CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
CENTRAL REGION
1234 EAST SHAW AVENUE
FRESNO, CALIFORNIA 93710

AMENDMENT NO. 21
(A Major Amendment)
California Endangered Species Act
Incidental Take Permit No. 2081-2015-024-04
California High-Speed Train Project Fresno to Bakersfield Section Permitting Phase 1

INTRODUCTION

On June 15, 2015, the California Department of Fish and Wildlife (CDFW) issued Incidental Take Permit No. 2081-2015-024-04 (ITP) to the California High-Speed Rail Authority (Permittee) authorizing take of California tiger salamander (*Ambystoma californiense*), Swainson's hawk (*Buteo swainsoni*), Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*), San Joaquin antelope squirrel (*Ammospermophilus nelsoni*), and San Joaquin kit fox (*Vulpes macrotis mutica*) (collectively, the Covered Species) associated with and incidental to the Permitting Phase 1 of the Fresno to Bakersfield Section of the High-Speed Train (HST) Project (Project). The Project as described in the ITP originally issued by CDFW includes HST alignment beginning on the south side of the G Street and San Benito Street intersection, north of Highway 41, in the City of Fresno, Fresno County, California. From this intersection, the Fresno to Bakersfield HST alignment extends south either along or adjacent to the Burlington Northern Santa Fe Railway (BNSF) for approximately 99 miles before reaching the section endpoint, at the intersection of 7th Standard Road, and Santa Fe Way, within the city limits of Shafter, in Kern County, California.

The total length of the Project is 99 miles. The Project is the second of the nine California HST sections to be constructed; each section will function independently, but once joined together will create a statewide HST system. The HST will be an electrically powered with steel-wheel-on-steel-rail technology and state-of-the-art safety, signaling, and automated train-control systems. The trains will be capable of operating at speeds of up to 220 miles per hour (mph) over a fully graded, separated, dedicated track alignment. The Project will be built using a design/build (D/B) approach, a method of construction by which one D/B contractor works under a single contract with the Permittee to provide design and construction services. The Project as originally permitted in the ITP included construction and installation of all Project components, including disturbance of up to 5,868.00 acres (hereafter, Construction Footprint). Construction may occur at any point along the Construction Footprint, and construction may occur at multiple locations simultaneously. The Project also includes operations,

maintenance, inspection activities within the Construction Footprint (O&M), and Mitigation Activities.

In an email dated June 24, 2016, the Permittee requested a revision of the Project Description to include an increase in the Construction Footprint by 102.58 acres to 5,970.58 acres to accommodate eight additional Roadway Modifications, and in a subsequent email dated July 25, 2016, the Permittee requested the addition of a third designation of approvable project biologists to carry out small mammal habitat assessment and trapping activities. On March 7, 2017, CDFW issued **Major Amendment No. 1** to the ITP incorporating these requested revisions along with corrections to the acreage for the impacts, changes to the required Habitat Management lands acreage, and clarifications to the reporting requirement language.

On July 5, 2018 and September 19, 2018, CDFW initiated, issued, and re-issued respectively, **Major Amendment No. 2** to the ITP incorporating a Baseline Map Book as Exhibit 6 and added references to the map book throughout the ITP; further revising the Tracking Suitable Habitat Feature Disturbances, Map Updating, and Reporting requirements; added a specific Covered Activity (pile driving) and a species-specific Take Avoidance Measure for that Covered Activity; adding the third category of Biological Monitor, Designated Small Mammal Trapper, to Condition of Approval 6.2; clarified the Construction Monitoring Notebook requirement; added Condition of Approval 7.13 requiring survey and reporting requirements in advance of initiating Covered Activities; revising Conditions of Approval 8.13.2, 8.14.1, 8.15.1, 8.16.1, 8.16.2, 8.16.3, 8.17.2; and adding Condition of Approval 8.15.6. There was no change to the Construction Footprint acreage.

In a letter dated June 25, 2018, the Permittee requested a revision of the ITP to change the Mitigation Site Construction Elements from the Fagundes Compensatory Mitigation Site to a new location, now recognized as Cottonwood Creek. Because the Permittee would no longer be conducting riparian and wetland restoration at the Fagundes Compensatory Mitigation Site, all references to riparian and wetland restoration at the Fagundes site was removed and replaced with the Cottonwood Creek mitigation site. Due to the varying conditions at the Cottonwood Creek site, some Construction Elements also changed with the changes in mitigation site location. Further, on September 25, 2018, the Permittee requested a 7-day extension provision be added for San Joaquin antelope squirrel relocation. There was no change to the Construction Footprint acreage. On October 2, 2018, CDFW issued **Major Amendment No. 3** to the ITP incorporating these changes.

In an email dated October 4, 2018, the Permittee requested a revision of the ITP to extend the dry season work window beyond October 31st for ground-disturbing activities

at the Mitigation Site. There was no change to the Construction Footprint acreage. On November 15, 2018, CDFW originally issued **Minor Amendment No. 4** to the ITP incorporating these changes.

In an email dated November 27, 2018, the Permittee requested a revision to the ITP to allow for San Joaquin antelope squirrel (SJAS) relocation to occur prior to April 1 and to allow SJAS relocation to occur after November 15 on a case-by-case basis. There was no change to the Construction Footprint acreage. On November 29, 2018, CDFW issued **Major Amendment No. 5** to the ITP incorporating these changes.

In a letter dated September 10, 2018, the Permittee requested to revise the Project Description to allow for an increase in the Construction Footprint of 6.92 acres for a total of 5,977.50 acres to accommodate new Work Areas for the water pipeline irrigation casing installation and level 3 fiber optic line relocation. Additionally, CDFW initiated amending the Project Description to include installation of water pipeline irrigation casings, dry jack and bore, and horizontal directional drilling as Covered Activities as well as adding Condition of Approval 7.12. On January 17, 2019, CDFW issued **Major Amendment No. 6** to the ITP incorporating these changes.

In a letter dated October 19, 2018, the Permittee requested to revise the Project Description to increase the Construction Footprint by 2.01 acres to a total of 5,979.51 acres for road improvements to Wasco Avenue to function as an access road for agricultural operations north of Kimberlina Road in Kern County. Additionally, the Permittee requested a design change to the HST/Kimberlina Road location that will be contained within the current ITP Construction Footprint at that location. On February 1, 2019, CDFW issued **Major Amendment No. 7** to the ITP incorporating these changes.

In a letter dated August 22, 2018, the Permittee requested to revise the Project Description to accommodate advanced design changes requiring roadway modifications, utility relocations, access road alterations, and canal realignments along and adjacent to the HST alignment at South Avenue; two new locations in Fresno County at Conejo Avenue, and Peach Avenue; as well as changes for existing locations at Flint Avenue and Kent Avenue in Kings County; and Avenue 88 in Tulare County resulting in a net decrease of 1.96 acres changing the Construction Footprint to 5,977.55 acres. In a subsequent email dated January 25, 2019, the Permittee requested to include the use of jack and bore and horizontal directional drilling as Covered Activities throughout the entire Construction Footprint. The Permittee also requested Condition of Approval 7.12, the notification and submission of a Horizontal Directional Drilling and Dry Jack and Bore Level 3 Fiber Optic Line Relocation Plan, be revised to serve as a notification and plan for all horizontal directional drilling and jack and bore

activities occurring within the entire Construction Footprint. On February 13, 2019, CDFW issued **Major Amendment No. 8** to the ITP incorporating these changes.

In a letter dated December 6, 2018, the Permittee requested to revise the Project Description to add construction of an intrusion protection barrier (IPB) within specific limits of the HST alignment to mitigate the risk of potential derailed trains from the adjacent BNSF rail line entering the path of the HST and increase the Construction Footprint by 0.75 acre which brought the total acres to 5,978.30. The IPB construction specific limits occurred in various locations along the California HST route from the vicinity of State Route 43 and Whisler Road to the vicinity of Madera and Poplar Avenues near the City of Shafter in Kern County. IPB construction in this vicinity required re-siting of two wildlife crossing structures. In an email dated January 23, 2019, Permittee further requested modifying the approval process for siting and constructing wildlife crossings. On February 20, 2019, CDFW issued **Major Amendment No. 9** to the ITP incorporating these changes

In a letter dated January 2, 2019, and a subsequent letter dated February 4, 2019, Permittee requested further revision to the ITP, as amended, to cover a 31.79-acre increase to the approved Project Construction Footprint and associated impacts to Covered Species to accommodate the “alternative technical concepts” (ATC) 11 and 13b (design variations). The changes were to employ “reverse stacking” over Garces Highway, Pond Road, and Peterson Road in Kern County; which means to place the railway over the surface roads instead of vice-versa; and a slight alignment revision to avoid a major agricultural water pumping facility known as the Semitropic Pump Station. In a letter dated February 12, 2019, Permittee requested amending the ITP to cover an 86.14-acre increase to the Project Construction Footprint to accommodate design variations including utility relocations, roadway modifications, temporary construction easements, and access roads at 23 locations. Altogether, this brought the Construction Footprint acreage total to 6,096.24. On March 28, 2019, CDFW issued **Major Amendment No. 10** to the ITP incorporating these changes.

In a letter dated March 11, 2019, the Permittee requested a 141.60-acre increase to the approved Project Construction Footprint and associated impacts to Covered Species to accommodate four segments of IPB between State Route 41 and approximately 1000 feet south of East American Avenue in Fresno County, and additional areas for construction access, fence and gate construction, utility relocations, and street and sidewalk modifications. In a letter dated March 12, 2019, the Permittee requested a 105.12-acre increase to the approved Project Construction Footprint and associated impacts to Covered Species to accommodate design variations at 20 locations, in Fresno County. The design variations include utility relocation and protection, roadway modifications, temporary construction easement for staging equipment and materials,

building demolition, additional earthwork, access roads, and/or waterway crossing structures. Altogether, this brought the Construction Footprint acreage total to 6,342.96. On April 25, 2019, CDFW issued **Major Amendment No. 11** to the ITP incorporating these changes.

In a letter dated January 8, 2019, Permittee requested that CDFW further amend the ITP, as amended, to cover increases in the Project Construction Footprint by 98.06 acres, for a total of 6,441.03 acres, to accommodate additional temporary access routes, staging areas, and utility relocation at several locations in Kern County referred to as "Wasco Utilities" and "North-South Utilities." Permittee provided supplemental information related to the requested activities dated January 29 and April 30, 2019. In a letter dated March 6, 2019, Permittee requested that CDFW further amend the ITP, as amended, to remove the required CDFW written approval of pre-construction survey reports. On May 20, 2019, CDFW issued **Major Amendment No. 12** to the ITP incorporating these changes.

