Merced Intermodal Track Connection Project

Revised Draft Environmental Impact Report

July 2025

SCH # 2023010061

San Joaquin Joint Powers Authority

MITC

Merced Intermodal Track Connection

REVISED DRAFT ENVIRONMENTAL IMPACT REPORT

MERCED INTERMODAL TRACK CONNECTION PROJECT

STATE CLEARINGHOUSE #2023010061

PREPARED FOR:

San Joaquin Joint Powers Authority
949 East Channel Street
Stockton, CA 95202
Contact: Dan Leavitt
information@mitcproject.org

PREPARED BY:

300 South Grand Avenue
Los Angeles, CA 90071
Contact: David DeRosa

595 Market Street, Suite 950
San Francisco, CA 94105
Contact: Rich Walter

July 2025

AECOM. 2025. *Merced Intermodal Track Connection Project Revised_Draft Environmental Impact Report*. July. Los Angeles, CA. Prepared for San Joaquin Joint Powers Authority, Stockton, CA.

Merced Intermodal Track Connection Project
Revised Draft Environmental Impact Report

TO: Agencies, Organizations, and Interested Parties
FROM: San Joaquin Joint Powers Authority
SUBJECT: Revised Draft Environmental Impact Report for the Merced Intermodal Track Connection Project Focused on Additional Biological Resources Analysis (Crotch's bumble bee)

The San Joaquin Joint Powers Authority (SJJPA) is issuing a limited revision to its previously published Draft Environmental Impact Report (EIR) for the Merced Intermodal Track Connection Project (Project), pursuant to the California Environmental Quality Act (CEQA). This document is entitled *Merced Intermodal Track Connection Revised Draft Environmental Impact Report* (Revised Draft EIR). Pursuant to Section 15088.5, subdivisions (c) and (f)(2) of the CEQA Guidelines, this document is limited to the portions of the previously published Draft EIR that require revision and recirculation. The previously published Draft EIR (SCH#2023010061, July 2024) is available on the Project's webpage (https://sjjpa.com/mitc/). **SJJPA requests that reviewers limit the scope of their comments to the revised information within this Revised Draft EIR.**

This Revised Draft EIR has been prepared, is being made available pursuant to CEQA, and presents the additional biological resources analysis for Crotch's bumble bee (*Bombus crotchii*).

Additional Biological Resources Analysis

The California Department of Fish and Wildlife commented on the previously published Draft EIR. The commenter noted that Crotch's bumble bee was not included in the previously published Draft EIR and no measures were proposed to mitigate for potential impacts on the species. The commenter noted that habitat for Crotch's bumble bee appears to be present in the Project vicinity and the commenter recommended mitigation measures. Crotch's bumble bee is listed as a candidate species under the California Endangered Species Act, and thus meets the definition of special-status species used by SJJPA for the impact analysis. Crotch's bumble bee is assumed to be present in the study area for the Project, based on the existence of suitable habitat for the species in the study area.

Per Section 15088.5(a) of the CEQA Guidelines, recirculation is required when new significant information identifies any one of the following:

- 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.

Of these recirculation requirements, SJJPA has revised the Draft EIR in relation to the first two items, as construction activities associated with the Project could affect grassland for Crotch's bumble bee, resulting in a potentially significant impact if Crotch's bumble bee are actually present at the time of disturbance. With implementation of Mitigation Measure BIO-2.15: Avoidance and Minimization Measures for Crotch's Bumble Bee, the impact would be less than significant. Thus, to provide the opportunity for meaningful public review and comment regarding the additional analysis and mitigation measure associated with Crotch's bumble bee, SJJPA has decided to recirculate the relevant portions of the Draft EIR. Accordingly, Section 3.4, *Biological Resources*, of this Revised Draft EIR includes additional analysis and a new mitigation measure related to Crotch's bumble bee.

Revised Draft Environmental Impact Report

As discussed above, a new significant environmental impact could result from the Project and a substantial increase in the severity of an environmental impact could result unless mitigation measures are adopted that reduce the impact to a level of insignificance. Thus, SJJPA, as the lead agency under CEQA, is issuing the Revised Draft EIR limited to the portions of the Draft EIR that require revision based on the new information described above, consistent with the guidance provided under CEQA.[1] New information added to the previously published Draft EIR includes background information, impact analysis, and a mitigation measure related to Crotch's bumble bee.

New or revised text in the Revised Draft EIR compared to the previously published Draft EIR is shown with underline and red colored font for additions and ~~strikeout~~ for deletions. The Revised Draft EIR consists of excerpted text where updates or additions related to Crotch's bumble bee have been made. Ellipses (…) are used to identify where text from the previously published Draft EIR remains unchanged and, therefore, is not included in the Revised Draft EIR.

This Revised Draft EIR includes the following:

- Executive Summary
- Section 3.4, *Biological Resources*
- Chapter 4, *Cumulative Impacts*
- Chapter 8, *References*
- Appendix 3.4-3, Special-Status Species Tables

SJJPA reviewed other sections of the previously published Draft EIR and found, based on research and a review of the evidence, that no other substantive changes would be required for this Revised Draft EIR. All other appendices to Section 3.4, as well as all technical reports supporting Section 3.4 of the Draft EIR, remain unchanged.

