

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

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HABITAT CONSERVATION
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AMENDMENT NO. 9
(A Major Amendment)

California Endangered Species Act
Incidental Take Permit No. 2081-2013-025-04
California High-Speed Train Project Merced to Fresno Section Permitting Phase 1

INTRODUCTION

On March 12, 2014, the California Department of Fish and Wildlife (CDFW) issued Incidental Take Permit No. 2081-2013-025-04 (ITP) to the California High Speed Rail Authority (Permittee) authorizing take of California tiger salamander (*Ambystoma californiense*), Swainson's hawk (*Buteo swainsoni*), and San Joaquin kit fox (*Vulpes macrotis mutica*) (collectively, the Covered Species) associated with and incidental to the Permitting Phase 1 of the Merced to Fresno Section of the High-Speed Train (HST) Project (Project). The Project as described in the ITP originally issued by CDFW includes HST alignment beginning at the intersection of Avenue 17 and the Burlington Northern Santa Fe (BNSF) Railway, in the City of Madera, Madera County, California, and continuing south to an area on the southern side of State Route (SR) 41, adjacent to Los Angeles Street in the City of Fresno, Fresno County, California. The total length of the Project is 24.1 miles. The Project is the first 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, high-speed train 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 grade 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 includes construction and installation of all Project components, including disturbance of up to 1,049.00 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, and inspection activities within the Construction Footprint (O&M), and Mitigation Site activities.

In a letter dated July 23, 2014, the Permittee requested revisions to several ITP Conditions of Approval, specifically those that mentioned Designated Biologists, so that individuals with less species-specific training ("General Biological Monitors") could be used to perform less technical monitoring tasks. The Permittee also requested the

deletion of Condition of Approval 8.48 (O&M Tree and Wood Shrub Removal), and minor modifications to several other measures, primarily for clarification purposes. In a follow up email on August 13, 2014, the Permittee also requested that a single Condition of Approval be modified (Condition of Approval 6.2) related to the Designated Biologist to help expedite processing of an Amendment. This amendment did not change the Construction Footprint, nor did it change the habitat impacts or the compensatory mitigation. CDFW issued **Minor Amendment No. 1** on August 21, 2014 incorporating these changes.

In an email dated April 24, 2015, the Permittee requested a revision of the ITP's Project Description for the Fresno River crossing, to modify the design in this area from a viaduct design to one with a partial retained fill segment and add two new staging areas. The size of the Construction Footprint increased by 54.39 acres from 1,049.00 acres to a total of 1,103.39 acres. In addition, the Permittee asked to include the previously requested Designated Biologist changes not addressed in Minor Amendment No. 1. The Permittee also requested that Wildlife Crossing #5 be moved slightly to a new location (approximately 50 feet from the authorized location), and that changes to the land use and vegetation communities be updated, and the applicable land cover designation be substituted. Lastly, in addition to the increased mitigation that was required to offset the requested Construction Footprint increase, CDFW also required additional mitigation to address a non-compliance event that occurred on June 2014; 7.2 acres of fallow land and 2 acres of grassland habitat that were disturbed by the Permittee's contractor outside of the footprint permitted by the ITP. The amount of compensatory mitigation, Habitat Management (HM) lands, increased from 234 acres to 254 acres. CDFW issued **Major Amendment No. 2** on June 12, 2015 incorporating these changes.

In a set of emails dated September 25, 2015, May 2, 2015, and May 23, 2016, the Permittee requested a revision to the ITP to increase the size of the Construction Footprint by 707.87 acres and 9.2 acres for a total increase of 780.07 acres for a new grand total of 1,883.46 acres. The increase of the Construction Footprint accommodates: (1) four new road crossings; (2) additional impact areas for repaving of asphalt at the ends of planned overpasses; (3) utility relocations; (4) construction access; (5) road improvements and right-of-way (ROW) acquisitions; (6) a temporary 20-foot construction easement, north of the San Joaquin River, to install barrier fence around the HST ROW; and (7) a 2.7-mile extension of the northern boundary of the Construction Footprint. The Permittee also requested: (1) the removal of overcrossing and road improvements; (2) additional road alignments and locations; (3) modification of the design and/or placement of bridges and ROW crossings; and (4) the addition of a paralleling station, radio tower, and two new permanent access roads to be located in Madera County, California. Because of the increase in habitat impacts by 364.91 acres,