In a letter dated April 5, 2019, Permittee requested to increase the Construction Footprint by 19.36 acres to accommodate design changes and refinements in the vicinity of State Route (SR) 46, including utility relocations, removal and construction of a Caltrans retention pond, construction of a retention pond for the Authority, building demolition, and other Covered Activities related to relocation of utilities within Kern County. In a letter dated June 21, 2019, Permittee requested to increase in the Construction Footprint by 150.46 acres to accommodate design variations including utility relocations, roadway modifications, temporary construction easements, access roads, and other Covered Activities at 19 locations within Fresno, Kings and Tulare counties. Together these design variations required an increase in the Construction Footprint of 169.82 acres, for a total of 6,610.85 acres. On August 8, 2019, CDFW issued **Major Amendment No. 13** to the ITP incorporating these changes.

In a letter dated May 3, 2019 Permittee requested a 50.89-acre expansion of the approved ITP Construction Footprint to address 68 utility conflicts involving PG&E overhead powerlines, AT&T telecommunication lines, SoCal Edison optical fiber, Semitropic irrigation lines, and North Kern Water Storage District relocation of Canal 9-22 and Canal P1030. Work to resolve the utility conflicts included bypass, civil work, protect in place, removal, relocation, and other Covered Activities within Kern County. This request also included three roadway modifications in Kern County one of which was a new location which brought the Construction Footprint to 6,661.74 acres. On September 3, 2019, CDFW issued **Major Amendment No. 14** to the ITP incorporating these changes.

In a letter dated May 9, 2019, Permittee requested amending the ITP to increase the Construction Footprint by 146.77 acres to accommodate design variations to the Tule elevated structure as well as utility relocations, roadway modifications, access roads, and other covered activities at 11 locations. The request also proposed eliminating two Temporary Construction Easements (TCEs) and two overcrossings, resulting in a 368.58-acre reduction to the Construction Footprint, for a net decrease of 221.81 acres, which brought the total Construction Footprint to 6,439.93 acres. On September 19, 2019, CDFW issued **Major Amendment No. 15** to the ITP incorporating these changes.

In a letter dated August 27, 2019, Permittee requested increasing the Project Construction Footprint by 7.94 acres at Gromer Avenue in Wasco to cover utility relocation, TCEs, and permanent access road construction. In a letter dated September 5, 2019, Permittee requested increasing the Project Construction Footprint by 15.08 acres to accommodate design variations including utilities and an access road within Semitropic Water Storage District (Semitropic WSD) that would need to be relocated at two locations. In a letter dated September 20, 2019, Permittee requested the correction of Table 1 to include the reduction of 8.93 urban acres already accounted for in Amendment 15 as well as removal of the remaining 12.13 acres of orchard in Table 1 which eliminates both TCE impacts from Amendment 15. Together these brought the new construction footprint to 6,462.95 acres. In an e-mail sent on October 10, 2019, CDFW informed Permittee that there would be two additional changes: 1) Table 9 updated to show the current number of nests taken of the maximum five covered by the ITP and 2) Conditions of Approval 7.1, 8.16.2 and 8.17.2 were further updated to include Designated Small Mammal Trapper(s), 8.16.2 and 8.17.2 were updated to clarify reporting, and 8.17.2 added conditional concurrence of daily trapping forms for the early resumption and/or extension relocation period for non-business days. On October 11, 2019, CDFW issued **Major Amendment No. 16** to the ITP incorporating these changes.

In a letter dated May 2, 2019, Permittee requested increasing the Project Construction Footprint by 57.32 acres to accommodate a variation in the profile design of the HST alignment construction from elevated viaduct to embankment at the sections of the HST mainline that are outside of streams and other waterways; changes to the bridge structures at Cole Slough, Dutch John Cut, and the Kings River channel; and a change from a bridge to two box culverts at Riverside Ditch. Design changes are also included for utility relocations, roadway modifications, TCEs, staging areas, site preparation, demolition, earthwork, and access roads, and other Covered Activities at seven locations as well as shifting the location of a switching station and addition of 20 new wildlife crossings. The request also proposed the reduction of two TCEs resulting in a 33.87-acre reduction to the Construction Footprint, for a net increase of 23.45 acres,

bringing the new total Construction Footprint to 6,486.40 acres. On October 31, 2019, CDFW issued **Major Amendment No. 17** to the ITP incorporating these changes.

In a letter dated January 8, 2019, and Supplemental information dated January 29, 2019, Permittee requested the "ATC 2 Variation" which included a design change in the City of Wasco from viaduct to an at-grade design. Permittee had originally submitted the ATC 2 Variation together with "Wasco Utilities" and "North-South Utilities" (Amendment 12) however, per discussion and request from CDFW, separate amendment requests were submitted. The Permittee provided additional supplemental information dated April 30, 2019 and September 20, 2019 for the ATC 2 Variation (Wasco at-grade). Permittee requested increasing the Project Construction Footprint by 12.58 acres, for a total of 6,498.98 acres to accommodate design change construction of Wasco at-grade and the addition of TCEs needed for access, staging, equipment storage, and other Covered Activities related to road modifications and building demolition. The request also proposed the addition of 13 dedicated wildlife crossings south of Wasco at-grade, San Joaquin kit fox escape refugia, and a minimum of 300 acres of additional habitat conservation lands to mitigate the reduction in wildlife permeability resulting from the Wasco viaduct design change. On November 22, 2019, CDFW issued **Major Amendment No. 18** to the ITP incorporating these changes.

In a letter dated May 14, 2019, Permittee requested design changes and refinements to accommodate several IPBs from just south of East American Ave (approximately 6.40 miles south of the City of Fresno), to just north of Ave 76, (approximately 4.95 miles north of Allensworth). The IPB Variations will not expand the ITP Construction Footprint or alter the general alignment described in the ITP. In a letter dated October 11, 2019, Permittee requested increasing the Project Construction Footprint by 12.15 acres, for a total of 6,511.13 acres, to accommodate design variations including utility relocations, roadway modifications, temporary construction easements, access roads, and other Covered Activities at McCombs Avenue and Merced Avenue. On December 12, 2019, CDFW issued **Major Amendment No. 19** to the ITP incorporating these changes.

In a letter received March 2, 2020, Permittee requested additional clarification regarding trapping and burrow excavation for Tipton kangaroo rat *(Dipodomys nitratoides nitratoides)* and San Joaquin antelope squirrel *(Ammospermophilus nelsoni)* when occupied or potentially occupied burrows of either species are present in suitable habitat. There was no change to the Construction Footprint acreage. On March 27, 2020, CDFW issued **Major Amendment No. 20** to the ITP incorporating these changes.

In issuing the ITP, Major Amendment No. 1, Major Amendment No. 2, Major Amendment No. 3, Minor Amendment No. 4, Major Amendment No. 5, Major

Amendment No. 6, Major Amendment No. 7, Major Amendment No. 8, Major Amendment No. 9, Major Amendment No. 10, Major Amendment No. 11, Major Amendment No. 12, Major Amendment No. 13, Major Amendment No. 14, Major Amendment No. 15, Major Amendment No. 16, Major Amendment No. 17, Major Amendment No. 18, Major Amendment No. 19, and Major Amendment No. 20 (collectively the ITP, as amended), CDFW found, among other things, that Permittee's compliance with the Conditions of Approval would fully mitigate impacts to the Covered Species and would not jeopardize the continued existence of the Covered Species.

In a letter dated July 23, 2019, and supplemental information dated July 26, 2019, Permittee requested a net 94.46-acre expansion of the approved ITP Construction Footprint, for a total of 6,605.59 acres, to accommodate alignment stream crossing design variations, changes to location and configuration of wildlife crossing structures at Cross Creek and Deer Creek as well as any utility relocations, roadway modifications, temporary construction easements, access roads, and other Covered Activities at these two locations. In a letter dated November 8, 2019, Permittee requested to update Table 5 for all the new dedicated wildlife crossings and new locations for existing crossings that were moved as well as updating the corresponding Mapbook pages. In a letter dated March 5, 2020, Permittee provided additional culverts for wildlife crossings near Allensworth Ecological Reserve. In a second letter dated March 5, 2020, Permittee provided supplemental information regarding locations for installation of San Joaquin kit fox (SJKF) escape refugia and this information was updated in a follow-up letter dated March 17, 2020.

This Amendment No. 21 (Amendment), a Major Amendment, makes the following changes to the ITP, as amended:

First, this Amendment increases the size of the entire Project Construction Footprint by 94.46 acres to a total of 6,605.59 acres of cumulative disturbance. The increase in the Construction Footprint acres is necessary to accommodate alignment design variations, changes to location and configuration of crossing structures at Cross Creek and Deer Creek as well as any utility relocations, roadway modifications, temporary construction easements, access roads, and other Covered Activities at these two locations.

Second, this Amendment updates Table 3 to increase the number of Dedicated Wildlife Crossings (DWC) from 127 crossing locations to 171 locations for a total increase of 44 DWCs.

Third, this Amendment adds the Tule River information from Amendment 15 to the proper location in Table 4 and updates the text paragraph regarding Tule River.

Fourth, this Amendment updates Table 4 and the text regarding new changes relating to Cross Creek and Deer Creek.

Fifth, this Amendment updates Table 5 to add 44 new DWC locations as well as adjusts locations of many existing DWC and culverts.

Sixth, this Amendment adds Table 5A documenting the coordinate locations of the SJKF escape refugia.

Seventh, this Amendment makes a correction to the section entitled “Roadway Modifications” and Table 8 by removing the Tule River information and moving the Tule River information to Table 4.

Eighth, this Amendment updates Table 9 and the text regarding increases in the Covered Species habitat impacts for California tiger salamander, Tipton kangaroo rat, San Joaquin antelope squirrel, Swainson’s hawk and San Joaquin kit fox as a result of the increase in the Project Construction Footprint.

Ninth, this Amendment updates Condition of Approval 8.15.7, requiring installation and maintenance of SJKF escape refugia and adds locations for escape refugia north of Deer Creek.

Tenth, this Amendment updates Table 11 and the required permanent protection of additional compensatory HM lands and increases the accompanying estimates of management costs required to mitigate for Covered Species impacts commensurate with and resulting from the increased 94.46-acre Project Construction Footprint in Covered Species habitat.

Eleventh, this Amendment increases the Performance Security amount required for Permittee to proceed with Covered Activities.

Twelfth, this Amendment modifies Exhibit 6, the “Baseline Map Book,” by replacing Map Book Pages 23-25 and 33-35 to reflect the increased Project Construction Footprint and to show the new and updated locations of Dedicated Wildlife Crossings and the addition of new SJKF refugia.