[1] CEQA Guidelines, Section 15088.5; 40 Code of Federal Regulations (C.F.R.) Section 1502.9(c)(1)(ii) (1978).

Publication of the Revised Draft EIR

Pursuant to CEQA requirements, this Revised Draft EIR has been released for a 47-day public review period. SJJPA is providing notification in a similar manner as the distribution of the previously published Draft EIR. The public was advised of the availability of this Revised Draft EIR through notices placed in local newspapers, sent by email and direct mailings, and announced through the Project webpage (https://sjjpa.com/mitc/) and social media.

A Notice of Availability (NOA) was posted with the California State Clearinghouse and at the county clerk/recorder's office for Merced County. In addition, the NOA was published in the following newspaper:

- Merced Sun-Star

Next Steps

SJJPA welcomes comments on the content of this Revised Draft EIR and requests that such comments be limited to the scope of the Revised Draft EIR. The public review period will begin on **July 31, 2025**, and end on **September 15, 2025**. Please see the Notice of Availability for the Revised Draft EIR for details on how to comment.

The previously published Draft EIR and the Revised Draft EIR are available on the Project webpage (https://sjjpa.com/mitc/). A printed copy of the previously published Draft EIR and the Revised Draft EIR are available for public viewing at the SJJPA offices at 949 East Channel Street in Stockton, California during normal office hours (Monday through Friday 8:00 a.m. to 5:00 p.m.). Electronic versions of the previously published Draft EIR and the Revised Draft EIR are available upon request at the SJJPA offices as well. In addition, a printed copy of the previously published Draft EIR and the Revised Draft EIR is also available for public viewing at the following locations:

- City of Merced, City Clerk's Office
  678 West 18th Street, 1st Floor
  Merced, CA 95340
  Office hours: Monday through Friday from 8:00 a.m. to 5:00 p.m.
  (closed during the 12:00 p.m. to 1:00 p.m. lunch hour)

- Merced County Library
  2100 O Street
  Merced, CA 95340
  Library hours: Monday and Thursday from 10:00 a.m. to 6:00 p.m., Tuesday and Wednesday from 10:00 a.m. to 8:00 p.m., and Friday and Saturday from 10:00 a.m. to 5:00 p.m. (electronic versions of the Draft EIR are also available upon request at this location)

The previously published Draft EIR is not currently part of the public review and comment process; however, it is available for review and reference.

The Final EIR will include SJJPA's responses to comments received on the previously published Draft EIR, in addition to responses to comments received on the content of this Revised Draft EIR. SJJPA anticipates publishing the Final EIR in late 2025. The new mitigation measure included in Section 3.4, *Biological Resources*, will be incorporated into the Mitigation Monitoring and Reporting Program as part of the CEQA

decision documents. After publishing the Final EIR, the SJJPA Board of Directors will consider whether to certify the Final EIR and approve the Project pursuant to CEQA.

Contents

This table of contents includes the chapters and sections in the Revised Draft Environmental Impact Report (Revised Draft EIR) that provide updates addressing Crotch's bumble bee (*Bombus crotchii*).

Appendices

…

Appendix 3.4-3: Special-Status Species Tables

…

Tables

Acronyms and Abbreviations

CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
EIR	Environmental Impact Report
IPaC	Information for Planning and Conservation
MITC	Merced Intermodal Track Connection
NMFS	National Marine Fisheries Service
Project	Merced Intermodal Track Connection Project
SJJPA	San Joaquin Joint Powers Authority
SR	State Route
UPRR	Union Pacific Railroad
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

Executive Summary

This chapter ~~executive summary presents the key findings~~ of ~~the~~ this Revised Draft Environmental Impact Report (Revised Draft EIR) reflects changes identified in Section 3.4, *Biological Resources* for the San Joaquin Joint Powers Authority (SJJPA)'s Merced Intermodal Track Connection Project (Project). ~~This section summarizes the background, need for the Project, Project objectives, description, environmental impacts and mitigation, alternatives, areas of controversy, and issues to be resolved associated with the Project.~~

…

Table ES-1 ~~at the end of this Executive Summary~~ presents a summary of the impacts of the Project, proposed mitigation measures, and each impact's level of significance after mitigation. Only the portions of Table ES-1 that have been changed are included in this chapter.

Table ES-1. Summary of Environmental Impacts and Required Mitigation Measures

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
3.4 Biological Resources			
Impact BIO-2. Construction of the Project could have a substantial adverse effect, either directly or through habitat modifications, on wildlife or fish species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or National Marine Fisheries Service.	Potentially significant impact	BIO-2.1: Conduct a Worker Environmental Training Program for Construction Personnel BIO-2.2: Install Fencing to Protect Sensitive Biological Resources BIO-2.3: Retain a Designated Biologist to Conduct Monitoring prior to Construction during Fence Installation and during all Construction Activities BIO-2.4: Avoidance, Minimization, and Compensatory Measures for Valley Elderberry Longhorn Beetle BIO-2.5: Avoidance and Minimization Measures for Western Pond Turtle BIO-2.6: Avoidance and Minimization Measures for Nesting Birds during Construction Activities BIO-2.7: Avoidance and Minimization Measures for Swainson's Hawk BIO-2.8: Compensate for Swainson's Hawk Foraging Habitat Loss BIO-2.9: Avoidance and Minimization Measures for Burrowing Owl BIO-2.10: Compensate for Burrowing Owl Habitat Loss BIO-2.11: Avoidance and Minimization Measures for Tricolored Blackbird BIO-2.12: Avoidance and Minimization Measures for Roosting Bats BIO-2.13: Avoidance, Minimization, and Compensatory Measures for Monarch Butterfly BIO-2.14: Implement Seasonal Restrictions for In-Water Work BIO-2.15: Avoidance and Minimization Measures for Crotch's Bumble Bee	Less-than-significant impact