the amendment request also included an increase in the amount of compensatory mitigation HM lands by 127 acres from 254 acres to 381 acres. This resulted in an increase in associated endowment, an increase in the Performance Security amount required to proceed with Covered Activities, and a request to extend the required timeframe to protect and transfer all HM lands and record any required conservation easements. Lastly, the State endangered hairy Orcutt grass (*Orcuttia pilosa*) was added to the list of Covered Species subject to take authorization. CDFW issued **Major Amendment No. 3** on September 20, 2016 incorporating these changes.

In an email dated October 24, 2016, the Permittee requested an amendment to the ITP to extend the dry season work window beyond October 31st to November 15th for ground-disturbing activities at the Lazy K Ranch Mitigation Site. In addition, the Permittee requested that exclusion fencing for California tiger salamander be allowed for use during ground disturbance at the Lazy K Ranch, under the provision that the fencing would be removed when the proposed extended dry season work window expires. This amendment did not change the 1,883.46-acre Construction Footprint, nor did it change the habitat impacts or the compensatory mitigation. CDFW issued **Minor Amendment No. 4** on October 31, 2016 incorporating these changes.

In an email dated April 5, 2017, the Permittee requested an amendment of the ITP to increase the size of the Construction Footprint by 155.72 acres to a total of 2,039.18 acres. This increase in the Construction Footprint is necessary to accommodate the full extent of the footprint for the north extension of the Project. The north extension includes 2.89 miles of guideway, construction of an at-grade bridge over Schmidt Creek, a wildlife crossing north of Road 27, and a four-lane overcrossing at Road 26. Additional design refinements in the request include structural design changes to the Avenue 17 overcrossing, which includes replacing a planned retaining wall with an engineered embankment, an additional 0.35 acres of land at El Paso Road, 0.008 additional acres at Ridgedale Drive to accommodate final design of the road, and the inclusion of approximately 14.97 acres of the BNSF transportation corridor between Avenue 17 and Avenue 19 to be used for geotechnical investigation, utility relocation and potential access improvements between the BNSF and HST corridors. In addition to the major construction elements and design refinements listed above, Covered Activities that will occur within the increased Construction Footprint include the construction and improvement of private and public access ways, structure demolitions, utility relocation and protection, and fencing. Because of the increase in habitat impacts by 109.42 acres and decreased habitat impacts by 84.80 acres for a net increase of 24.62 acres, the amendment also included an increase in the amount of compensatory mitigation HM lands by 11.42 acres from 381 acres to 392.42 acres. This resulted in an increase in associated endowment, and an increase in the Performance Security

amount required to proceed with Covered Activities. CDFW issued **Major Amendment No. 5** on June 23, 2017 incorporating these changes.

In a letter dated September 19, 2017, the Permittee requested an amendment of the ITP to include an alternative option to fulfill their mitigation obligation that increased as a result of the increased Construction Footprint as issued in Major Amendment No. 5. To address this request the ITP was revised to: (1) provided an option to purchase 6.9 acres (6.43 acres of currently released vernal pool fairy shrimp credits that are also designated as "future release" California tiger salamander aquatic breeding habitat credits and 0.47 acres of currently released California tiger salamander upland habitat that has been identified to hold water with sufficient duration to support breeding) of Covered Species credits from CDFW-approved Dutchman Creek Conservation Bank; (2) provided a modified timeframe in which the remaining 10.39-acre mitigation obligation must be met; and (3) revised the Performance Security amount required in order to proceed with Covered Activities. There was no increase to Construction Footprint for this amendment. CDFW issued **Major Amendment No. 6** on August 3, 2018 incorporating these changes.