AMENDMENT

The ITP, as amended, is further amended as follows (amended language in ***bold italics***; deleted language in ~~strikethrough~~):

1. The section entitled “Project Description” on page 3 of the ITP, as amended, paragraph one shall be further amended to read as follows:

   The Project is approximately 99 miles in length and includes construction and installation of all Project components (Exhibits 1 and 2). Construction and installation of all Project components will disturb up to ~~6,511.13~~ ***6,605.59*** acres (hereafter, Construction Footprint). Construction may occur at any point along the Construction Footprint, and construction may occur at multiple locations simultaneously.

2. Table 3 on page 10 of the ITP is amended to read as follows:

Table 3. Design Features for the Project

Design Feature	CP1-C	CP 2-3	CP 4
Number of major water crossings	0	6	1
Number of roadway undercrossings & overcrossings	3	33	9
Number of dedicated wildlife crossings	0	~~90~~ ***121***	~~37~~ ***50***

3. The section entitled “Project Description” on page 14 of the ITP, Section Cross Creek, is amended to read as follows:

   Cross Creek:

   The proposed approach for the crossing over Cross Creek would be similar to that proposed for the Kings River Complex. The HST alignment would traverse Cross Creek with a ~~9,600~~***2,500***-foot long ***and 43-foot wide*** elevated structure. ~~The main channel would be crossed in a single span with a 325-foot long bridge with support structures on the banks of the creek. The soffit, the lowest portion of the structure spanning the waterway, will be approximately 15.5 feet above the top of the bank on both sides of the river, providing ample clearance for passage of flood flows and wildlife. The elevated approach would begin approximately 4,000 feet north of the north bank of Cross Creek, with a minimum vertical clearance of about 30 feet from the creekbed. A steel truss structure would span the main channel.~~ ***The Cross Creek Viaduct will be a precast structure. Most bents, including bents 19 and 20 which will be within the creek, will consist of two 4-foot-diameter columns supporting a cap. Bents 7 and 26, outside of the creek, will have larger***

columns. On bents with expansion joints, the bent will have a drop cap where girders rest on bearing pads that are on the cap. The end spans will be supported on expansion elastomeric bearings at the abutments. The abutments will be conventional seat type abutments supported on two rows of 5-foot Cast in Drilled Hole (CIDH) piles with four piles per row. The pile cap elevation will be set to be below the estimated scour elevation for the 100-year flood condition. Existing dirt roads on both sides of the creek (Kaweah South and Kaweah North access road) will be converted into undercrossings with a minimum clearance of 14 feet and 17 feet, respectively.

4. The section entitled "Project Description" on page 14 of the ITP, Section Tule River, is amended to read as follows:

Tule River:
The proposed approach for the crossing over Tule River would be similar to that proposed for the Kings River Complex. The elevated approach would begin approximately 8,000 feet north of the Tule River and have a minimum vertical clearance over the river of about 30 feet. ~~A single pile is anticipated to, toward the southern bank~~ ***Four columns, two on the north and two on the south of the channel for the Tule Elevated Structure will be placed in the Tule River***.

5. The section entitled "Project Description" on page 15 of the ITP, Section Deer Creek, is amended to read as follows:

Deer Creek:
The proposed approach for the crossing over Deer Creek would be similar to that proposed for the Kings River Complex. The elevated approach would begin approximately 200 feet north of the creek and have a minimum vertical clearance over the creek of approximately ~~six~~ ***four*** feet. ~~A single pile is anticipated to be~~ ***Two columns will be*** placed within Deer Creek, near the northern bank. ***The viaduct at Deer Creek will be 3,000 feet long. A new 202-foot long approximately 10-foot high bridge will be installed to allow for Deer Creek Overflow if it floods to the south.***

6. A portion of Table 4 (not including Unnamed Crossings) starting on page 15 of the ITP is amended to read as follows:

Table 4. Bridge ~~Sections~~ *and Culvert* Locations

Watercourse (Feature ID Code)	Latitude	Longitude	Total Impact (acres)	Construction Package (CP)
Cole Slough	36.45360265390	-119.63083316000	0.706	2/3
Dutch John Cut	36.44646747690	-119.62229281700	2.044	2/3
Kings River Old Channel	36.43046	-119.608129	1.342	2/3
Riverside Ditch	36.43309293250	-119.61009747000	0.281	2/3
Cross Creek	36.17329470290	-119.60725094600	~~0.28~~ ***2.05***	2/3
Tule River	~~36.04268946320~~ ***36.042562***	~~-119.51644351300~~ ***-119.516311***	~~0.95~~ ***4.78***	2/3
Deer Creek	35.92017741060	-119.42824486900	~~0.22~~ ***1.00***	2/3
Poso Creek	35.66468122760	-119.33358375900	0.53	4
North Central Canal (031FOW01)	36.686396	-119.753616	0.24	1C
Central Canal West and East (034EOW02)	36.677928	-119.750341	0.80	1C
Viau Canal (037EOW02)	36.666209	-119.749516	0.01	1C

7. The second paragraph in the section entitled “Dedicated Wildlife Crossings” beginning on page 22 of the ITP is amended to read as follows:

   Within the Construction Footprint, ~~103~~ ***171*** dedicated wildlife crossings will be constructed (Table 5 and Exhibit 3). The wildlife crossings will consist of one of two concrete structure types, box culverts or short-span slab bridges, providing an opening below the HST tracks to facilitate wildlife movement (Figures 9 and 10). ~~Which of the two~~ ***The type of*** structure~~s~~ used at each wildlife crossing location will depend on the height of the embankment supporting the track at that particular location. The design will provide a minimum ~~opening of three feet high, ten feet wide, and up to 73 feet long, resulting in an~~ openness factor (OF) of 0.41 as measured by (height × width)/length. ***Thus, for a crossing three feet high and ten feet wide, the maximum length would be 73 feet, for a crossing four feet high and ten feet wide, the maximum length would be 98 feet.*** The length of the crossing will be reduced whenever possible to improve the OF. ***The height will***

never be less than three feet. To accommodate variations in the topography, the height of the structure may extend as much as 18 inches below grade; however, at least 50 percent of the vertical clearance will be above grade ***(i.e., for crossings with a height over three feet, more than 18 inches would be above grade***). Where feasible from an engineering perspective and appropriate from an ecological perspective, the dedicated wildlife crossings will be constructed with larger openings that will accommodate movement across the alignment by a wider range of terrestrial wildlife species (Figure 9).

8. Table 5 starting on page 23 of the ITP is amended to update and add the following locations:

Table 5. Location of Dedicated Wildlife Crossings

Wildlife Crossing Name	County	Latitude	Longitude	Number of Culverts	Dimensions W x H x L (feet)	Openness Factor
Dedicated Wildlife Crossings Associated with the Kings River Complex						
1a.r	Fresno	36.458066	-119.637172	3	7 x 6 x 100	0.42
2a.	Fresno	36.456291	-119.634818	3	7 x 6 x 100	0.42
2b.	Fresno	36.456016	-119.634434	3	7 x 6 x 100	0.42
2c.	Fresno	36.455353	-119.633298	3	7 x 6 x 100	0.42
3a.	Fresno	~~36.4540600002~~ ***36.454368***	~~-119.631443~~ ***-119.632092***	3	7 x 6 x 100	0.42
4	Fresno	~~36.4531220001~~ ***36.452917***	~~-119.630202~~ ***-119.629946***	3	7 x 6 x 100	0.42
5.r	Fresno	~~36.4498950001~~ ***36.450892***	~~-119.626192~~ ***-119.627381***	3	7 x 6 x 100	0.42
6.r	Kings	~~36.4472679996~~ ***36.448123***	~~-119.62317~~ ***-119.624115***	3	7 x 6 x 100	0.42
7a.r	Kings	~~36.4462379998~~ ***36.44562***	~~-119.622045~~ ***-119.621459***	3	7 x 6 x 100	0.42
8	Kings	~~36.4450600004~~ ***36.441479***	~~-119.620803~~ ***-119.617548***	3	7 x 6 x 100	0.42
9.r	Kings	~~36.4401049997~~ ***36.437499***	~~-119.615954~~ ***-119.613706***	3	7 x 6 x 100	0.42
9b.	Kings	36.435158	-119.611732	3	7 x 6 x 100	0.42
10.r	Kings	~~36.4339709998~~ ***36.434414***	~~-119.61075~~ ***-119.611086***	3	7 x 6 x 95	0.44
13.r	Kings	~~36.4328049998~~	~~-119.609852~~	3	7 x 6 x 90	0.47

Wildlife Crossing Name	County	Latitude	Longitude	Number of Culverts	Dimensions W x H x L (feet)	Openness Factor
		36.432065	***-119.609323***			
13b.	Kings	36.431526	-119.60897	3	7 x 6 x 89	0.47
14.r	Kings	36.43101	-119.608641	3	7 x 6 x 88	0.48
15.r	Kings	36.429748	-119.607706	3	7 x 6 x 86	0.49
16	Kings	36.426296	-119.605419	2	7 x 6 x 83	0.51
17	Kings	36.424769	-119.604751	2	10 x 5 x 80	0.63
18	Kings	36.422991	-119.60357	2	10 x 4 x 78	0.51
Dedicated Wildlife Crossings Associated with Cross Creek and North of Corcoran						
CP 2-3 CC1	***Kings***	***36.181056***	***-119.60977***	***3***	***10 x 5 x 75***	***0.67***
CP 2-3 CC2	***Kings***	***36.180225***	***-119.609536***	***3***	***10 x 5 x 75***	***0.67***
CP 2-3 CC3	***Kings***	***36.179442***	***-119.60937***	***3***	***10 x 5 x 77***	***0.65***
CP 2-3 CC4	***Kings***	***36.178468***	***-119.60907***	***3***	***10 x 5 x 77***	***0.65***
CP 2-3 CC5	***Kings***	***36.168358***	***-119.605147***	***3***	***10 x 5 x 90***	***0.56***
CP 2-3 CC6	***Kings***	***36.167401***	***-119.604621***	***3***	***10 x 5 x 90***	***0.56***
CP 2-3 CC7	***Kings***	***36.166369***	***-119.604078***	***3***	***10 x 5 x 90***	***0.56***
CP 2-3 CC8	***Kings***	***36.165199***	***-119.603569***	***3***	***10 x 5 x 90***	***0.56***
CP 2-3 CC9	***Kings***	***36.163873***	***-119.602827***	***3***	***10 x 5 x 90***	***0.56***
CP 2-3 CC10	***Kings***	***36.162239***	***-119.601952***	***3***	***10 x 5 x 86***	***0.58***
CP 2-3 DWC01	***Kings***	***36.159747***	***-119.600409***	***1***	***10 x 5 x 89***	***0.56***
CP 2-3 DWC02	Kings	~~36.1572921924~~ ***36.15597***	~~-119.5996727~~ ***-119.59779***	***1***	***10 x 3 x 62.5***	***0.48***
CP 2-3 DWC03	Kings	~~36.1534265118~~ ***36.15221***	~~-119.5968454~~ ***-119.59504***	***1***	***10 x 3 x 62.5***	***0.48***
CP 2-3 DWC05	***Kings***	***36.147104***	***-119.591364***	***1***	***10 x 4 x 86.96***	***0.46***
CP 2-3 DWC06	Kings	~~36.1437309998~~ ***36.143961***	~~-119.589739~~ ***-119.589162***	***1***	***10 x 4 x 86.96***	***0.46***
CP 2-3 DWC07	**Kings**	**36.141637**	**-119.587366**	***1***	***10 x 4 x 85.11***	***0.47***
CP 2-3 DWC08	Kings	~~36.1359455213~~ ***36.134338***	~~-119.58385782~~ ***-119.581531***	***1***	***10 x 5 x 76.92***	***0.65***
CP 2-3 DWC09	Kings	~~36.1327625889~~ ***36.130962***	~~-119.58119879~~ ***-119.57843***	***1***	***10 x 5 x 75.76***	***0.66***
~~Wildlife Crossing~~	~~Kings~~	~~36.1280198353~~	~~-119.57821839~~			
CP 2-3 DWC10	Kings	~~36.1277548458~~ ***36.127552***	~~-119.57883643~~ ***-119.574952***	***1***	***10 x 5 x 72.46***	***0.69***