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
Impact BIO-5. Construction of the Project could conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance	Potentially significant impact	BIO-2.15: Avoidance and Minimization Measures for Crotch's Bumble Bee BIO-5.1: Compensate for Tree Removal during Construction	Less-than-significant impact
Impact C-BIO-1. Construction and operation of the Project would not contribute considerably to a significant cumulative impact on sensitive biological resources.	Significant cumulative impact	BIO-2.1: Conduct a Worker Environmental Training Program for Construction Personnel BIO-2.2: Install Fencing to Protect Sensitive Biological Resources BIO-2.3: Retain a Designated Biologist to Conduct Monitoring prior to Construction during Fence Installation and during all Construction Activities BIO-2.4: Avoidance, Minimization, and Compensatory Measures for Valley Elderberry Longhorn Beetle BIO-2.5: Avoidance and Minimization Measures for Western Pond Turtle BIO-2.6: Avoidance and Minimization Measures for Nesting Birds during Construction Activities BIO-2.7: Avoidance and Minimization Measures for Swainson's Hawk BIO-2.8: Compensate for Swainson's Hawk Foraging Habitat Loss BIO-2.9: Avoidance and Minimization Measures for Burrowing Owl BIO-2.10: Compensate for Burrowing Owl Habitat Loss BIO-2.11: Avoidance and Minimization Measures for Tricolored Blackbird BIO-2.12: Avoidance and Minimization Measures for Roosting Bats BIO-2.13: Avoidance, Minimization, and Compensatory Measures for Monarch Butterfly BIO-2.14: Implement Seasonal Restrictions for In-Water Work	Less than considerable contribution

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
		BIO-2.15: Avoidance and Minimization Measures for Crotch's Bumble Bee BIO-3.1: Avoidance and Minimization Measures for Sensitive Natural Communities, including Ruderal Riparian Habitat BIO-3.2: Compensate for Loss of Ruderal Riparian Habitat BIO-3.3: Prevent the Introduction or Spread of Invasive Plant Species BIO-4.1: Avoidance and Minimization Measures for Wetlands and Drainages during Construction BIO-4.2: Compensate for Impacts on Jurisdictional Wetlands and Nonwetland Waters of the United States (aquatic resources) and the state prior to Impacts during Construction BIO-5.1: Compensate for Tree Removal during Construction BIO-7.1: Avoidance and Minimization Measures for Nesting Birds during Operation and Maintenance Activities BIO-7.2: Avoidance and Minimization Measures for Roosting Bats during Operation and Maintenance Activities BIO-7.3: Conduct Pre-Activity Survey for Special-Status Wildlife Species Prior to Conducting Maintenance Activities BIO-10.1: Model Hydraulics of New Bridge before Construction and Design Bridge to Accommodate Fish Migration	

1

3.4 Biological Resources

3.4.1 Introduction

Section 3.4, *Biological Resources*, of this Recirculated Draft Environmental Impact Report (Recirculated Draft EIR) provides updates addressing Crotch's bumble bee (*Bombus crotchii*). This species became a candidate for listing under the California Endangered Species Act (CESA) on June 12, 2019. This document provides information on the biology and ecology of Crotch's bumble bee, data sources used to determine the extent of potential habitat within the study area, and analysis of Project impacts and mitigation measures. Changes in response to the species designation are being made in the Recirculated Draft EIR and in the list of special-status wildlife species included in Appendix 3.4-3. All other appendices to Section 3.4 of the Draft EIR, as well as technical reports supporting Section 3.4, remain unchanged.

...

3.4.3 Environmental Setting

...

3.4.3.1 Land Cover Types and Associated Wildlife

...

Ruderal Annual Grassland

...

Wildlife Associations

Wildlife species occurring in ruderal land cover are primarily determined by the characteristics of nearby natural, less disturbed habitat, although the dense cover provided by weeds can attract foraging songbirds that are otherwise absent from adjacent developed, grassland, woodland, or wetland areas. Species in this category include white-crowned sparrow (*Zonotrichia leucophrys*), American goldfinch (*Spinus tristis*), dark-eyed junco (*Junco hyemalis*), and song sparrow (*Melospiza melodia*). Such cover type also provides habitat for common reptiles such as western fence lizard (*Sceloporus occidentalis*), gopher snake (*Pituophis catenifer*), and common garter snake (*Thamnophis* spp.). Ruderal habitat type can also provide low quality habitat for burrowing owl, tricolored blackbird (*Agelaius tricolor*) foraging, and Swainson's hawk foraging. Ruderal habitat can also support insects such as western monarch butterfly and Crotch's bumble bee if blooming nectar resources and milkweed plants are present.

...

3.4.3.2 Special-Status Species

...