In a letter dated September 24, 2018, the Permittee requested further revision to the ITP, as amended, to revise the Project Description to allow for an increase in the Construction Footprint by 1.53 acres to a total of 2,040.71 acres. The Construction Footprint increase accommodates new Work Areas for improvements to Dry Creek Canal and the use of the roads adjacent to Dry Creek Canal for construction access. The new Work Areas would result in an increase of 1.53 acres of permanent impacts. Because of the increase in the Construction Footprint, the amendment also included an increase in the amount of compensatory mitigation HM lands by 1.53 acres which resulted in an increase in associated endowment, and an increase in the Performance Security amount required to proceed with Covered Activities. In a letter dated December 3, 2018, the Permittee requested amending the ITP, as amended, to accommodate construction of an intrusion protection barrier (IPB) within specific limits of the HST alignment in Fresno County to mitigate the risk of any potential derailed trains from the adjacent private rail lines from entering the path of the HST. The IPB would be a concrete wall and will not require additional Project Construction Footprint area beyond what was already permitted. IPB construction would occur in three locations totaling 4,060 linear feet, within downtown Fresno, along the "Fresno Trench." CDFW issued **Major Amendment No.7** on February 28, 2019.

In a letter dated May 1, 2019, the Permittee requested further revision to the ITP, as amended, to increase the extent of take of HaOrGr by 0.91 acres; increase the habitat management (HM) lands requirements for HaOrGr by 5.46 acres; allow the take of

HaOrGr to proceed with Security in place; change pre-construction botanical inventory requirements to require only focused surveys for HaOrGr; revise HaOrGr buffer and salvage requirements to reduce impacts to the species by eliminating the requirement to salvage all HaOrGr within 50 feet of the Construction Footprint, including outside of the right-of-way; and, because the impact/salvage areas have low HaOrGr seed abundance and high invasive plant seed abundance, eliminate the requirement to salvage plants in the Construction Footprint in lieu of CDFW's acceptance of the required Habitat Enhancement Plan for HaOrGr. There was no increase to Construction Footprint for this amendment. CDFW issued **Major Amendment No.8** on May 31, 2019.

In issuing the ITP, Minor 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, and Major Amendment No. 8 (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 February 15, 2019, the Permittee requested further revision to the ITP, as amended, (1) to increase the size of the Construction Footprint by 89.78 acres from 2,040.71 to a total of 2,130.49 acres to accommodate 24 proposed design variations listed below, (2) an increase in the length of intrusion protection barrier (IPB) by 14 miles from 4,060 linear feet to 73,894 linear feet, and (3) allow for wildlife crossing variations at three (3) locations. Because of the increase in habitat impacts by 24.09 acres for SWHA and 89.78 acres for SJKF the amendment also included an increase in the amount of compensatory mitigation HM lands by 24.09 acres for SWHA and 81.76 acres for SJKF for a total of 107.13 acres. This resulted in an increase in associated endowment, and an increase in the Performance Security amount required to proceed with Covered Activities.

This Major Amendment No. 9 (Amendment) makes the following changes to the ITP, as amended:

First, this Amendment increases the size of the entire Project Construction Footprint by 89.78 acres to a total of 2,130.49 acres of cumulative impact disturbance. This increase in the Construction Footprint is necessary to accommodate 24 additional design variations including additional work to either temporarily or permanently relocate, bypass or modify existing utilities including gas pipeline, electrical distribution lines, telecommunication facilities, sewer, storm drain, water main, and irrigation utilities; some utilities may require additional work and subsurface exploration to find their exact location; additional civil work and maintenance of traffic (MOT) work including removal,

temporary installation, modification or new installation of sidewalks, curbs, fences, retaining walls, driveways, roads, ramps, ramp meters, signs traffic lights, roadway improvements including slurry seal and restriping, realignment of bridges and onramps, onramp widening, raising an irrigation levee, clearing and grubbing, demolition of structures, site grading, and site restoration. Acquisition of temporary construction easements or new right of way, of new parcels, or full acquisition of partial parcels, will be required to accomplish these activities and for construction staging areas and parking for both construction and public.

Second, this Amendment adds the description of the 24 design variations, construction of an additional 69,834 linear feet of IPB, and three wildlife crossing variations to the Project Description.