Wildlife Crossing Name	County	Latitude	Longitude	Number of Culverts	Dimensions W x H x L (feet)	Openness Factor
CP 2-3 DWC11	Kings	~~36.1234997874~~ ***36.124285***	~~-119.57135478~~ ***-119.571297***	***1***	***10 x 4 x 74.07***	***0.54***
~~Wildlife Crossing~~	~~Kings~~	~~36.1221708016~~	~~-119.57398144~~			
~~Wildlife Crossing~~	~~Kings~~	~~36.1219389835~~	~~-119.57457932~~			
CP 2-3 DWC12	Kings	~~36.1196320855~~ ***36.121197***	~~-119.56619655~~ ***-119.567498***	***1***	***10 x 4 x 72.73***	***0.55***
CP 2-3 DWC13	***Kings***	***36.118172***	***-119.563658***	***1***	***10 x 4 x 70.18***	***0.57***
CP 2-3 DWC14	Kings	~~36.1161341131~~ ***36.116173***	~~-119.56139267~~ ***-119.561132***	***1***	***10 x 4 x 66.67***	***0.6***
CP 2-3 DWC15	***Kings***	***36.11288***	***-119.55699***	***1***	***10 x 3 x 65.22***	***0.46***
Dedicated Wildlife Crossings Associated with South of Corcoran and the Tule River						
CP 2-3 DWC16	***Kings***	***36.10626***	***-119.549991***	***1***	***10 x 3 x 65.22***	***0.46***
CP 2-3 DWC17	Kings	~~36.1043190003~~ ***36.105198***	~~-119.548091~~ ***-119.549027***	***1***	***10 x 3 x 63.83***	***0.47***
CP 2-3 DWC18	Kings	~~36.0997240003~~ ***36.101098***	~~-119.544195~~ ***-119.545421***	***1***	***10 x 3 x 63.83***	***0.47***
CP 2-3 DWC19	Kings	~~36.0949829999~~ ***36.094191***	~~-119.540778~~ ***-119.54026***	***1***	***10 x 3 x 66.67***	***0.45***
CP 2-3 DWC20	Kings	~~36.0900559997~~ ***36.09033***	~~-119.537787~~ ***-119.537806***	***1***	***10 x 4 x 65.57***	***0.61***
CP 2-3 DWC21	Tulare	~~36.0849679999~~ ***36.086958***	~~-119.535236~~ ***-119.535925***	***1***	***10 x 3 x 71.43***	***0.42***
CP 2-3 DWC22	***Tulare***	***36.082315***	***-119.53365***	***1***	***10 x 4 x 70.18***	***0.57***
CP 2-3 DWC23	Tulare	~~36.0754385685~~ ***36.07624***	~~-119.53147124~~ ***-119.531226***	***1***	***10 x 4 x 72.73***	***0.55***
CP 2-3 DWC24	Tulare	~~36.0701620018~~ ***36.06909***	~~-119.52945750~~ ***-119.528862***	***1***	***10 x 4 x 72.73***	***0.55***
CP 2-3 DWC25	***Tulare***	***36.067688***	***-119.528415***	***1***	***10 x 5 x 70.42***	***0.71***
CP 2-3 DWC26	***Tulare***	***36.067293***	***-119.528275***	***1***	***10 x 5 x 70.42***	***0.71***
CP 2-3 DWC27	Tulare	~~36.066426462~~ ***36.066926***	~~-119.5280319~~ ***-119.528148***	***1***	***10 x 5 x 70.42***	***0.71***
CP 2-3 DWC28	***Tulare***	***36.064842***	***-119.527463***	***1***	***10 x 4 x 78.43***	***0.51***
CP 2-3 DWC29	***Tulare***	***36.060697***	***-119.525906***	***1***	***10 x 4 x 83.33***	***0.48***
CP 2-3 DWC30	Tulare	~~36.0429354084~~ ***36.055771***	~~-119.51682675~~ ***-119.52378***	***1***	***10 x 5 x 102.04***	***0.6***
CP 2-3 DWC31	Tulare	~~36.0420851488~~ ***36.052021***	~~-119.51620535~~ ***-119.521913***	***1***	***10 x 8 x 119.4***	***0.67***

Wildlife Crossing Name	County	Latitude	Longitude	Number of Culverts	Dimensions W x H x L (feet)	Openness Factor
CP 2-3 DWC32	Tulare	~~36.0398466082~~ ***36.0385404***	~~-119.51456138~~ ***-119.513651***	***1***	***10 x 5 x 119.05***	***0.42***
CP 2-3 DWC33	Tulare	~~36.0283523292~~ ***36.028333***	~~-119.50615919~~ ***-119.506169***	***1***	***10 x 3 x 63.83***	***0.47***
CP 2-3 DWC34	Tulare	~~36.0283463947~~ ***36.025418***	~~-119.50617599~~ ***-119.504041***	***1***	***10 x 3 x 66.67***	***0.45***
CP 2-3 DWC35	Tulare	~~36.0236015986~~ ***36.021935***	~~-119.50270236~~ ***-119.501466***	***1***	***10 x 3 x 63.83***	***0.47***
CP 2-3 DWC36	Tulare	~~36.0166090808~~ ***36.018184***	~~-119.49758837~~ ***-119.498724***	***1***	***10 x 4 x 68.97***	***0.58***
CP 2-3 DWC37	Tulare	~~36.012818173~~ ***36.014589***	~~-119.49481869~~ ***-119.496167***	***1***	***10 x 4 x 71.43***	***0.56***
CP 2-3 DWC38	***Tulare***	***36.010957***	***-119.493467***	***1***	***10 x 4 x 74.07***	***0.54***
CP 2-3 DWC39	Tulare	~~36.0045971954~~ ***36.003466***	~~-119.48882217~~ ***-119.488334***	***1***	***10 x 4 x 74.07***	***0.54***
CP 2-3 DWC40	Tulare	~~36.0003324224~~ ***36.000015***	~~-119.48568931~~ ***-119.486036***	***1***	***10 x 4 x 76.92***	***0.52***
CP 2-3 DWC41	***Tulare***	***35.996306***	***-119.48352***	***1***	***10 x 4 x 78.43***	***0.51***
CP 2-3 DWC42	***Tulare***	***35.992734***	***-119.48093***	***1***	***10 x 4 x 76.92***	***0.52***
CP 2-3 DWC43	Tulare	~~35.991001435~~ ***35.990231***	~~-119.47889634~~ ***-119.479094***	***1***	***10 x 4 x 81.63***	***0.49***
CP 2-3 DWC44	Tulare	~~35.9873333013~~ ***35.985734***	~~-119.47621172~~ ***-119.47579***	***1***	***10 x 4 x 86.96***	***0.46***
CP 2-3 DWC45	Tulare	~~35.9832940102~~ ***35.982746***	~~-119.47327485~~ ***-119.473618***	***1***	***10 x 4 x 88.89***	***0.45***
CP 2-3 DWC46	Tulare	~~35.9791975097~~ ***35.979036***	~~-119.47029245~~ ***-119.470843***	***1***	***10 x 4 x 93.02***	***0.43***
CP 2-3 DWC47	Tulare	~~35.9751774301~~ ***35.975313***	~~-119.46732497~~ ***-119.467912***	***1***	***10 x 4 x 71.43***	***0.56***
CP 2-3 DWC48	***Tulare***	***35.970687***	***-119.465101***	***1***	***10 x 4 x 85.11***	***0.47***
CP 2-3 DWC49	Tulare	~~35.9688864766~~ ***35.969055***	~~-119.46273028~~ ***-119.463025***	***1***	***10 x 4 x 88.89***	***0.45***
CP 2-3 DWC50	Tulare	~~35.9645658034~~ ***35.963904***	~~-119.45958335~~ ***-119.459131***	***1***	***10 x 4 x 71.43***	***0.56***
Dedicated Wildlife Crossings Associated with Deer Creek						
CP 2-3 DWC51	Tulare	~~35.9603041~~ ***35.960578***	~~-119.4564701~~ ***-119.456675***	***1***	***10 x 4 x 78.43***	***0.51***
CP 2-3 DWC52	Tulare	~~35.95598254~~ ***35.956392***	~~-119.4533577~~ ***-119.45363***	***1***	***10 x 4 x 75.47***	***0.53***