Special-Status Wildlife

Appendix 3.4-3 provides a list of special-status wildlife species identified during the review of existing information as having the potential to occur in the study area. This list was derived from CNDDB occurrences in USGS topographic quadrangle maps with which the Project footprint overlaps (Merced and Atwater quadrangles) and IPaC results using the Project footprint. Special-status wildlife species were determined to be either present or absent in the study area based on suitable habitat, range of the species, and known occurrences of the species in the vicinity of the study area. Eight ~~Seven~~ special-status wildlife species have potential to be present (Monarch butterfly, valley elderberry longhorn beetle, Crotch's bumble bee, western pond turtle, tricolored blackbird, burrowing owl, Swainson's hawk, and western mastiff bat).

...

3.4.4 Impact Analysis

...

3.4.4.1 Methods for Analysis

...

3.4.4.2 Thresholds of Significance

...

3.4.4.3 Impacts and Mitigation Measures

...

Impact BIO-2	Construction of the Project could have a substantial adverse effect, either directly or through habitat modifications, on wildlife or fish species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or National Marine Fisheries Service.
Level of Impact	**Potentially significant impact**

Mitigation Measures	BIO-2.1: Conduct a Worker Environmental Training Program for Construction Personnel BIO-2.2: Install Fencing to Protect Sensitive Biological Resources BIO-2.3: Retain a Designated Biologist to Conduct Monitoring prior to Construction during Fence Installation and during all Construction Activities BIO-2.4: Avoidance, Minimization, and Compensatory Measures for Valley Elderberry Longhorn Beetle BIO-2.5: Avoidance and Minimization Measures for Western Pond Turtle BIO-2.6: Avoidance and Minimization Measures for Nesting Birds during Construction Activities BIO-2.7: Avoidance and Minimization Measures for Swainson's Hawk BIO-2.8: Compensate for Swainson's Hawk Foraging Habitat Loss BIO-2.9: Avoidance and Minimization Measures for Burrowing Owl BIO-2.10: Compensate for Burrowing Owl Habitat Loss BIO-2.11: Avoidance and Minimization Measures for Tricolored Blackbird BIO-2.12: Avoidance and Minimization Measures for Roosting Bats BIO-2.13: Avoidance, Minimization, and Compensatory Measures for Monarch Butterfly BIO-2.14: Implement Seasonal Restrictions for In-Water Work BIO-2.15: Avoidance and Minimization Measures for Crotch's Bumble Bee
Level of Impact After Mitigation	**Less-than-significant impact**

Project

Impact Characterization

Construction for the majority of the Project would occur in the existing right-of-way and would mainly disturb developed/landscaped, disturbed/unvegetated and ruderal annual grassland areas with limited potential to support special-status wildlife species. Although unlikely, special-status wildlife species could be present within the existing right-of-way and previously disturbed areas during construction. Outside of the existing right-of-way, special-status wildlife species have the potential to occur in natural land cover with suitable habitat characteristics (e.g., riparian, annual grasslands, riverine). Construction of the Project could have direct and indirect effects on special-status wildlife species. Direct effects can be temporary (return to baseline within 1 year of disturbance) or permanent in duration and could be caused by the following actions.

- Injury or mortality of wildlife from construction equipment vehicle strike, crushing, and/or entombment.
- Loss or disturbance of habitat from vegetation clearing (including removal of trees, shrubs, and ground cover vegetation), grading, excavating/trenching, tie and ballast installation, bridge work, and concrete work activities during construction.
- Temporary stockpiling, soil movement, construction materials, or other construction waste.
- Excavation and placement of fill.
- Soil compaction, dust, air pollution, and water runoff from the construction site.

- Increased vehicle traffic and human presence.
- Short-term construction-related noise (from equipment and human presence) and visual disturbance.
- Degradation of water quality in aquatic habitat features from construction runoff containing petroleum or concrete products.
- Indirect effects on wildlife could be caused by the following actions.
    - Increased light and noise levels.
    - Alteration of hydrology or aquatic thermal regime.
    - Damage through toxicity associated with exposure to herbicides and other chemicals.
    - Introduction of invasive (nonnative) species.
    - Decreased reproductive success because of loss of foraging and ~~nesting~~ breeding habitat.
    - Reduced habitat suitability and prey abundance as a result of habitat alteration or degradation.

The types of direct and indirect effects on special-status wildlife resulting from these actions would be similar wherever habitat for a given species or species group is present. For the purposes of this discussion, effects on special-status wildlife and fish are described based on land cover types or habitat features that support special-status species (including some that support multiple species) that could be affected by the Project. The following subsections summarize the land covers that could be affected by the Project and the associated species that could be affected.

…

Grassland Habitat for Special-Status Invertebrates, Reptiles, and Birds

Construction activities affecting ruderal annual grassland habitat (15.36 acres) could affect the following special-status species: western monarch butterfly, Crotch's bumble bee, western pond turtle, Swainson's hawk, and burrowing owl. Potential direct effects include injury and mortality of adults, young, and eggs occurring in grassland habitat within the Project footprint, nest loss, host plant loss (e.g., milkweed sp.), permanent habitat loss, and permanent habitat degradation through impacts that result in reduced host plant health. Potential indirect effects include habitat degradation from invasive plants, increased light and noise levels, decreased reproductive success, reduced prey abundance, fugitive dust affecting host or nectar plants by covering leaves and reducing plant vigor, and herbicide/insecticide exposure.

…

Mitigation Measures

….