Third, this Amendment increases the Covered Species impacts for Swainson's hawk by 24.09 acres and San Joaquin kit fox by 89.78 acres resulting in a total increase of impacts to habitat of 89.78 acres.

Fourth, this Amendment requires either the purchase of additional Covered Species credits or the permanent protection of additional HM lands and accompanying management costs to compensate for Covered Species impacts associated with the increase in the Construction Footprint.

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

AMENDMENT

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

1. The third paragraph of the section entitled "Project Description" on pages 2 and 3 of the ITP, as amended, shall be further amended to read as follows:

The Project is 27.01 miles in length and includes construction and installation of all Project components (Exhibit 1). Construction and installation of all Project components will disturb up to ~~2,040.74~~**2,130.49** acres (hereafter, Construction Footprint). Construction may occur at any point along the Construction Footprint, and construction may occur at multiple locations simultaneously. For purposes of this ITP, in addition to Construction Footprint activities (i.e., construction of the California HST), the Project also includes operations, maintenance, and inspection

activities within the Construction Footprint (O&M); and Mitigation Site activities. The three types of general activities are described more fully in this Project Description. Also, each of the three general types of activities requires their own Conditions of Approval.

2. The following description of the 24 design variations is added the section entitled "Project Description":

- 1) *utility work, including traffic signal modifications in downtown Fresno;*
- 2) *relocation of a 12-inch, Kinder Morgan, Inc. gas pipeline;*
- 3) *new site for the Fresno Station Parking Lot;*
- 4) *clearing and grubbing 11.27-acres of what remains of an inaccessible orchard;*
- 5) *additional land to provide space for Producers Dairy vehicles;*
- 6) *raising the northern levee road of the irrigation lateral four inches;*
- 7) *full acquisition of five parcels approved as partial, demolition of four motels;*
- 8) *full acquisition and subsequent demolition of structures on two parcels approved as partial acquisition for additional construction staging areas;*
- 9) *partial acquisition of an additional parcel, building demolition and removal of foundations, asphalt pavement, and trees is also required on the parcel;*
- 10) *roadway improvements at North Thorne Avenue, West Napa, and south of West Belmont Avenue to North Fruit Avenue, Avenue. These roadway improvements require a new staging area on West Voorman Avenue;*
- 11) *improvements to an existing unpaved road to be used for construction access;*
- 12) *temporary installation or modification of sidewalks and pedestrian ramps at seven sites and installation of eight signs within five sites for safe vehicular and pedestrian access around the construction site along downtown Fresno streets;*
- 13) *additional utility and MOT work along West Jennifer Avenue, North Gates Avenue and at the intersection of West Shaw Avenue and North Gates Avenue;*
- 14) *realignment of the San Joaquin River bridge and West Herndon Avenue undercrossing;*
- 15) *subsurface exploration is required to determine the precise location of a buried 24-inch, high-pressure natural gas pipeline;*
- 16) *additional utility and civil work between West Bullard Avenue and State Route (SR) 41 in Fresno including: Minor duct bank modifications at*

- 25 telecommunication facility locations, eight traffic light modifications, relocation of a City of Fresno water main, and minor civil modifications to sidewalk and access driveways;*
- 17) additional work to find and relocate or modify existing utilities at Road 28 ¼ to just south of East Belmont Avenue;*
 - 18) additional temporary construction easement is required to relocate utilities, including a 4-inch PG&E electric distribution line, in the street and sidewalk at Broadway Street;*
 - 19) additional work will be required to relocate or modify existing utilities within Fresno County, including:*
 - Electrical utility work at Avenue 15 14 in Madera County to Mono and G Street,*
 - Sewer utility work North of the Van Buren and W. Herndon Avenue intersection,*
 - Storm drain utility work west of the alignment and North Golden State Boulevard and east of SR 99 along a dirt access road,*
 - Irrigation utility work east and west of the alignment at N. Golden State Boulevard within APN 510-080-11 and 510-090-45,*
 - Telecommunication utility work west of the alignment at the intersection of West Herndon Avenue and North Parkway Drive and east of the alignment and Union Pacific Railroad ROW, southwest of the East Amador and H Street intersection;*
 - 20) additional work to relocate or modify four PG&E electrical utilities, 12 PG&E gas utilities (two in Madera County and ten in Fresno County), and modification to one Fresno Irrigation District irrigation pipe, and one Fresno Metropolitan Flood Control District (FMFCD) storm drain;*
 - 21) additional work to relocate or otherwise modify ten PG&E electrical utilities (four in Madera County and six in Fresno County), ten PG&E gas utilities in Fresno County, one sanitary/storm sewer utility in Fresno County;*
 - 22) additional work to install of temporary sewer bypasses in the City of Fresno at:*
 - Six locations near the intersection of Herndon Avenue and Golden State Boulevard,*
 - One location near the intersection of Golden State Boulevard and the future Veterans Boulevard,*
 - Two locations near the intersection of Shaw Avenue and Golden State Boulevard,*
 - Two locations near the intersection of W. Pine Avenue and N. West Avenue,*
 - Three locations along G Street between SR 180 and Hwy 41;*