Wildlife Crossing Name	County	Latitude	Longitude	Number of Culverts	Dimensions W x H x L (feet)	Openness Factor
CP 2-3 DWC53	Tulare	~~35.95169105~~ ***35.952549***	~~-119.4501466~~ ***-119.45086***	***1***	***10 x 4 x 74.07***	***0.54***
CP 2-3 DWC54	***Tulare***	***35.949339***	***-119.448509***	***1***	***10 x 3 x 62.50***	***0.48***
CP 2-3 DWC55	Tulare	~~35.94648928~~ ***35.946465***	~~-119.446365~~ ***-119.446369***	***1***	***10 x 3 x 63.83***	***0.47***
CP 2-3 DWC56	Tulare	~~35.94190272~~ ***35.941705***	~~-119.4430133~~ ***-119.443024***	***1***	***10 x 3 x 65.22***	***0.46***
~~Wildlife Crossing~~	~~Tulare~~	~~35.93692789~~	~~-119.4393771~~			
CP 2-3 DWC57	Tulare	~~35.93692789~~ ***35.936807***	~~-119.4393771~~ ***-119.439376***	***1***	***10 x 3 x 63.83***	***0.47***
CP 2-3 DWC58	***Tulare***	***35.934743***	***-119.437838***	***1***	***10 x 3 x 68.18***	***0.44***
~~Wildlife Crossing~~	~~Tulare~~	~~35.932779~~	~~-119.4363647~~			
CP 2-3 DWC59	Tulare	~~35.932779~~ ***35.931888***	~~-119.4363647~~ ***-119.435741***	***1***	***10 x 3 x 69.77***	***0.43***
~~Wildlife Crossing~~	~~Tulare~~	~~35.9285626~~	~~-119.433275~~			
CP 2-3 DWC60	Tulare	~~35.9285596~~ ***35.926317***	~~-119.4333079~~ ***-119.432055***	***1***	***10 x 3 x 65.22***	***0.46***
~~Wildlife Crossing~~	~~Tulare~~	~~35.924654~~	~~-119.430408~~			
CP 2-3 DWC61	Tulare	~~35.92456423~~ ***35.924600***	~~-119.4305991~~ ***-119.430872***	***1***	***10 x 3 x 70***	***1***
CP 2-3 DC1	Tulare	~~35.9207005385~~ ***35.921745***	~~-119.4281908~~ ***-119.429241***	***3***	***10 x 5 x 120***	***0.71***
CP 2-3 DC2	***Tulare***	***35.908035***	***-119.422299***	***3***	***10 x 5 x 120***	***0.79***
CP 2-3 DC3	***Tulare***	***35.906885***	***-119.421746***	***3***	***10 x 5 x 120***	***0.79***
CP 2-3 DC4	Tulare	~~35.9033169826~~ ***35.901207***	~~-119.41977326~~ ***-119.419461***	***1***	***10 x 5 x 100***	***0.48***
CP 2-3 DC5	Tulare	~~35.8993576889~~ ***35.899461***	~~-119.4183857~~ ***-119.418907***	***1***	***10 x 4 x 80***	***0.48***
CP 2-3 DC6	Tulare	~~35.8943658448~~ ***35.898358***	~~-119.41674316~~ ***-119.418512***	***1***	***10 x 5 x 95***	***0.44***
Dedicated Wildlife Crossings Associated with Allensworth Ecological Reserve						
CP 2-3 DWC62	Tulare	~~35.8868199997~~ ***35.88808***	~~-119.414964~~ ***-119.415598***	***2***	***10 x 4 x 83.33***	***0.48***
CP 2-3 DWC63	***Tulare***	***35.885421***	***-119.414992***	***2***	***10 x 4 x 80***	***0.5***
CP 2-3 DWC64	Tulare	~~35.8813770002~~ ***35.882751***	~~-119.414047~~ ***-119.414494***	***2***	***10 x 4 x 76.92***	***0.52***
CP 2-3 DWC65	Tulare	~~35.8767619999~~	~~-119.413493~~	***2***	***10 x 4 x 74.07***	***0.54***

Wildlife Crossing Name	County	Latitude	Longitude	Number of Culverts	Dimensions W x H x L (feet)	Openness Factor
		35.878389	***-119.413786***			
CP 2-3 DWC66	Tulare	~~35.8722729998~~ ***35.874061***	~~-119.413027~~ ***-119.413217***	***2***	***10 x 4 x 71.43***	***0.56***
CP 2-3 DWC67	***Tulare***	***35.870117***	***-119.412818***	***2***	***10 x 4 x 71.43***	***0.56***
CP 2-3 DWC68	Tulare	~~35.8694210004~~ ***35.868907***	~~-119.412731~~ ***-119.412658***	***2***	***10 x 4 x 74.07***	***0.54***
CP 2-3 DWC69	***Tulare***	***35.866026***	***-119.412378***	***2***	***10 x 4 x 97.57***	***0.41***
CP 2-3 DWC70	Tulare	~~35.86422~~ ***35.862276***	~~-119.412192~~ ***-119.412001***	***2***	***10 x 3 x 69.77***	***0.43***
CP 2-3 DWC71	Tulare	~~35.8590189999~~ ***35.858647***	~~-119.411653~~ ***-119.411619***	***2***	***10 x 3 x 73.17***	***0.41***
CP 2-3 DWC72	***Tulare***	***35.855004***	***-119.411235***	***2***	***10 x 3 x 71.43***	***0.42***
CP 2-3 DWC73	Tulare	~~35.8538589997~~ ***35.852381***	~~-119.411117~~ ***-119.410956***	***2***	***10 x 3 x 69.77***	***0.43***
CP 2-3 DWC74	Tulare	~~35.8477410003~~ ***35.847713***	~~-119.410477~~ ***-119.410481***	***2***	***10 x 3 x 73.17***	***0.41***
CP 2-3 DWC75	***Tulare***	***35.8437***	***-119.410064***	***2***	***10 x 3 x 73.17***	***0.41***
CP 2-3 DWC76	Tulare	~~35.8405160001~~ ***35.840271***	~~-119.409732~~ ***-119.409712***	***2***	***10 x 3 x 69.77***	***0.43***
CP 2-3 DWC77	Tulare	~~35.8345630001~~ ***35.835051***	~~-119.409117~~ ***-119.409166***	***2***	***10 x 3 x 66.67***	***0.45***
CP 2-3 DWC79	Tulare	~~35.8286090001~~ ***35.830712***	~~-119.4085~~ ***-119.408727***	***2***	***10 x 3 x 63.83***	***0.47***
CP 2-3 DWC80	***Tulare***	***35.826198***	***-119.408239***	***2***	***10 x 3 x 63.83***	***0.47***
CP 2-3 DWC81	Tulare	~~35.8226560002~~ ***35.822028***	~~-119.407883~~ ***-119.407829***	***2***	***10 x 3 x 65.22***	***0.46***
CP 2-3 DWC82	***Tulare***	***35.818989***	***-119.407506***	***2***	***10 x 3 x 69.77***	***0.43***
CP 2-3 DWC83	Tulare	~~35.8167030002~~ ***35.816422***	~~-119.407267~~ ***-119.407246***	***2***	***10 x 3 x 66.67***	***0.45***
CP 2-3 DWC84	***Tulare***	***35.813757***	***-119.406959***	***2***	***10 x 3 x 65.22***	***0.46***
CP 2-3 DWC85	Tulare	~~35.8107489996~~ ***35.809021***	~~-119.40665~~ ***-119.406492***	***2***	***10 x 3 x 62.50***	***0.48***
CP 2-3 DWC86	Tulare	~~35.8047960001~~ ***35.80469***	~~-119.406033~~ ***-119.40601***	***2***	***10 x 3 x 62.50***	***0.48***
Dedicated Wildlife Crossings Optimized for North of Wasco						
DWC 01A	***Tulare***	***35.802155***	***-119.405785***	***3***	***10 x 3 x 63.69***	***0.47***

Wildlife Crossing Name	County	Latitude	Longitude	Number of Culverts	Dimensions W x H x L (feet)	Openness Factor
DWC 01	Tulare	~~35.798842~~ ***35.800692***	~~-119.405417~~ ***-119.40562***	***3***	***10 x 3 x 70.54***	***0.43***
DWC 02	***Tulare***	***35.797644***	***-119.405308***	***3***	***10 x 3 x 62.85***	***0.48***
DWC 03	Kern	~~35.792794~~ ***35.79287***	~~-119.404707~~ ***-119.404709***	***3***	***10 x 3 x 67.65***	***0.44***
DWC 04	***Kern***	***35.790163***	***-119.404288***	***3***	***10 x 3 x 66.56***	***0.45***
DWC 05a	Kern	~~35.787924~~ ***35.788392***	~~-119.403886~~ ***-119.404082***	***3***	***10 x 3 x 63.69***	***0.47***
DWC 05	Kern	~~35.783026~~ ***35.78474***	~~-119.402816~~ ***-119.403199***	***3***	***10 x 3 x 63.85***	***0.47***
DWC 06	Kern	~~35.777562~~ ***35.778786***	~~-119.401324~~ ***-119.401657***	***3***	***10 x 3 x 69.01***	***0.43***
DWC 07	***Kern***	***35.775551***	***-119.40065***	***2***	***10 x 3 x 68.48***	***0.44***
DWC 08	Kern	~~35.772127~~ ***35.772084***	~~-119.399518~~ ***-119.399448***	***2***	***10 x 3 x 62.37***	***0.48***
DWC 09	Kern	~~35.766764~~ ***35.767958***	~~-119.39741~~ ***-119.397838***	***3***	***10 x 3 x 63.01***	***0.48***
DWC 10	***Kern***	***35.764786***	***-119.396471***	***1***	***10 x 5 x 82.27***	***0.61***
DWC 11	Kern	35.756802	-119.392586	***1***	***10 x 4 x 82.44***	***0.49***
DWC 12	Kern	~~35.752204~~ ***35.753127***	~~-119.389931~~ ***-119.39037***	***1***	***10 x 3 x 63.01***	***0.48***
DWC 13	***Kern***	***35.749247***	***-119.387938***	***1***	***10 x 3 x 62.84***	***0.48***
DWC 14	Kern	~~35.746136~~ ***35.746347***	~~-119.385987~~ ***-119.385974***	***1***	***10 x 4 x 67.54***	***0.59***
DWC 15	***Kern***	***35.741721***	***-119.382595***	***1***	***10 x 4 x 71.96***	***0.56***
DWC 16	Kern	~~35.73914979~~ ***35.739151***	~~-119.3806418~~ ***-119.380775***	***3***	***10 x 3 x 67.69***	***0.44***
DWC 17	Kern	~~35.734511~~ ***35.734515***	~~-119.376801~~ ***-119.37661***	***3***	***10 x 3 x 62.67***	***0.48***
DWC 18	Kern	~~35.730352~~ ***35.7317999***	~~-119.372933~~ ***-119.3741027***	***1***	***10 x 3 x 69.72***	***0.43***
DWC 19	Kern	~~35.726293~~ ***35.727617***	~~-119.368911~~ ***-119.370098***	***1***	***10 x 3 x 65.80***	***0.46***
DWC 20	***Kern***	***35.72479***	***-119.367366***	***1***	***10 x 3 x 64.84***	***0.46***
DWC 21	Kern	~~35.722238~~ ***35.7213811***	~~-119.36488~~ ***-119.3640873***	***1***	***10 x 4 x 83.26***	***0.48***
DWC 22	Kern	~~35.713403~~	~~-119.356947~~	***1***	***10 x 5 x 72.84***	***0.55***