Mitigation Measure BIO-2.3: Retain a Designated Biologist to Conduct Monitoring prior to Construction during Fence Installation and during all Construction Activities

To ensure that all construction personnel are trained, that avoidance and minimization measures are properly implemented, that required construction fencing, silt fencing, and/or straw wattles are installed, and that sensitive habitats are avoided, SJJPA or its contractor(s) will

designate a biologist to monitor all construction activities. If a special-status wildlife species is observed within the work area during construction, all activities within the immediate area of the animal will stop until the individual moves out of the work area on its own accord. Observations of state or federally listed species will be reported to CDFW, USFWS, and/or NMFS. Observations of special-status species and sensitive natural communities will be reported to the California Natural Diversity Database (CNDDB).

…

Mitigation Measure BIO-2.15: Avoidance and Minimization Measures for Crotch's Bumble Bee

Habitat Assessment. Prior to initiation of construction, a qualified biologist will conduct a habitat assessment following methods described in the Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species (California Department of Fish and Wildlife 2023) to determine if the Project area and the immediate surrounding vicinity contain habitat suitable to support Crotch's bumble bee. The habitat assessment will quantify plant species, diversity, quantity of foraging resources, and potential nesting and overwintering substrates.

Preconstruction Survey. Prior to initiation of ground-disturbing construction or vegetation removal, if potentially suitable habitat is identified during the habitat assessment, a qualified biologist will conduct focused surveys for Crotch's bumble bee during the active season for Crotch's bumble bee (approximately February 1 through October 31) following the methodology outlined in the Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species (California Department of Fish and Wildlife 2023). The survey period may be refined based on location, elevation, seasonal rainfall, average ambient temperatures, and local seasonal weather conditions to coincide with bloom periods for preferred plant forage species (California Department of Fish and Wildlife 2023). The survey area will consist of the construction footprint plus a 50-foot buffer if access is allowed. If Crotch's bumble bee is not detected, construction activities can proceed. If however, there is a lapse in initial construction activities greater than 2 weeks, an additional survey will be conducted to ensure that Crotch's bumble bee has not moved into the construction area.

No-Activity Buffers. If an in-use Crotch's bumble bee nest is detected during preconstruction surveys, a 50-foot (minimum) non-disturbance buffer will be established around the nest until the nest senesces or becomes inactive and is no longer in use, as determined by the qualified biologist or until construction activity in the project area is complete, whichever is first. If a 50-foot non-disturbance buffer is not feasible, SJJPA will consult with CDFW to determine additional avoidance and minimization measures. If ground-disturbing activities will occur in suitable Crotch's bumble bee habitat during the overwintering period (October through February), a qualified biological monitor will be present during initial vegetation removal and ground disturbance in suitable habitat, and consultation with CDFW may be warranted to discuss how to implement project activities and avoid take. Any detection of Crotch's bumble bee prior to or during project implementation warrants consultation with CDFW to discuss how to avoid take.

Take Authorization. If take cannot be avoided, SJJPA will consult with CDFW to obtain an Incidental Take Permit pursuant to Fish and Game Code Section 2081(b), prior to initiating ground-disturbing activities.

Significance with Application of Mitigation

With implementation of Mitigation Measures BIO-2.1, BIO-2.2, BIO-2.3, BIO-2.4, BIO-2.5, BIO-2.6, BIO-2.7, BIO-2.8, BIO-2.9, BIO-2.10, BIO-2.11, BIO-2.12, BIO-2.13, ~~and~~ BIO-2.14, and BIO-2.15, impacts on wildlife or fish species identified as a candidate, sensitive, or special-status species during construction of the Project would be less than significant.

Variant H1

Impact Characterization

Construction of Variant H1 would disturb or remove an additional 0.12 acre of developed/landscaped habitat and 4.48 acres of ruderal annual grassland compared to the Project, with potential to support special-status wildlife species. Variant H1 would include construction of 15 acres of solar panels. Monarch butterflies, Crotch's bumble bee, western pond turtle, Swainson's hawk, burrowing owl, and nesting birds could be affected by construction within developed landscape and ruderal annual grassland habitat. Ground disturbance activities for construction of Variant H1 could result in habitat loss, habitat degradation from invasive plants, increased light and noise levels, decreased reproductive success, reduced prey abundance, fugitive dust affecting host or nectar plants by covering leaves and reducing plant vigor, and herbicide/insecticide exposure.

Impact Details and Conclusions

The Variant H1 construction area supports the special-status wildlife species mentioned above. The potential for impacts on wildlife or fish species identified as a candidate, sensitive, or special-status species under Variant H1 is the same as described for the Project and would be a potentially significant impact.

Mitigation Measures

...

Mitigation Measure BIO-2.15: Avoidance and Minimization Measures for Crotch's Bumble Bee

Significance with Application of Mitigation

With implementation of Mitigation Measures BIO-2.1, BIO-2.2, BIO-2.3, BIO-2.4, BIO-2.5, BIO-2.6, BIO-2.7, BIO-2.8, BIO-2.9, BIO-2.10, ~~and~~ BIO-2.13, and BIO-2.15, impacts on wildlife or fish species identified as a candidate, sensitive, or special-status species under Variant H1 would be less than significant.