23) additional civil work at four locations:

- **Realignment of the northbound SR 99 Herndon Avenue onramp to accommodate HST construction of the San Joaquin River Viaduct,**
- **Partial removal of an existing maintenance road, clearing and grubbing, irrigation line removal and relocation, and site restoration is required for approximately 1,330 feet between the northbound onramp and the SR 99 shoulder,**
- **Additional work at the Producers Dairy property, east of N. Thorne Avenue within APN 458-240-31, to connect the Producers Dairy property to the FMFCD storm drain system,**
- **Additional ROW is required at the parking lot on the southwest corner of Kern Street and H Street (APN 467-040-20ST) to accommodate a Kern Street cul-de-sac on the east side of the UPRR railroad tracks;**

24) additional civil work at 52 sites mostly in Downtown Fresno including:

- **Addition of temporary staging areas,**
- **Installation of temporary signs to facilitate in-traffic detours during overcrossing construction at Herndon Avenue, Shaw Avenue, and Belmont Avenue,**
- **Construction of additional city sidewalk near Shaw Avenue,**
- **Onramp widening, ramp meter installation and modification, sidewalk construction, signage, slurry seal, and restriping for the Belmont Avenue/SR 99 interchange,**
- **Installation of temporary signs for the future closure of portions of North Roosevelt Avenue and East Divisadero Street,**
- **Relocation of a UPRR driveway that includes MOT signs, sidewalk and curb removal, fence removal, retaining wall removal, site grading, and driveway and curb pour installation.**

3. The following description updates to the IPB information and is added to the section entitled "Project Description" immediately following the addition from Amendment 7:

Where lateral separation of the project alignment and a conventional railroad is less than 102 feet, intrusion protection measures are required to be installed. Where High-Speed Rail (HSR) elevated guideway structures are within 102 feet of an adjacent railroad, guideway support columns, piers, abutments, and wing walls will be designed to withstand train collision and intrusion protection will not be required. Where overhead grade separation support columns, piers, abutments, and wing walls are within 25 feet of an adjacent railroad pier protection, designs that meet UPRR-BNSF Guidelines for Railroad Grade Separation Projects (UPRR and BNSF 2016) and the

American Railway Engineering and Maintenance-of-Way Association (AREMA) requirements for Pier Protection (AREMA 2012) will be used.

Where the alignment is at or below-grade and there is less than a 102-foot separation between the project alignment and a conventional railroad, an IPB is being designed to provide sufficient protection from derailment. These locations are described below. No IPB would be constructed within rivers, streams, or open channels. IPB would be terminated at the same limit of the front face of the HSR elevated guideway structure abutment wall.

Twenty segments of IPB will be located from Avenue 17 to Downtown Fresno. At the north end of CP 1, an IPB will be required from Avenue 17 to just south of Cottonwood Creek in Madera County with a large break at the Fresno River Viaduct elevated guideway structure, two smaller breaks at the Avenue 15 1/4 and Avenue 15 grade separations, and a final break at the Cottonwood Creek elevated guideway structure. An IPB is not needed again until the alignment enters Fresno County, south of the San Joaquin River where the IPB will extend from West Herndon Avenue south through downtown Fresno to the end of CP1 A/B near State Route 41.

