed in the draft EIR, there would be no impacts on airports or airport land use plans from the **Lathrop Wye Double Track** that could result in a safety hazard.

Construction of the **Lathrop Wye Double Track** would result in the same potential impacts on emergency response as identified in Impact SAF-3 in Section 4.16, *Safety and Security.* Construction of the **Lathrop Wye Double Track** could require limited temporary road closures and road construction that could potentially cause increased traffic congestion in areas where emergency vehicles operate. Also, construction activities near at-grade crossings could interfere with emergency response by increasing traffic congestion and vehicle wait time. As described in Impact SAF-3 in Section 4.16, *Safety and Security*, this impact would be reduced to a less than significant level after implementation of Mitigation Measure TR-7.1, which requires the implementation of a construction road traffic control plan. Operation of the ACE Extension with the **Lathrop Wye Double Track** would be the same as the operational scenarios identified in the draft EIR. Therefore, the operational impacts related to emergency plans, emergency response plan, or emergency evacuation plans would be less than significant.

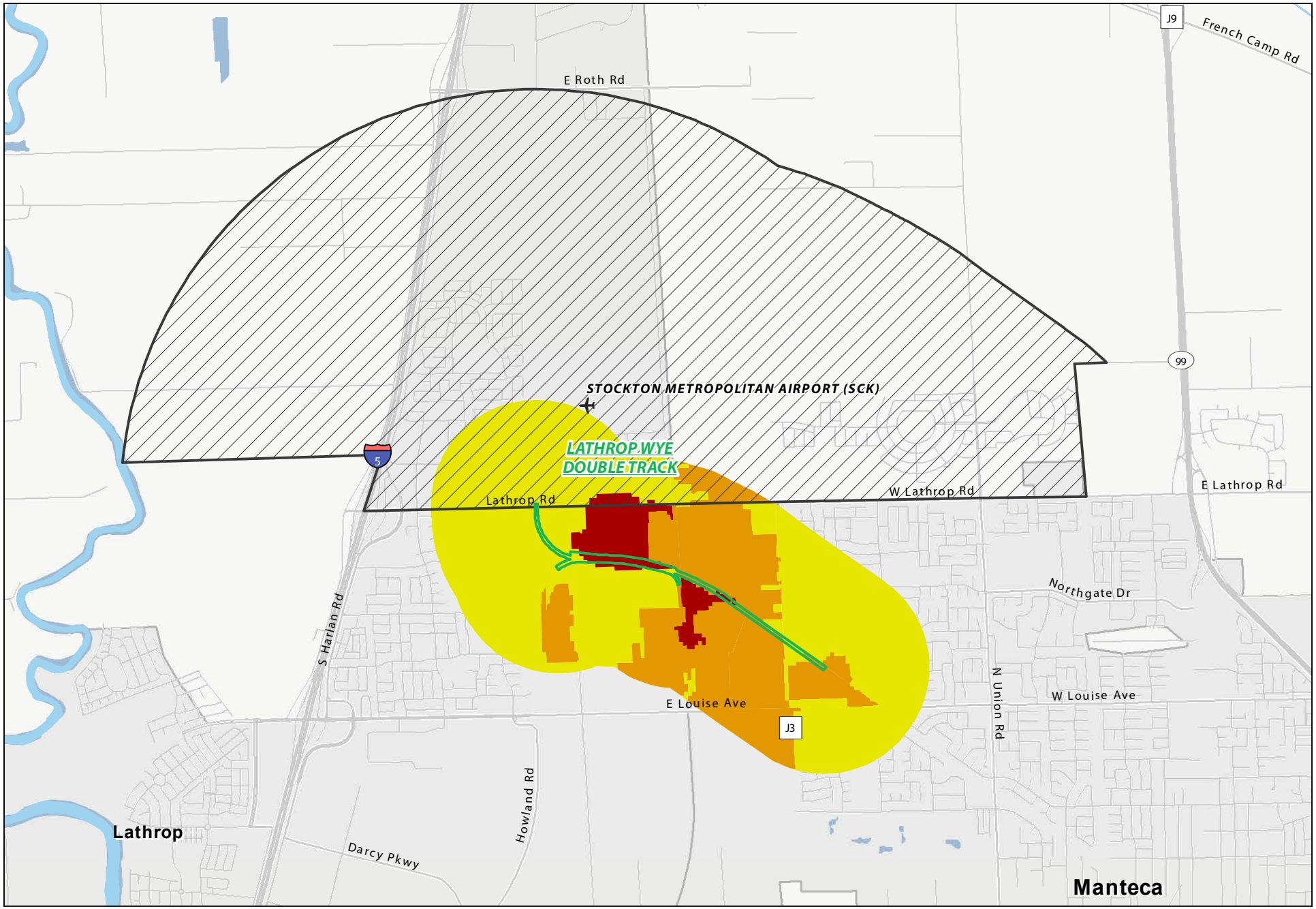
Construction of the **Lathrop Wye Double Track** would occur entirely within the UPRR ROW and like the impacts identified in the draft EIR, could require limited temporary road closures and road construction that could potentially cause increased traffic congestion in areas where emergency vehicles operate. Also, construction activities near at-grade crossings could interfere with emergency response by increasing traffic congestion and vehicle wait time.