Variant H2

Impact Characterization

Construction of Variant H2 would disturb or remove developed/landscaped habitat, ruderal annual grassland, detention basin and disturbed/unvegetated habitat with potential to support special-status wildlife species. Ground disturbance activities for construction of Variant H2 could result in the permanent degradation or loss of special-status wildlife habitat in the Variant H2 footprint. Temporary impacts during construction of Variant H2 could also occur.

Impact Details and Conclusions

The Variant H2 construction area supports the special-status wildlife species mentioned above. The potential for impacts on wildlife or fish species identified as a candidate, sensitive, or special-status species under Variant H2 is the same as described for the Project and would be a potentially significant impact.

Mitigation Measures

...

Mitigation Measure BIO-2.15: Avoidance and Minimization Measures for Crotch's Bumble Bee

Significance with Application of Mitigation

With implementation of Mitigation Measures BIO-2.1, BIO-2.2, BIO-2.3, BIO-2.4, BIO-2.5, BIO-2.6, BIO-2.7, BIO-2.8, BIO-2.9, BIO-2.10, ~~and~~ BIO-2.13, and BIO-2.15, impacts on wildlife or fish species identified as a candidate, sensitive, or special-status species under Variant H2 would be less than significant.

Variant H3

Impact Characterization

Construction of Variant H3 would disturb or remove developed/landscaped habitat, ruderal annual grassland, detention basin and disturbed/unvegetated habitat with potential to support special-status wildlife species. Ground disturbance activities for construction of Variant H3 could result in the permanent degradation or loss of special-status wildlife habitat in the Variant H3 footprint. Temporary impacts during construction of Variant H3 could also occur.

Impact Details and Conclusions

The Variant H3 construction area supports the special-status wildlife species mentioned above. The potential for impacts on wildlife or fish species identified as a candidate, sensitive, or special-status species under Variant H3 is the same as described for the Project and would be a potentially significant impact.

Mitigation Measures

...

Mitigation Measure BIO-2.15: Avoidance and Minimization Measures for Crotch's Bumble Bee

Significance with Application of Mitigation

With implementation of Mitigation Measures BIO-2.1, BIO-2.2, BIO-2.3, BIO-2.4, BIO-2.5, BIO-2.6, BIO-2.7, BIO-2.8, BIO-2.9, BIO-2.10, ~~and~~ BIO-2.13, and BIO-2.15, impacts on wildlife or fish species identified as a candidate, sensitive, or special-status species under Variant H3 would be less than significant.

...

Impact BIO-5	Construction of the Project could conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
Level of Impact	**Potentially significant impact**
Mitigation Measures	BIO-2.15: Avoidance and Minimization Measures for Crotch's Bumble Bee BIO-5.1: Compensate for Tree Removal during Construction
Level of Impact After Mitigation	**Less-than-significant impact**

Project

Impact Characterization

Construction of the Project could conflict with local biological resource policies (including the City of Merced tree policies and the protection of sensitive plant and wildlife habitat policies or ordinances) by removing locally regulated street trees and/or disturbing sensitive plant and wildlife habitat during construction.

Tree removal is expected during construction, as part of ground disturbance activities. Local regulations do not apply inside or outside the UPRR right-of-way because UPRR is a federally regulated rail carrier and the SJJPA is a joint powers authority that benefits from the exemption contained in Public Utilities Code Section 103200.

Construction of the Project would avoid tree removal unless it is necessary. Tree removals would be limited in areas within the existing UPRR right-of-way because existing UPRR maintenance actions routinely prune and remove trees in the right-of-way as necessary for safe operation. Tree removals are expected in some portions of the existing right-of-way and in environmental footprints outside the existing right-of-way.

The analysis below identifies the potential impacts on trees. Impacts on special-status plants and their habitat are discussed under Impact BIO-1; impacts on special-status wildlife and fish and their habitat are discussed under Impact BIO-2.

Impact Details and Conclusions

The San Joaquins tracks and ACE/UPRR spur track construction areas are primarily located within developed and ruderal land cover and would affect a low number of trees. Trees would mostly be affected in ruderal riparian habitat, which is discussed in Impact BIO-3.

While compliance with local ordinances is not legally required for construction of the Project, the loss of trees from areas outside the UPRR right-of-way would be significant and could conflict with the City of Merced tree policies. Therefore, the impacts from tree removal due to the Project would be potentially significant.

In addition, there are local policies related to the protection of plants, wildlife, and fish species. These local policies are identified in Appendix 3.0-1, *Regional Plans and Local General Plans*, and include policies from the Merced County General Plan. As described in Impact BIO-2, construction of the Project would result in a potentially significant impact on special-status wildlife and fish species. As such, construction of the Project could conflict with local biological resource policies, resulting in a potentially significant impact.

Mitigation Measures

...

Mitigation Measure BIO-2.15: Avoidance and Minimization Measures for Crotch's Bumble Bee

...

Significance with Application of Mitigation

With implementation of Mitigation Measures BIO-2.1, BIO-2.2, BIO-2.3, BIO-2.4, BIO-2.5, BIO-2.6, BIO-2.7, BIO-2.8, BIO-2.9, BIO-2.10, BIO-2.11, BIO-2.12, BIO-2.13, BIO-2.15, and BIO-5.1, impacts related to a conflict with local policies or ordinances protecting biological resources during construction of the Project would be less than significant.