Wildlife Crossing Name	County	Latitude	Longitude	Number of Culverts	Dimensions W x H x L (feet)	Openness Factor
		35.713192	***-119.356838***			
DWC 23	***Kern***	***35.710533***	***-119.354736***	***1***	***10 x 3 x 69.98***	***0.43***
DWC 24	Kern	~~35.708414~~ ***35.708442***	~~-119.353071~~ ***-119.353169***	***1***	***10 x 3 x 72.41***	***0.41***
DWC 25	***Kern***	***35.7046728***	***-119.3505115***	***1***	***10 x 5 x 98.61***	***0.51***
DWC 26	Kern	~~35.698868~~ ***35.7008476***	~~-119.346726~~ ***-119.3480323***	***1***	***10 x 5 x 94.23***	***0.53***
DWC 27	***Kern***	***35.6958143***	***-119.3450797***	***1***	***10 x 3 x 64.75***	***0.46***
DWC 28	Kern	~~35.69093507~~ ***35.691319***	~~-119.3425661~~ ***-119.3427237***	***1***	***10 x 3 x 63.18***	***0.47***
DWC 29	***Kern***	***35.6883779***	***-119.3413188***	***1***	***10 x 3 x 63.67***	***0.47***
DWC 30	Kern	~~35.68302339~~ ***35.6831582***	~~-119.3389226~~ ***-119.3390825***	***1***	***10 x 3 x 63.18***	***0.47***
DWC 31	***Kern***	***35.6789934***	***-119.337528***	***1***	***10 x 3 x 63.65***	***0.47***
DWC 32	Kern	~~35.67432317~~ ***35.6747924***	~~-119.3359758~~ ***-119.3361495***	***2***	***10 x 3 x 65.21***	***0.46***
~~Wildlife Crossing~~	~~Kern~~	~~35.67432317~~	~~-119.3359758~~			
DWC 33/34	***Kern***	***35.6705597***	***-119.3349514***	***2***	***10 x 3 x 70.04***	***0.43***
DWC 35/36	Kern	~~35.6443805~~ ***35.666966***	~~-119.3316622~~ ***-119.334091***	***2***	***10 x 4 x 72.63***	***0.55***
DWC 37	Kern	~~35.6366546667~~ ***35.663788***	~~-119.3317163~~ ***-119.333442***	***1***	***10 x 4 x 66.8***	***0.6***
Dedicated Wildlife Crossings Optimized South of Wasco						
1l.add-2l.add	Kern	35.552944	-119.326328	2	10 x 3 x 70.91	0.41
1b.r-1c.r	Kern	35.55239498	-119.3261289	2	10 x 3 x 72.95	0.41
1d.a-2d.a	Kern	35.5507168	-119.3251983	2	10 x 3 x 64.53	0.46
1e.r-2e.r	Kern	35.54326015	-119.3200844	2	10 x 3 x 65.69	0.45
1f.a-1g.r	Kern	~~35.53966953~~ ***35.5396695***	~~-119.3169658~~ ***-119.3169658***	2	10 x 3 x 64.53	0.46
2g.r-1h.r	Kern	35.5381581	-119.3155023	2	10 x 3 x 64.53	0.46
1i.r-2i.r	Kern	35.52884359	-119.3046569	2	10 x 3 x 64.53	0.46
1m.add- 2m.add	Kern	35.52877496	-119.3045758	2	10 x 4 x 93.27	0.46
1n.add-2n.add	Kern	35.52684694	-119.3022069	~~2~~ ***3***	10 x 4 x 90.94	0.44
1j.r-2j.r	Kern	35.52678439	-119.3021354	2	10 x 3 x 64.53	0.46

Wildlife Crossing Name	County	Latitude	Longitude	Number of Culverts	Dimensions W x H x L (feet)	Openness Factor
1k.r	Kern	35.5246197	-119.2994843	1	10 x 3 x 73	0.41
1k.a – 2k.add	Kern	35.52387191	-119.2983084	~~2~~ ***3***	10 x 4 x 88.63	0.45
~~2h.r- 2h.add~~ ***2h.r***	Kern	35.52227384	-119.2966128	2	10 x 3 x 67.10	0.45

9. Table 5A starting directly after Table 5 in the ITP as amended is added to document the SJKF escape refugia locations:

Table 5A. Location of SJKF Escape Refugia

West Side of the HST	*Latitude*	*Longitude*	*EAst Side of the HST*	*Latitude*	*Longitude*
North of Deer Creek					
1	***36.13227***	***-119.5799750***	***1***	***36.13236***	***-119.579417***
2	***36.10297***	***-119.547256***	***2***	***36.10306***	***-119.546742***
3	***36.09577***	***-119.541592***	***3***	***36.09585***	***-119.541089***
4	***36.05804***	***-119.524983***	***4***	***36.05810***	***-119.524572***
5	***36.05386***	***-119.523036***	***5***	***36.05391***	***-119.522656***
6	***36.03303***	***-119.5097111***	***6***	***36.03306***	***-119.509328***
7	***36.00550***	***-119.489497***	***7***	***36.00551***	***-119.489192***
8	***35.98827***	***-119.477247***	***8***	***35.98831***	***-119.476847***
9	***35.97689***	***-119.468875***	***9***	***35.97694***	***-119.468308***
10	***35.96888***	***-119.463078***	***10***	***35.96893***	***-119.462458***
11	***35.94414***	***-119.444992***	***11***	***35.94436***	***-119.4445250***
12	***35.93914***	***-119.441333***	***12***	***35.93931***	***-119.440836***
13	***35.92366***	***-119.430658***	***13***	***35.92382***	***-119.4300917***
14	***35.90275***	***-119.420317***	***14***	***35.90289***	***-119.419836***
South of Wasco					
1	***35.567864***	***-119.331667***	***1***	***35.567869***	***-119.331403***
2	***35.565100***	***-119.331275***	***2***	***35.565119***	***-119.3308***
3	***35.562478***	***-119.330575***	***3***	***35.562503***	***-119.330111***

West Side of the HST	*Latitude*	*Longitude*	*EAst Side of the HST*	*Latitude*	*Longitude*
4	***35.559872***	***-119.329764***	***4***	***35.559856***	***-119.329161***
5	***35.557175***	***-119.328697***	***5***	***35.557261***	***-119.328192***
6	***35.554622***	***-119.327572***	***6***	***35.554650***	***-119.327003***
7	***35.547733***	***-119.3241***	***7***	***35.548019***	***-119.323242***
8	***35.545361***	***-119.322469***	***8***	***35.545608***	***-119.321600***
9	***35.535908***	***-119.313478***	***9***	***35.535997***	***-119.312928***
10	***35.533914***	***-119.311239***	***10***	***35.534006***	***-119.310608***
11	***35.532619***	***-119.309753***	***11***	***35.532583***	***-119.308878***
12	***35.531428***	***-119.308344***	***12***	***35.531506***	***-119.307536***
13	***35.530050***	***-119.306611***	***13***	***35.530072***	***-119.305828***

10. The section entitled “Roadway Modifications” beginning on page 36 of the ITP is amended to read as follows:

    - Roadway Modifications: Changes to existing roads along or crossing the HST ROW will be needed because the HST requires a fully dedicated grade-separated track alignment for public safety and to achieve the desired speeds. The Project will require ~~132~~ ***131*** roadway modifications: 45 in Fresno County, 39 in Kings County, ~~32~~ ***31*** in Tulare County, and 16 in Kern County. Roadway modifications will occupy ~~2,121.98~~ ***2,117.20*** total acres of the Construction Footprint (Table 8). At some locations, there will be an option to perform the modification as either an undercrossing or an overcrossing of the HST ROW. In these instances, the more conservative impact in terms of acreage (e.g., higher acreage) has been included and evaluated in this ITP. Handrails, fences, and walkways will be provided for the safety of pedestrians and bicyclists during roadway modification.

11. One line is removed from Table 8 starting on page 37 of the ITP, which was added in Amendment 15, but is not a Roadway Modification and belongs elsewhere. Table 8 is amended to read as follows, showing the lines above and below for reference:

Table 8. Location and Size of Project Roadway Modifications

Street Modification	County	Activity	Latitude	Longitude	Acres
Ave 144	Tulare	Utility relocations. Tule Elevated Structure, additional utility relocations, and roadway modifications.	36.050889	-119.521987	25.31
~~Tule River~~	~~Tulare~~	~~Change from single pile with four columns, two on the north and two on the south of the channel for the Tule Elevated Structure as well as utility relocations.~~	~~36.042562~~	~~-119.516311~~	~~4.78~~
Ave 136	Tulare	Closed connection to the west of SR 43 and retain the connection to the east. Access roads, roadway modifications and improvements, and utility relocations.	36.03635183	-119.5118982	6.05

12. The section entitled "Impacts of the Taking on Covered Species" on page 59, of the ITP, as amended, shall be further amended to read as follows:

    This ITP covers all Project related activities that cumulatively disturb no more than ~~6,511.13~~ ***6,605.59*** acres within the Construction Footprint (as depicted in the Baseline Map Book, Exhibit 6, Baseline Maps 1 through 53 and generated from the metadata provided by the Permittee) and no more than 17.32 acres at the Mitigation Site (collectively, the Project Area). Project activities are more fully described in the Project Description of this ITP and include subsurface geotechnical drilling and boring; habitat grubbing, vegetation removal, clearing, demolition, construction of a geotechnical test embankment and associated borrow site excavation and mass grading followed by the mobilization of equipment and materials; earthwork including construction of temporary and permanent excavation support structures; pile driving, excavation of open cut slope and fill, at grade profile excavation and leveling, and retained fill cut, rail bed foundation soil compaction, and elevated profiles and elevated profile structure components including construction and installation of straddle bents, foundations, pile caps, substructures, and superstructures; trench digging and other subsurface utility installation, relocation, and protection; pad preparation and construction of a batch plant, materials storage, fabrication, casting areas, access roads, and staging areas; rotary drilled reinforced concrete cast in place pile and drive pile installation; excavation of drainage swales and fabrication and installation of underground drainage culverts and pipes; ~~132~~ ***131*** roadway modifications including realignment and resurfacing, construction of new access roads, overcrossing, and undercrossing; construction of waterway crossing structures over the Kings River

Complex, Cross Creek, Tule River, Deer Creek, Poso Creek, and other watercourse crossings, partial dewatering and diversion of water; construction and assembly of tie and ballast and slab track railway systems, and shoofly track; erecting mast poles; construction of electrical systems facilities including the OCS, nine TPSS, up to nine switching stations, and up to 27 paralleling stations; construction of signal huts and bungalows including installation of cabling to the field hardware and track stations; traction electrification; excavation and construction of wildlife crossings, construction of the Kings/Tulare Regional Station; construction of a maintenance-of-infrastructure facility; installation of AD and AR fence; construction of temporary job site trailers and field offices including the development of building pads and preparation of parking areas; application of dust suppressants; operation and maintenance activities such as track, power, structure, signaling, train control, communications, intruder, and right-of way inspection and repair; equipment staging, mowing, inoculum collection, land grading, and excavation of wetlands at the Mitigation Site; and hand tool or auger planting of trees and shrubs, and other activities within the Construction Footprint and Mitigation Site described in the Project Description section of this ITP. All these Project activities are collectively referred to as the Covered Activities.