The **Lathrop Wye Double Track** would be located in an area of moderate fire hazard (see Figure 5-7). Impact SAF-3 in Section 4.16, *Safety and Security* identifies that the improvements associated with the Phase I improvements would also be located in some moderate fire hazards area. Thus, the impact associated with exposing people or structures to a significant risk of loss, injury, or death involving wildland fires due to the **Lathrop Wye Double Track** would be the same as the impact identified in Impact SAF-3 in Section 4.16, *Safety and Security.* The impact related to exposing people or structures to a significant risk of loss, injury, or death involving wildland fires would be less than significant for the **Lathrop Wye Double Track** because fire safety measures would be implemented during construction pursuant to Cal. Code Regs., Title 14 and Title 19, and because vegetation maintenance would reduce potential fire fuel along the tracks or cover the area along the tracks with nonflammable materials.

Construction and operation of the **Lathrop Wye Double Track** would be required to comply with the same safety requirements as identified in Impact SAF-4 in Section 4.16, *Safety and Security*. Thus, the impact of creating a hazard to workers, passengers, or adjacent receptors, from construction and operation of the **Lathrop Wye Double Track** would be the same as the impact identified in Impact SAF-4 in Section 4.16, *Safety and Security*. Hazards from construction activities and operation would be less than significant.

5.2.16.2 Overall Impact Conclusion

Construction of the **Lathrop Wye Double Track** would result in additional safety and security impacts previously identified in Section 4.16, *Safety and Security*; however, these impacts can be reduced to a less than significant level with previously identified mitigation. Operational impacts would be the same as disclosed in Section 4.16, *Safety and Security*. The significance conclusions in Section 4.16, *Safety and Security* are not changed with the addition of the **Lathrop Wye Double Track**.



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Miles

Direct Impact Study Area

- Lathrop Wye Double Track (Phase I)
- Airports
- Airport Area of Influence

Wildfire Risk*

- Moderate
- Non-Wildland/Non-Urban
- Urban Unzoned

*0.5 mile wildfire risk buffer shown

Figure 5-7
Lathrop Wye Double Track –
Airports and Fire Hazard Severity Zones in Study Area
ACE Extension Lathrop to Ceres/Merced