Variant H1

Impact Characterization

Construction of Variant H1 would have the same impacts on protected street trees and/or sensitive plant and wildlife habitat as discussed above for the Project.

Impact Details and Conclusions

As described above for the Project, loss of trees within ruderal riparian habitat is discussed in Impact BIO-3. Under Variant H1, the loss of trees from areas outside the UPRR right-of-way would be significant and could conflict with the City of Merced tree policies. Therefore, the impacts from tree removal due to construction of Variant H1 would be potentially significant.

Construction of Variant H1 could also conflict with local biological resource policies, resulting in a potentially significant impact.

Mitigation Measures

...

Mitigation Measure BIO-2.15: Avoidance and Minimization Measures for Crotch's Bumble Bee

...

Significance with Application of Mitigation

With implementation of Mitigation Measures BIO-2.1, BIO-2.2, BIO-2.3, BIO-2.4, BIO-2.5, BIO-2.6, BIO-2.7, BIO-2.8, BIO-2.9, BIO-2.10, BIO-2.11, BIO-2.12, BIO-2.13, BIO-2.15, and BIO-5.1, impacts related to a conflict with local policies or ordinances protecting biological resources during construction of Variant H1 would be less than significant.

Variant H2

Impact Characterization

Construction of Variant H2 would have the same impacts on protected street trees and/or sensitive plant and wildlife habitat as discussed above for the Project.

Impact Details and Conclusions

As described above for the Project, loss of trees within ruderal riparian habitat is discussed in Impact BIO-3. Under Variant H2, the loss of trees from areas outside the UPRR right-of-way would be significant and could conflict with the City of Merced tree policies. Therefore, the impacts from tree removal due to construction of Variant H2 would be potentially significant.

Construction of Variant H2 could also conflict with local biological resource policies, resulting in a potentially significant impact.

Mitigation Measures

…

Mitigation Measure BIO-2.15: Avoidance and Minimization Measures for Crotch's Bumble Bee

…

Significance with Application of Mitigation

With implementation of Mitigation Measures BIO-2.1, BIO-2.2, BIO-2.3, BIO-2.4, BIO-2.5, BIO-2.6, BIO-2.7, BIO-2.8, BIO-2.9, BIO-2.10, BIO-2.11, BIO-2.12, BIO-2.13, BIO-2.15, and BIO-5.1, impacts related to a conflict with local policies or ordinances protecting biological resources during construction of Variant H2 would be less than significant.

Variant H3

Impact Characterization

Construction of Variant H3 would have the same impacts on protected street trees and/or sensitive plant and wildlife habitat as discussed above for the Project.

Impact Details and Conclusions

As described above for the Project, loss of trees within ruderal riparian habitat is discussed in Impact BIO-3. Under Variant H3, the loss of trees from areas outside the UPRR right-of-way would be significant and could conflict with the City of Merced tree policies. Therefore, the impacts from tree removal due to construction of Variant H3 would be potentially significant.

Construction of Variant H3 could also conflict with local biological resource policies, resulting in a potentially significant impact.

Mitigation Measures

…

Mitigation Measure BIO-2.15: Avoidance and Minimization Measures for Crotch's Bumble Bee

…

Significance with Application of Mitigation

With implementation of Mitigation Measures BIO-2.1, BIO-2.2, BIO-2.3, BIO-2.4, BIO-2.5, BIO-2.6, BIO-2.7, BIO-2.8, BIO-2.9, BIO-2.10, BIO-2.11, BIO-2.12, BIO-2.13, BIO-2.15, and BIO-5.1, impacts

related to a conflict with local policies or ordinances protecting biological resources during construction of Variant H3 would be less than significant.

…

This page intentionally left blank.

Chapter 4
Cumulative Impacts

4.1 Introduction

...

This chapter of the Revised Draft Environmental Impact Report (Revised Draft EIR) reflects changes identified in Section 3.4, *Biological Resources.*

...

4.6 Cumulative Impacts Analysis

...

4.6.1 Biological Resources

...

Impact C-BIO-1	Construction and operation of the Project would not contribute considerably to a significant cumulative impact on sensitive biological resources.
Level of Cumulative Impact	Construction and Operation Significant (see below in regard to the Project's contribution)
Applicable Mitigation Measures	BIO-2.1: Conduct a Worker Environmental Training Program for Construction Personnel BIO-2.2: Install Fencing to Protect Sensitive Biological Resources BIO-2.3: Retain a Designated Biologist to Conduct Monitoring prior to Construction during Fence Installation and during all Construction Activities BIO-2.4: Avoidance, Minimization, and Compensatory Measures for Valley Elderberry Longhorn Beetle BIO-2.5: Avoidance and Minimization Measures for Western Pond Turtle BIO-2.6: Avoidance and Minimization Measures for Nesting Birds during Construction Activities BIO-2.7: Avoidance and Minimization Measures for Swainson's Hawk BIO-2.8: Compensate for Swainson's Hawk Foraging Habitat Loss BIO-2.9: Avoidance and Minimization Measures for Burrowing Owl BIO-2.10: Compensate for Burrowing Owl Habitat Loss BIO-2.11: Avoidance and Minimization Measures for Tricolored Blackbird BIO-2.12: Avoidance and Minimization Measures for Roosting Bats BIO-2.13: Avoidance, Minimization, and Compensatory Measures for Monarch Butterfly BIO-2.14: Implement Seasonal Restrictions for In-Water Work BIO-2.15: Avoidance and Minimization Measures for Crotch's Bumble Bee BIO-3.1: Avoidance and Minimization Measures for Sensitive Natural Communities, including Ruderal Riparian Habitat BIO-3.2: Compensate for Loss of Ruderal Riparian Habitat BIO-3.3: Prevent the Introduction or Spread of Invasive Plant Species BIO-4.1: Avoidance and Minimization Measures for Wetlands and Drainages during Construction BIO-4.2: Compensate for Impacts on Jurisdictional Wetlands and Nonwetland Waters of the United States (aquatic resources) and the state prior to Impacts during Construction BIO-5.1: Compensate for Tree Removal during Construction BIO-7.1: Avoidance and Minimization Measures for Nesting Birds during Operation and Maintenance Activities BIO-7.2: Avoidance and Minimization Measures for Roosting Bats during Operation and Maintenance Activities BIO-7.3: Conduct Pre-Activity Survey for Special-Status Wildlife Species Prior to Conducting Maintenance Activities BIO-10.1: Model Hydraulics of New Bridge before Construction and Design Bridge to Accommodate Fish Migration
Project's Contribution Considerable?	Construction and Operation No