Within the City of Fresno limits, the IPB will be divided into 12 segments separated by 11 breaks. These breaks will be located at the Herndon Avenue undercrossing, the future Veteran Boulevard grade separation, Herndon Canal, Shaw Avenue grade separation, McKinley Avenue grade separation, Olive Avenue grade separation, and Belmont Avenue Grade separation. Within Downtown Fresno the IPB will have additional breaks at State Route 180, between El Dorado Street and San Joaquin Street, at Fresno Street, Tulare Street, and Ventura Street.

IPB will be constructed in three ~~three~~ **twenty** locations:

- ~~North of West Belmont~~ **Start of Fresno Trench** to West Belmont Avenue/Fresno County (1,880 linear feet)
- West Belmont Avenue to UPRR Spur Line/Fresno County (890 linear feet)
- UPRR Spur Line to Dry Creek Canal/Fresno County (1,290 linear feet)

The Table (below) list the locations and lengths of IPB described above. Not including the IPB along portions of the Fresno Trench in Downtown Fresno, the total length of IPB is 14.0 miles across the CP1 A/B alignment.

Table of the Intrusion Protection Barrier Location and Lengths

Location/County	Start Coordinates	End Coordinates	Length (Linear Feet)
North of Ave 17 to Fresno River Viaduct – Madera County	36.996516, -120.043817	36.984761, -120.029798	6,355
South of Fresno River Viaduct to Ave 15 1/2 – Madera County	36.980008, -120.024262	36.974442, -120.019339	2,490
Ave 15 1/2 to Ave 15 – Madera County	36.974313, -120.019227	36.967126, -120.012852	3,219
Ave 15 to Cottonwood Creek – Madera County	36.967010, -120.012746	36.94247, -119.994390	9,269
Cottonwood Creek to ~900 feet south of Cottonwood Creek – Madera County	36.945670, -119.993899	36.943539, -119.992167	920
San Joaquin River Viaduct to North of Herndon Ave – Fresno County	36.837384, -119.92276	36.835915, -119.918491	973
South of Herndon Ave to Veterans Boulevard – Fresno County	36.833420, -119.914444	36.825242, -119.902070	4,684
Veterans Boulevard to Herndon Canal – Fresno Canal	36.825016, -119.901718	36.814968, -119.886916	5,685
Herndon Canal to Shaw Ave – Fresno County	36.814926, -119.886858	36.808390, -119.877584	3,607
Shaw Ave to McKinley Ave – Fresno County	36.808082, -119.877237	36.764818, -119.829582	21,047
McKinley Ave to Olive Ave – Fresno County	36.764612, -119.829348	36.757882, -119.821944	3,273
Olive Ave to North of West Belmont Ave – Fresno County	36.757653, -119.821692	36.754497, -119.818207	1,540
North of West Belmont Ave Start of Fresno Trench to West Belmont Ave – Fresno County	36.754497, -119.818207	36.750624, -119.813965	1,879 4890
West Belmont Ave to UPRR Spur Line – Fresno County	36.750456, -119.813761	36.748617, -119.811756	892 890
UPRR Spur Line to Dry Creek Canal – Fresno County	36.748310, -119.811425	36.754497, -119.818207	1,292 4290
SR 180 to South of Divisadero – Fresno County	36.744385, -119.8070101	36.742320, -119.804834	1,003
North of Stanislaus Street to Fresno Undercrossing – Fresno County	36.738438, -119.00581	36.733736, -119.795630	2,250
Fresno Street Undercrossing to Tulare Street Undercrossing – Fresno County	36.733510, -119.795275	36.731752, -119.793372	849
Tulare Street Undercrossing to Ventura Undercrossing – Fresno County	36.731565, -119.793159	36.727840, -119.789037	1,817
Ventura Undercrossing to Hwy 41 – Fresno County	36.727584, -119.788781	36.724291, -119.785003	850
Total			4,060 73,894 (14 miles)