5.2.17 Transportation and Traffic

5.2.17.1 Impact Analysis

Construction of the **Lathrop Wye Double Track** includes improvements at the McKinley Avenue and S Airport Way at-grade crossings. Construction impacts would be temporary and would not impact overall transportation goals related to LOS, as described in Impact TR-1 in Section 4.17, *Transportation and Traffic*. Impact TR-1 in Section 4.17, *Transportation and Traffic*, identifies significant and unavoidable operational impacts at several intersections in Manteca and Modesto, which would conflict with LOS standards identified in local planning documents. As stated in the Impact TR-1 in Section 4.17, *Transportation and Traffic*, Mitigation Measures TR-7.2 and 7.3 would reduce some, but not all of the significant operational traffic impacts. Operation of ACE with the **Lathrop Wye Double Track** would be the same as the operational scenarios described in the draft EIR. Therefore, the operational impacts related to conflicting with applicable plans and policies would be the same as the significant and unavoidable impact analyzed in Impact TR-1 in Section 4.17, *Traffic and Transportation.*

Operation of ACE with the **Lathrop Wye Double Track** would have the same beneficial impact as described in Impact TR-2 in Section 4.17, *Traffic and Transportation*. The ACE Extension is consistent with Bay Area congestion management programs (CMPs) with respect to goals of increasing transit ridership and reducing the number of commuters in passenger cars from outside of the Bay Area. Therefore, the operational impacts of the **Lathrop Wye Double Track**, related to conflicting with applicable congestion management plans would be less than significant, the same as analyzed in Impact TR-2 in Section 4.17, *Traffic and Transportation* of the Draft EIR.

The Phase I improvements would not result in any change in air traffic patterns through an increase in air traffic levels or a change in location that results in substantial safety risks, as described in Impact TR-3 in Section 4.17, *Traffic and Transportation*. The **Lathrop Wye Double Track** entails construction of a new track, realignment of existing track, at-grade intersection modifications, and a culvert extension. Like the other Phase I improvements, the **Lathrop Wye Double Track** would not result in any changes in air traffic, and the impact would be less than significant.

The **Lathrop Wye Double Track** would be required comply with all construction standard provisions, including federal, state, and local railroad and roadway safety standards, established by FRA, Caltrans, and all applicable city and county agencies responsible for maintenance of train and vehicle traffic. Therefore, the **Lathrop Wye Double Track** would not substantially increase hazards due to design features or incompatible uses, and impacts would be less than significant, the same as described in Impact TR-4 in Section 4.17, *Traffic and Transportation*.

Like the other Phase I improvements, the **Lathrop Wye Double Track** would be served by existing or proposed transit, bicycle, and pedestrian infrastructure that would enhance or create new multimodal connectivity and increase transit ridership. The **Lathrop Wye Double Track** improvements would be in conformance with and would not conflict with applicable policies, plans, and programs related to transit, bicycles and pedestrians. The impact would be less than significant, the same as described in Impact TR-5 of the Draft EIR.

As described under Impact TR-6 in Section 4.17, *Traffic and Transportation*, operation of the ACE Extension would shift travel demand from current driving trips to transit trips, which would result in the reduction of VMT. Many adopted regional transportation plans take into consideration ACE

service and future expansion, including SJCOG, StanCOG, and MCAG, and therefore operations would not conflict or create inconsistencies with regional transportation plans. Operation of ACE with the **Lathrop Wye Double Track** would be the same as the operational scenarios described in the draft EIR. Thus, regional VMT would be reduced, and operation of ACE with the **Lathrop Wye Double Track** would not substantially disrupt future regional traffic operations. The impact on VMT from operation of ACE with the **Lathrop Wye Double** would be less than significant (beneficial), the same as described in Impact TR-6 in Section 4.17, *Traffic and Transportation*.