Cumulative rail and other regional transportation projects would not likely affect biological resources if these projects are located entirely within the existing railroad or roadway right-of-way. However, certain features for cumulative rail and other regional transportation projects located outside the existing railroad or roadway right-of-way, such as new railroad or roadway bridges crossing waterways or new alignments, could be located in biologically sensitive areas. For example,

the retrofit of the Bear Creek Bridge on SR 59 and the widening of Black Rascal and Bear Creek bridges on SR 59 would be expected to affect the aquatic habitat of Bear Creek and Black Rascal Creek. Although the land uses in the vicinity of the Project corridor are generally urbanized, cumulative land development projects could be located in pockets of areas that are biologically sensitive, especially those in areas previously not developed. The loss of biological resources, including special-status plant, wildlife, and fish species; sensitive natural communities; wetlands/other aquatic resources; and trees constitutes a significant cumulative impact on biological resources.

4.6.1.1 Construction

Construction activities for the cumulative projects could result in the loss of biological resources due to land disturbance activities, such as excavation and grading. Construction of cumulative projects could remove or alter habitat for special-status species, remove or degrade riparian and aquatic habitat from an increase in erosion and sedimentation, and remove trees in biologically sensitive areas. Thus, construction of the Project and other cumulative projects could result in a potentially significant cumulative impact on biological resources.

The Project corridor is primarily located within an existing UPRR right-of-way that passes through urban and suburban areas. The majority of the Project would be located within the existing UPRR right-of-way, roadway right-of-way, or urbanized areas. Biologically sensitive areas for the Project are limited to waterways such as the various creeks and canals where aquatic, wetland, and riparian land cover types are present.

As described in Section 3.4, *Biological Resources*, construction of the Project could have significant impacts on wildlife and fish species; sensitive natural communities; wetlands/other aquatic resources; and trees. However, Mitigation Measures BIO-2.1 through BIO-2.~~14~~15 for special-status wildlife and fish species; BIO-3.1 through BIO-3.3 for sensitive natural communities, including ruderal riparian habitat; BIO-4.1 and BIO-4.2 for protection of wetlands and drainages; BIO-9.1 for species movement and migratory corridors; and BIO-5.1 for trees are identified to reduce construction impacts to less-than-significant levels. Because construction of the Project would not occur in pristine areas, but rather in developed rail corridors and highly urbanized areas, impacts would be on remnant biological resources in that context. With mitigation, the Project's residual construction impacts would be limited in scale and extent. Thus, the Project's contribution to cumulative impacts on biological resources as a result of construction would be less than considerable with mitigation.

…

This page intentionally left blank.

Chapter 8
References for the Revised Draft EIR

...

Section 3.4, Biological Resources

...

California Department of Fish and Wildlife. 2023. Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species. June. Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213150&inline

...

Appendix 3.4-3, Special-Status Species Tables

Hatfield, R., Jepsen, S., Thorp, R., Richardson, L., and Colla, S. 2015. Bombus crotchii. The IUCN Red List of Threatened Species 2015: e.T44937582A46440211. http://dx.doi.org/10.2305/IUCN.UK.2015-2.RLTS.T44937582A46440211.en.

...

This page intentionally left blank.

Appendix 3.4-3
Special-Status Species Tables

Table 3.4-3.2. Special-Status Wildlife Known or with Potential to Occur in the Study Area

Common Name *Scientific Name*	Status[a] Federal/ State/ Other	Geographic Range	General Habitat Description	Habitat Present/ Absent	Rationale
Invertebrates					
Crotch's bumble bee *Bombus crotchii*	–/CE/–	Occurs in California on the Pacific Coast, Western desert, Great Valley and adjacent foothills in southwestern California and also in southwest Nevada near the California border. (Hatfield et al. 2015)	Found in open grassland and shrub habitat. Nests are located underground or above ground in rock piles, cavities in dead trees, old bird nests, or tufts of grass (Hatfield et al. 2015)	Present	Grassland and shrub habitat is present in the study area.

Notes:

[a] Status Codes

...

CE Candidate for protection as Endangered under the California Endangered Species Act.