13. Table 9 on page 61 of the ITP, as amended, shall be further amended to read as follows:

Table 9. Covered Species Habitat Impacts

Covered Species	Habitat Type	Impact Type	Impact Acres
California tiger salamander	Upland refugia (annual grassland, pasture, barren, fallow field, inactive agriculture, and ruderal)	Permanent	~~9.06~~ ***35.42***
	Aquatic breeding (vernal pool, open water, seasonal wetland)	Permanent	~~9.64~~ ***11.14***
		Total	~~18.70~~ ***46.56***
	Upland refugia (annual grassland at Mitigation Site)	Temporary	16.56
	Aquatic breeding habitat (vernal pools at Mitigation Site)	Temporary	0.76
		Total	17.32
Tipton kangaroo rat	Annual grassland, Alkali desert scrub, barren, pasture, fallow field, inactive agriculture, and ruderal	Permanent	~~636.17~~ ***705.68***

Covered Species	Habitat Type	Impact Type	Impact Acres
San Joaquin antelope squirrel	Annual grassland, Alkali desert scrub, barren, pasture, fallow field, inactive agriculture, and ruderal	Permanent	~~636.17~~ ***705.68***
Swainson's hawk	Foraging (California annual grassland, pasture, barren, fallow field, inactive agriculture, ruderal, field crops, row crops, and irrigated hay crops)	Permanent	~~2,367.26~~ ***2,447.43***
	Foraging (annual grassland at Mitigation Site)	Temporary	17.32
	Nesting (riparian and eucalyptus woodland and individual trees)	Permanent	3 of the maximum 5 nest trees
San Joaquin kit fox	Alkali desert scrub, annual grassland, barren, pasture, fallow field, inactive agriculture, ruderal, field crops, row crops, and irrigated hay crops	Permanent	~~3,818.96~~ ***3,899.13***
	Foraging and denning (annual grassland at Mitigation Site)	Temporary	17.32

14. The first paragraph of the section titled "Tipton Kangaroo Rat," on page 62 of the ITP, as amended, shall be further amended to read as follows:

    The extent of the impacts of the taking of Tipton kangaroo rat (TKR) is based on the amount of vegetation cover types that could function as TKR foraging, burrowing, and breeding habitat within the Construction Footprint, the assumption that all potentially suitable habitat in the Construction Footprint would be permanently destroyed, and an evaluation of Project indirect impacts. The Covered Activities are expected to result in the permanent loss of up to ~~636.17~~ ***705.68*** acres of potential habitat (Table 9).

15. The first paragraph of the section titled "San Joaquin Antelope Squirrel," on page 62 of the ITP, as amended, shall be further amended to read as follows:

The extent of the impacts of the taking of San Joaquin antelope squirrel (SJAS) is based on the amount of vegetation cover types that could function as SJAS foraging, burrowing, and breeding habitat within the Construction Footprint, the assumption that all potentially suitable habitat in the Construction Footprint would be permanently destroyed, and an evaluation of Project indirect impacts. The Covered Activities are expected to result in the permanent loss of up to ~~636.17~~ ***705.68*** acres of potential habitat (Table 9).

16. The first paragraph of the section titled "Swainson's Hawk," on page 63 of the ITP, as amended, shall be further amended to read as follows:

    Up to ~~2,367.26~~ ***2,447.43*** acres of foraging habitat, including areas within active agricultural production, and five nest trees for Swainson's hawk (SWHA) could be permanently impacted as a result of Covered Activities. In addition, grading and excavation at the Mitigation Site would also result in up to 17.32 acres of temporary impacts to SWHA foraging habitat (Table 9). It is expected that all potentially suitable habitat (~~2,367.26~~ ***2,447.43*** acres) within the Construction Footprint would be permanently destroyed. Based on the results of baseline surveys conducted within the Construction Footprint in spring 2013, there are five known SWHA nest trees within 0.5-miles of the Construction Footprint (Table 10). The foraging habitat impact acres were determined based on these five nest trees along with the guidelines set forth in the *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California* (CDFW, 1994).

17. The first paragraph of the section titled "San Joaquin Kit Fox," on page 64 of the ITP, as amended, shall be further amended to read as follows:

    The extent of the impacts of the taking of San Joaquin kit fox (SJKF) is based on the amount of vegetation cover types that could function as SJKF foraging, denning, and breeding habitat within the Construction Footprint, the assumption that all potentially suitable habitat in the Construction Footprint would be permanently destroyed, and an evaluation of Project indirect impacts. The Covered Activities are expected to result in the permanent loss of up to ~~3,818.96~~ ***3,899.13*** acres of potential habitat (Table 9). Grading and excavation at the Mitigation Site would also result in up to 17.32 acres of temporary impacts to SJKF habitat.

18. Condition of Approval 8.15.6 under "Specific Measures for SJKF," on page 86 of the ITP, as amended, shall be further amended to read as follows:

8.15.7. SJKF Escape Refugia Plan. Permittee shall submit a SJKF Escape Refugia Plan to CDFW prior to initiating installation which shall not proceed until the Escape Refugia Plan has been approved in writing by CDFW. The Plan shall contain full size design drawings of the artificial SJKF dens to be provided as escape refugia along ~~the~~ portion~~(s)~~ of the alignment south of the City of Wasco ***and also north of Deer Creek*** where MSE walls are located***,*** ~~or~~ the profile is too low***, where it is not possible*** to install dedicated wildlife crossing structures ***at the required frequency of 3 per mile for other reasons, or where refugia would be beneficial to SJKF***. The Plan shall provide detailed mapping showing the refugia would be spaced so that kit fox would encounter them approximately every 0.19 mile (1,000 feet). ***Refugia shall be installed on both the east and west side of the HST at each designated location.*** The Plan shall include a full description of the fencing requirements for the escape dens, and a future inspection and maintenance schedule needed to keep the escape refugia fully functional ***as well as funding in the form of a nonwasting Endowment or alternative mechanism established for that purpose and approved in advance and in writing by CDFW***. A requirement to provide annual Reporting regarding the inspection and maintenance of the escape refugia shall be part of the Plan. Any proposed changes to the Plan shall be submitted in writing to CDFW and approved by CDFW in writing prior to implementation of any proposed modifications.

Further, the Authority shall record the locations of the refugia and the refugia shall be protected in perpetuity through the recordations of a conservation easement on the parcels where they reside such that the refugia remain for the lifetime of the HST. The conservation easement may provide for flexibility in moving the locations of refugia if needed in the future upon approval in advance and in writing by CDFW. Approximate locations for the refugia are included in the Exhibit 6.

19. Table 11 on page 105 of the ITP, as amended, shall be further amended to read as follows:

Table 11. Required Mitigation for Project-Related Impacts to Covered Species

Covered Species Name Common Name (Scientific Name)	Habitat Type	Project Impacts	Required Mitigation Acreage
California tiger salamander (*Ambystoma californiense*)	Upland	~~9.06~~ ***35.42***	~~27.18~~ ***106.26***
	Aquatic	~~9.64~~ ***11.14***	~~0.96~~ ***1.11***
Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*)	Natural	~~636.17~~ ***705.68***	~~1,908.51~~ ***2,117.04***
San Joaquin antelope squirrel (*Ammospermophilus nelsoni*)	Natural	~~636.17~~ ***705.68***	~~1,908.51~~ ***2,117.04***
Swainson's hawk (*Buteo swainsoni*) (active trees within 0.5 mile of the project footprint)	Foraging habitat 0-1 miles	~~533.26~~ ***562.68***	~~533.26~~ ***562.68***
	Foraging habitat 1-5 miles	~~1,176.55~~ ***1,227.29***	~~882.41~~ ***920.47***
	Foraging habitat 5-10 miles	657.45	328.73
San Joaquin kit fox (*Vulpes macrotis mutica*)	Natural and agriculture	~~3,818.96~~ ***3,899.13***	~~2,301.17~~ ***2,475.48***
Total Compensatory Mitigation			~~7,890.72~~ ***8,628.81***

20. Condition of Approval 9.1 (Cost Estimates) on pages 106 and 107 of the ITP, as amended, shall be further amended to read as follows:

    9.1. Cost Estimates. CDFW has estimated the cost of acquisition, protection, and perpetual management of the HM lands as follows:

        9.1.1. Land acquisition costs for HM lands identified in Condition of Approval 9.2 below, estimated at an average of $11,413.90/acre for up to ~~7,890.72~~ ***8,628.81*** acres: ~~$90,063,889.01~~ ***$98,488,374.46***. Land acquisition costs are estimated using local fair market current value for lands with habitat values meeting mitigation requirements.

        9.1.2. Start-up costs for HM lands, including initial site protection and enhancement costs as described in Condition of Approval 9.2.5 below, estimated at ~~$4,195,033.70~~ ***$4,587,432.92***.

9.1.3. Interim management period funding as described in Condition of Approval 9.2.6 below, estimated at ~~$1,853,676.03~~ ***$2,027,067.02***.

9.1.4. Long-term management funding as described in Condition of Approval 9.3 below, estimated at $3,570.26/acre for up to ~~7,890.72~~ ***8,628.81*** acres: ~~$28,171,921.99~~ ***$30,807,095.19***. Long-term management funding is estimated initially for the purpose of providing Security to ensure implementation of HM lands management.

9.1.5 Related transaction fees including but not limited to account set-up fees, administrative fees, title and documentation review and related title transactions, expenses incurred from other state agency reviews, and overhead related to transfer of HM lands to CDFW as described in Condition of Approval 9.4, estimated at $12,000.