Construction of the **Lathrop Wye Double Track** would have similar construction impacts as those identified in Impact TR-7a in Section 4.17, *Traffic and Transportation*. Traffic operations along adjacent roadways could be temporarily impacted, and there would be some additional traffic due to construction workers and construction equipment. These impacts would be intermittent and short term. As described in Impact TRA-7a, these temporary impacts would be minimized through the implementation of Mitigation Measure TR 7.1, which requires the preparation of a construction management plan. Because construction activities for the **Lathrop Wye Double Track** would be similar to construction activities for other Phase I improvements, the construction impacts would be the same as the less than significant impact analyzed in Impact TR-7a in Section 4.17, *Traffic and Transportation.*

Operation of ACE with the **Lathrop Wye Double Track** would be the same as the operational scenarios described in the draft EIR. Thus, impacts on traffic operations from operation of ACE with the **Lathrop Wye Double Track** would be the same as those described in Impact TRA-7b and TR-7c. Overall, the ACE Extension would result in a VMT reduction by reducing the number of passenger vehicles commuting to the Bay Area, and increasing transit use. The operational impacts on delay and LOS in 2020 conditions would be the same as analyzed in the Impact TR-7b in Section 4.17, *Traffic and Transportation*, and would be significant and unavoidable even after implementation of Mitigation Measure TR-7.2. The operational impacts on delay and LOS in 2040 condition would be the same as analyzed in the Impact TR-7c in Section 4.17, *Traffic and Transportation,* and would be significant and unavoidable even after implementation of Mitigation Measure TR-7.3.

Operation of ACE Extension would introduce new ACE service between Lathrop and Ceres. There are existing and upgraded at-grade crossings to ensure hazards on roadways would be avoided. Operation of ACE with the **Lathrop Wye Double Track** would entail additional at-grade crossings as well as improvements to existing at-grade crossings. These safety measures and warning devices would remain in place along the ACE Extension alignment, and operations would be the same as those described in the Impact TR-7d in Section 4.17, *Traffic and Transportation*. Operational impacts related to traffic hazards for operation of ACE with the **Lathrop Wye Double Track** would be the same as analyzed in the Impact TR-7d in Section 4.17, *Traffic and Transportation* and would be less than significant after implementation of Mitigation Measure TR-7.1.

Construction of the **Lathrop Wye Double Track** would have similar construction impacts as described in Impact TR-8a in Section 4.17, *Traffic and Transportation*. Construction could result in some interruptions to existing ACE service. These impacts would be intermittent and short term. As described in Impact TRA-8a in Section 4.17, *Traffic and Transportation*, these temporary impacts would be minimized through the implementation of Mitigation Measure TR 7.1, which requires the preparation of a construction management plan. Construction activities for the **Lathrop Wye Double Track** would be similar to those identified in Impact TRA-8a in Section 4.17, *Traffic and Transportation*. Therefore, the construction impacts of the **Lathrop Wye Double Track** would be the same as the less than significant impact analyzed in Impact TR-3a in Section 4.17, *Traffic and*

Transportation.

Operations of the ACE Extension would not conflict or create inconsistences with adopted transit plans, guidelines, policies or standards adopted by study area cities, counties, SJRRC, or the state of California. It would increase ridership and connectivity, which would serve the population growth that is projected for the area. It is unlikely that the relatively modest increases in ridership for other transit services due to the ACE Extension would result in the need for additional transit infrastructure. Operation of ACE with the **Lathrop Wye Double Track** would be the same as the operational scenarios described in the draft EIR. Thus, operation of the **Lathrop Wye Double Track** would have the same less than significant operational impact analyzed under Impact TR-8b in Section 4.17, *Traffic and Transportation*.

The ACE Extension would not pose an impediment to connecting transit systems including Santa Clara VTA, Wheels, San Joaquin Regional Transit District, Modesto MAX, and other rail and bus transit systems serving the existing ACE route and expansion alignment. Safety measures and warning devices would remain in place along the extension alignment, including at existing and upgraded at-grade crossings that would provide transit system access to existing and new stations. The **Lathrop Wye Double Track** would entail additional at-grade crossings as well as improvements to existing at-grade crossings. These safety measures and warning devices would remain in place along the extension alignment, and operations would be the same as those described in the draft EIR. Construction and operational impacts related to traffic hazards would be the same as analyzed in the Impact TR-8c in Section 4.17, *Traffic and Transportation* and would be less than significant.

Like the other Phase I improvements, the **Lathrop Wye Double Track** would entail construction impacts on pedestrian facilities. These temporary impacts would be limited to locations where sidewalks and pedestrian/bicycle paths would require temporary closure to facilitate construction activities. The **Lathrop Wye Double Track** would involve additional at-grade crossings as well as improvements to existing at-grade crossings and would have the same temporary impacts to pedestrians and bikeways. Mitigation Measure TR-7.1 would reduce impacts to pedestrians and bicyclists to a less-than-significant level. Construction impacts on pedestrian and bicycle facilities would be the same as the impact identified in Impact TR-9a in Section 4.17, *Traffic and Transportation.* Thus, the impact on pedestrian and bicycle facilities due to construction of the **Lathrop Wye Double Track** would be less than significant after mitigation.

As described in Impact TR-9b in Section 4.17, *Traffic and Transportation*, operation of the ACE Extension would cause increased volumes at pedestrian and bicycle facilities surrounding and providing access to ACE stations. However, existing facilities are generally under capacity and capable of accommodating increased pedestrian and bicycle volumes at stations. Operation of ACE with the **Lathrop Wye Double Track** would be the same as the operational scenarios described in the draft EIR. Thus, the impacts to existing or planned bicycle and pedestrian facilities from operation of ACE with the **Lathrop Wye Double Track** would be the same as the less than significant impact analyzed in Impact TR-9b in Section 4.17, *Traffic and Transportation.*

As stated in impact TR-10a in Section 4.17, *Traffic and Transportation*, construction could result in temporary impacts to emergency vehicle access. Construction activities for the **Lathrop Wye Double Track** would be similar to those analyzed in impact TR-10a in Section 4.17, *Traffic and Transportation*. Impacts related to emergency vehicle access would be the same as the impact identified in Impact TR-10a in Section 4.17, *Traffic and Transportation.* The impact on emergency

vehicle access due to construction of the **Lathrop Wye Double Track** would be less than significant after implementation of Mitigation Measure TR-7.1.

As stated under Impact TR-10b in Section 4.17, *Traffic and Transportation*, operation of the ACE Extension would cause some minor delay to emergency vehicles. However, impacts to emergency response from Phase I operations would be less than significant because the minor delays would affect only the relatively small number of emergency vehicles that are actually traveling through the subset of study intersections and because Phase I operations would substantially reduce overall VMT in the ACE corridor. Operation of ACE with the **Lathrop Wye Double Track** would be the same as the operational scenarios described in the draft EIR. Thus, the impacts to emergency vehicle access and emergency response times from operation of ACE with the **Lathrop Wye Double Track** would be the same as the less than significant impact analyzed in Impact TR-10b in Section 4.17, *Traffic and Transportation.*

Temporary vehicle parking for construction of the **Lathrop Wye Double Track** will be provided for construction vehicles, equipment, and workers within UPRR ROW, as well as staging and access areas. Thus, existing local parking supply in areas near the **Lathrop Wye Double Track** construction sites is not anticipated to be affected. Impacts related to temporary parking during construction of the **Lathrop Wye Double Track** would be the same as the less than significant impact analyzed in Impact TR-11a in Section 4.17, *Traffic and Transportation.* Furthermore, implementation of Mitigation Measure TR-7.1 would further reduce this less than significant impact.

As stated under Impact TR-11b in Section 4.17, *Traffic and Transportation*, new parking lots are expected to accommodate the existing and new parking demand from operation of the ACE Extensions. As a result, no secondary traffic operational impacts relative to existing and proposed station parking facilities throughout the existing and proposed ACE system are expected for operation of ACE Extension. Operation of ACE with the **Lathrop Wye Double Track** would be the same as the operational scenarios described in the draft EIR. Thus, operational impacts of the **Lathrop Wye Double Track** would be the same as the impacts identified in Impact TR-11b in Section 4.17, *Traffic and Transportation*. The impact would be less than significant.