21. Condition of Approval 10.1 (Performance Security) on page 112 of the ITP, is amended to read as follows:

    10.1. Security Amount. The Security shall be in the amount of ~~$124,296,520.72~~ ***$135,921,969.59.*** This amount is based on the cost estimates identified in Condition of Approval 9.1 above.

22. Exhibit 6 ("Baseline Map Book") in the list of attachments on page 115 of the ITP, as amended, is amended to include the replacement of Map Book Pages 12-14 and 23-48 with the corresponding page included in Attachment 1 of this Amendment, to reflect the increased Project Footprint and to show the new and updated locations of Dedicated Wildlife Crossings and the addition of new SJKF refugia.

The corresponding measures in the Mitigation Monitoring and Reporting Program (MMRP) (Attachment 1 of the ITP, as amended) shall be further amended to read the same as above. All terms and conditions of the ITP, as amended, and the MMRP that are not expressly amended herein remain in effect and must be implemented and adhered to by the Permittee.

FINDINGS

Issuance of this Amendment will increase the amount of take for some of the Covered Species compared to the Project as originally approved; however, because the

HM lands protection and management funding requirements will be commensurately increased, it is not expected that this Amendment will increase Project impacts on these species (i.e., "impacts of taking" as used in Fish and Game Code Section 2081, subd. (b)(2)).

Discussion: This Amendment makes twelve specific changes to the ITP, as amended. First, this Amendment increases the size of the entire Project Construction Footprint by 94.46 acres to a total of 6,605.59 acres of cumulative disturbance. The increase in the Construction Footprint acres is necessary to accommodate design variations of the alignment and crossing structures at Cross Creek and Deer Creek as well as any utility relocations, roadway modifications, temporary construction easements, access roads, and other Covered Activities at these two locations.

Second, this Amendment updates Table 3 to increase the number of DWCs from 127 DWC locations to 171 locations for a total increase of 44 DWCs.

Third, this Amendment updates the Project Description regarding new changes relating to Cross Creek and Deer Creek as well as updating the information in Table 4.

Fourth, this Amendment makes a correction by adding the Tule River information to the proper location in the Project Description and into Table 4.

Fifth, this Amendment updates Table 5 to add 44 new DWC locations as well as adjusts locations of many existing DWCs and culverts

Sixth, this Amendment adds Table 5A documenting the coordinate locations of the SJKF escape refugia.

Seventh, this Amendment makes a correction to the section entitled "Roadway Modifications" and Table 8 removing Tule River.

Eighth, this Amendment updates Table 9 and the text regarding increases in the Covered Species habitat impacts for California tiger salamander, Tipton kangaroo rat, San Joaquin antelope squirrel, Swainson's hawk and San Joaquin kit fox as a result of the increase in the Project Construction Footprint.

Ninth, this Amendment updates Condition of Approval 8.15.7, requiring installation and maintenance of SJKF escape refugia and adds locations for escape refugia north of Deer Creek.

Tenth, this Amendment updates Table 11 and the required permanent protection of additional compensatory HM lands and increases the accompanying estimates of management costs required to mitigate for Covered Species impacts commensurate with and resulting from the increased 94.46-acre Project Construction Footprint in Covered Species habitat.

Eleventh, this Amendment increases the Performance Security amount required for Permittee to proceed with Covered Activities.

Twelfth, this Amendment modifies Exhibit 6, the "Baseline Map Book," by replacing Map Book Pages 23-25 and 33-35 to reflect the increased Project Construction Footprint and to show the new and updated locations of Dedicated Wildlife Crossings and the addition of new SJKF refugia.

CDFW has determined that although this Amendment may result in an increase in take of the Covered Species, and increased Covered Species Habitat impacts, the additional impacts of the taking will be minimized and fully mitigated through implementation of the Conditions of Approval. Because the impacts will be minimized and fully mitigated, there will be no increase in Project impacts to the Covered Species with this Amendment.

Issuance of this Amendment does not affect CDFW's previous determination that issuance of the ITP, as amended meets and is otherwise consistent with the permitting criteria set forth in Fish and Game Code section 2081, subdivisions (b) and (c).

Discussion: CDFW determined in June 2015 that the Project as approved, met the standards for issuance of an ITP under CESA. CDFW determined in March 2017, in September 2018, in October 2018, twice in November 2018, in January 2019, three times in February 2019, in March 2019, in April 2019, in May 2019, in August 2019, twice in September 2019, twice in October 2019, in November 2019, and in December 2019 that Amendments No. 1, No. 2, No. 3, No. 4, No. 5, No. 6, No. 7, No. 8, No. 9, No. 10, No. 11, No. 12, No. 13, No. 14, No. 15, No. 16, No. 17, No. 18, No. 19, and No. 20 respectively, to the ITP met the standards for issuance of an ITP under CESA. This determination included findings that, among other things, the impacts of the taking would be minimized and fully mitigated and that the Project would not jeopardize the continued existence of the Covered Species. Those findings are unchanged with respect to this Amendment because the Project and ITP, as amended: (1) will increase the habitat compensation in proportion to the increase in impacts so that the fully mitigate standard is still met; (2) does not alter the Permittee's continued adherence to and implementation of the avoidance and minimization measures set forth in the Conditions of Approval in the ITP, as amended, and MMRP which will minimize and fully mitigate impacts of the taking on the Covered Species.

None of the factors that would trigger the need for subsequent or supplemental environmental analysis of the Project under Public Resources Code section 21166 or California Code of Regulations, title 14, sections 15162 and 15163, exist as a result of this Amendment.

Discussion: CDFW issued the original ITP in June 2015, Major Amendment No. 1 to the ITP in March 2017, Major Amendment No. 2 in September 2018, Major Amendment No. 3 in October 2018, Minor Amendment No. 4 and Major Amendment No. 5 in November 2018, Major Amendment No. 6 in January 2019, Major Amendments 7, 8, and 9 in February 2019, Major Amendment No. 10 in March 2019, Major Amendment No. 11 in April 2019, Major Amendment No. 12 in May 2019, Major Amendment No. 13 in August 2019, Major Amendments No. 14 and 15 in September 2019, Major Amendment No.16 and 17 in October 2019, Major Amendment No.18 in November 2019, Major Amendment No.19 in December 2019, and Major Amendment No. 20 in March 2020 as a responsible agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) after, among other things, considering the California High-Speed Train: Fresno to Bakersfield Section Final Project Environmental Impact Report/Environmental Impact Statement (EIR/EIS) (SCH No. 2009091126) certified by the lead agency, California High-Speed Rail Authority, on May 7, 2014. As explained in the findings below, CDFW finds for purposes of CESA that this Amendment represents a major change to the ITP, as amended. However, for the reasons explained above, CDFW concludes that approval of this Amendment will not result in and does not have the potential to create any new significant or substantially more severe environmental effects than previously analyzed and disclosed by California High Speed Rail Authority during its lead agency review of the Project, particularly with respect to the impacts authorized by CDFW pursuant to the ITP, as amended. As a result, CDFW finds that no subsequent or supplemental environmental review is required by CEQA as part of CDFW's approval of this Amendment.

CDFW finds that this Amendment is a Major Amendment, as defined in California Code of Regulations, title 14, section 783.6, subdivision (c)(5).

Discussion: This Amendment increases the size of the entire Project Construction Footprint by 94.46 acres to a total of 6,605.59 acres of cumulative disturbance. The increase in the Construction Footprint acres is necessary to accommodate design variations of crossing structures at Cross Creek and Deer Creek as well as any utility relocations, roadway modifications, temporary construction easements, access roads, and other Covered Activities at these two locations; updates Table 3 to increase the number of DWCs from 127 DWC locations to 171 locations for a total increase of 44 DWCs; updates the Project Description regarding new changes relating to Cross

Creek and Deer Creek as well as updating the information in Table 4; makes a correction by adding the Tule River information to the proper location in the Project Description and also in Table 4; updates Table 5 to add 44 new DWC as well as modifies many existing DWC locations culvert configurations at existing locations; adds Table 5A documenting the coordinate locations of the SJKF escape refugia; makes a correction to the section entitled "Roadway Modifications" and Table 8 removing Tule River; updates Table 9 and the text regarding increases in the Covered Species habitat impacts for California tiger salamander, Tipton kangaroo rat, San Joaquin antelope squirrel, Swainson's hawk and San Joaquin kit fox as a result of the change to the Project Construction Footprint; updates Condition of Approval 8.15.7, requiring installation and maintenance of SJKF escape refugia and adds locations of escape refugia north of Deer Creek; updates Table 11 and the required permanent protection of additional compensatory HM lands and increases the accompanying estimates of management costs required to mitigate for Covered Species impacts resulting from the increased Project Construction Footprint in Covered Species habitat; increases the Performance Security amount required for Permittee to proceed with Covered Activities; modifies Exhibit 6, the "Baseline Map Book," by replacing Map Book Pages 23-25 and 33-35 to reflect the increased Project Construction Footprint and to depict the new and updated locations of DWCs and the addition of new SJKF escape refugia.

As described above, these changes to the ITP, as amended, will increase the Project Construction Footprint, add locations of Covered Activities, and modify the Permittee's mitigation obligations. Therefore, this Amendment will substantially increase the scope or nature of the permitted Project or activity, or significantly modify the minimization, mitigation, or monitoring measures in the ITP, as amended. CDFW has determined that the changes to the ITP, as amended, constitutes a Major Amendment as defined in California Code of Regulations, title 14, section 783.6, subdivision (c)(5).

The authorization provided by this Amendment is not valid until Permittee signs and dates the acknowledgement below, and returns one of the duplicate originals of this Amendment by registered first class mail to CDFW at:

California Department of Fish and Wildlife
Habitat Conservation Planning Branch
Attention: CESA Permitting Program
Post Office Box 944209
Sacramento, California 94244-2090

Attachment:

ATTACHMENT 1 EXHIBIT 6 Baseline Map Book Pages 23-25 and 33-35

APPROVED BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

on 5/22/2020

DocuSigned by:
Annee Ferranti
041A77B10D78486...

for Julie A. Vance, Regional Manager
Central Region

ACKNOWLEDGMENT

The undersigned: (1) warrants that he or she is acting as a duly authorized representative of the Permittee, (2) acknowledges receipt of the original ITP and this Amendment, and (3) agrees on behalf of the Permittee to comply with all terms and conditions of the ITP, as amended.

DocuSigned by:
By: Mark McLoughlin
437AA2E68E7842B... Date: 5/29/2020

Printed Name: Mark A. McLoughlin Title: Director of Environmental Services