As stated under Impact TR-12a in Section 4.17, *Traffic and Transportation*, construction of the ACE Extension could result in temporary impacts to freight service. Similar to the impacts described in Impact TR-12a, construction activities for the **Lathrop Wye Double Track** would involve construction equipment operating within the UPRR ROW and would have the potential for temporary disruptions to UPRR freight service. Impacts on UPRR freight service due to construction of the **Lathrop Wye Double Track** would be the same as the impact identified in Impact TR-1a in Section 4.17, *Traffic and Transportation.* Thus, the impact on UPRR freight service due to construction of the **Lathrop Wye Double Track** would be less than significant after implementation of Mitigation Measure TR-12.1.

Operation of the ACE Extension with the **Lathrop Wye Double Track** would be the same as the operational scenarios identified in the draft EIR. While current freight traffic could be impacted particularly in the Lathrop area, SJRRC would work with UPRR on the accommodation of new ACE rail service along the Lathrop to Ceres segment, where a second main track would be constructed as well as replacement of portions of existing track on the Fresno Subdivision. Because operations would the same with the **Lathrop Wye Double Track**, the operational impacts on existing freight operations would be the same as analyzed in the Impact TR-12b of the Draft EIR Section 4.17, *Traffic and Transportation,* and would be less than significant.

5.2.17.2 Overall Impact Conclusion

Construction of the **Lathrop Wye Double Track** would result in additional impacts to transportation and traffic; however, these impacts can be reduced to a less than significant level with previously identified mitigation or would have the same residual unavoidable impact after mitigation as disclosed in the draft EIR for the Proposed Project. Operational impacts would be the same as disclosed in Section 4.17, *Traffic and Transportation*. The significance conclusions in Section 4.17, *Traffic and Transportation* are not changed with the addition of the **Lathrop Wye Double Track**.

5.2.18 Utilities and Service Systems

5.2.18.1 Impact Analysis

There is the potential for damage and disruption to gas and electric lines, water lines, sewer lines, telecommunications lines, and irrigation and water supply canals. Table 5-12 indicates which known utilities would be affected by the construction of the **Lathrop Wye Double Track**. In addition, there are several utilities that would be within the direct study area that have not been identified by service providers. Impact USS-1 in Section 4.18, *Utilities and Service Systems* identified that several utilities would be affected by other Phase I improvements; thus, the impact from construction of the **Lathrop Wye Double Track** would be the same as the construction impact identified in Impact USS-1 in Section 4.18, *Utilities and Service Systems*. Thus, the impact on utility infrastructure from construction of the **Lathrop Wye Double Track** would be less than significant after implementation of Mitigation Measure USS-1.

Construction of the **Lathrop Wye Double Track** would be similar to the construction of other Phase I improvements. Like other Phase I improvements, the **Lathrop Wye Double Track** would generate wastewater from portable toilets; require water from use; and would temporarily change drainage patterns due to grading, trenching, and other ground disturbance activities. These impacts would be the same as the impacts described in Section 4.18, *Utilities and Service Systems*. Thus, construction of the **Lathrop Wye Double Track** would result in a less than significant impact on water, wastewater, and stormwater infrastructure because the source of wastewater would be temporary during construction and would not necessitate the construction of new wastewater treatment facilities; because water use would be temporary and would not place a long-term demand on local service providers; and because construction would require the implementation of a stormwater pollution prevention plan (SWPPP) that would ensure that stormwater runoff during construction would be controlled.

Operation of the **Lathrop Wye Double Track** would not require water or wastewater services. The **Lathrop Wye Double Track** would not include any restrooms. No landscaping irrigation is proposed on the **Lathrop Wye Double Track** that would require irrigation. No water would be required and no wastewater would be generated from maintenance activities. Operation of ACE with the **Lathrop Wye Double Track** would not increase the demand for water or wastewater services. Thus, impact associated with operation of ACE with the **Lathrop Wye Double Track** would be the same as the less than significant impact identified in Impact USS-3 in Section 4.18, *Utilities and Service Systems*.

Like other Phase I improvements that would be located entirely within the UPRR ROW, operation of the **Lathrop Wye Double Track** would not require storm drain facilities. Typically, railroad track

permits water to percolate through to the ground. As such, the addition of new track and track improvements at **Lathrop Wye Double Track** would not result in the creation of substantial new areas of impervious surface, and increases in stormwater runoff would be minimal. Installation of new stormwater drainage or retention infrastructure would not be required along the track. Thus, the impact would be less than significant.

Table 5-12. Lathrop Wye Double Track - Utilities Potentially Affected

	Protect in Place						Relocate					
Phase I Improvements	**Irrigation Canals**	**Gas and Electric Lines**	**Water Lines**	**Sewer Lines**	**Storm Drains**	**Telecom Lines**	**Irrigation Canals**	**Gas and Electric Lines**	**Water Lines**	**Sewer Lines**	**Storm Drains**	**Telecom Lines**
Lathrop Wye Double Track	0	5	1	3	0	4	1 [a]	1	0	0	0	0

Source: Hartman pers. comm.

[a] The irrigation canal would be affected by implementation of a box culvert extension.

Construction of the **Lathrop Wye Double Track** would generate similar C&D waste and would be located the same distance from landfills as the other Phase I improvements. As described in Impact USS-5 in Section 4.18, *Utilities and Service Systems*, all the regional solid waste facilities accept C&D material and the landfill facilities in the vicinity of the Phase I improvements have sufficient remaining capacity (or a throughput) that would accommodate the temporary demand for waste disposal generated by construction. Thus, the impact from the **Lathrop Wye Double Track** would be less than significant.

Like other Phase I improvements that do not create stations, the **Lathrop Wye Double Track** would not result in ongoing solid waste generation. Solid waste could occasionally be generated as part of routine track maintenance and would be diverted as required by the appropriate federal, state, and local regulatory guidance. Thus, impacts related to solid waste being generated from operation of the **Lathrop Wye Double Track** would be less than significant.

5.2.18.2 Overall Impact Conclusion

Construction and operation of the **Lathrop Wye Double Track** would not result in any additional impact to utilities beyond that disclosed in Section 4.18, *Utilities* for the reasons disclosed above. The significance conclusions in Section 4.18 are not changed with the addition of the **Lathrop Wye Double Track**.

Construction of the Lathrop Wye Double Track would result in additional impacts to utilities and service systems previously identified in Section 4.18, *Utilities and Service Systems*; however, these impacts can be reduced to a less than significant level with previously identified mitigation. Operational impacts would be the same as disclosed in Section 4.18, *Utilities and Service Systems*. The significance conclusions in Section 4.18, *Utilities and Service Systems* are not changed with the addition of the **Lathrop Wye Double Track**.

5.2.19 Cumulative Impacts

As discussed above, the addition of the **Lathrop Wye Double Track** would not result in new significant or substantially more severe impacts than those disclosed in the draft EIR. As such, the potential contribution of the proposed project would not substantially change. As shown in Figure 5-1 in the draft EIR, cumulative projects were already identified adjacent to the **Lathrop Wye Double Track** construction area. Since the impacts of the **Lathrop Wye Double Track** would not be substantially different than the Proposed Project disclosed in the draft EIR, and nearby cumulative projects were already included in the draft EIR, the significance conclusions about cumulative effects of the Proposed Project with **Lathrop Wye Double Track** would be the same as disclosed in the draft EIR.

Chapter 6
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