Major Amendment No: 9
Incidental Take Permit 2081-2013-025-04
CALIFORNIA HIGH-SPEED RAIL AUTHORITY
CALIFORNIA HIGH-SPEED TRAIN PROJECT
Merced to Fresno Section Permitting Phase 1

4. The following description of the Wildlife Variations is added the section entitled "Project Description":

In Madera County, between Avenue 15 and Cottonwood Creek, the IPB will coincide with the locations of three previously designed wildlife crossings (ITP Table 4, Crossing No. 1, 2, and 3). To maintain the permeability of wildlife crossings, a 25-foot-wide opening will be placed in the IPB, centered on the 10-foot-wide opening of the wildlife crossing. Access restriction fencing will run from the 25-foot opening in the IPB to the edge of the 10-foot opening of the wildlife crossing, effectively creating a funnel for wildlife entering and exiting along the IPB side of the wildlife crossing. On the IPB side of the wildlife crossing, fencing will be affixed to the edge of the wildlife crossing and additional access restriction fencing will run along the top of the opening to ensure safety and security of the HST guideway is maintained.

5. The first paragraph of the section entitled "Impacts of the Taking on Covered Species" on pages 32 and 33 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 2,040.71 **2,130.49** acres within the Construction Footprint and 529.79 acres within the Lazy K Ranch Mitigation Site (the Construction Footprint and Lazy K Ranch Mitigation Site are collectively, the Project Area). Project activities include subsurface geotechnical drilling and boring; habitat grubbing, vegetation removal, clearing, and mass grading followed by the mobilization of equipment and materials; earthwork including construction of temporary and permanent excavation support structures; 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; 23 roadway modifications including realignment and resurfacing, construction of new access roads, overcrossing, and undercrossing; construction of waterway crossing structures over the Fresno River, Cottonwood Creek, and the San Joaquin River including 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, TPSS, two switching stations, and six 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 Downtown Fresno Station; 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; and equipment staging, inoculum collection, land grading, and excavation of wetlands in the Wetland Restoration Area and mowing, hand tool or auger planting of trees and shrubs, and installation of irrigation systems in the Riparian Restoration Area within the Lazy K Ranch Mitigation Site and other activities within the Construction Footprint and Mitigation Site described in the Project Description section of this ITP (Covered Activities).

6. The first paragraph of the section entitled "Swainson's Hawk" on page 34 of the ITP, as amended, shall be further amended to read as follows:

Up to ~~393.06~~ **417.15** acres of foraging habitat and one nest tree for Swainson's hawk (SWHA) could be permanently impacted as a result of Covered Activities (Table 5) and it is expected that all potentially suitable habitat would be permanently destroyed. Based on the results of baseline surveys conducted within the Construction Footprint in spring 2013, there is one known location of a SWHA nest tree within 0.5-mile of the Construction Footprint, on the west side of SR 99 south of the San Joaquin River. The foraging habitat impact acres were determined based on this one nest tree and the guidelines set forth in the Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (*Buteo swainsoni*) in the Central Valley of California (California Department of Fish and Game, 1994).

7. The first paragraph of the section entitled "San Joaquin Kit Fox" on page 35 of the ITP, as amended, shall be further amended to read as follows:

Up to ~~438.90~~ **528.68** total acres, of habitat for San Joaquin kit fox (SJKF) could be permanently impacted as a result of Covered Activities (Table 5). This determination was based on an identification of baseline vegetation cover types and that all potentially suitable habitat would be permanently destroyed within the Construction Footprint. Vegetation cover type acres that could function as SJKF foraging, denning, and breeding habitat were quantified and subsequently used as

a habitat-based surrogate to estimate the extent of incidental take in the form of mortality and indirect impacts that will occur as a result of Project build out.

8. Table 5 on page 36 of the ITP, as amended, shall be further amended to read as follows:

Table 5. Covered Species Habitat Impacts

Covered Species	Habitat Type	Impact Type	Impact Acres
California tiger salamander	Upland refugia (California annual grassland, pasture, barren, fallow field, inactive agriculture, and ruderal)	Permanent	150.53
	Aquatic breeding (vernal pool, open water, seasonal wetland)	Permanent (Direct)	6.47
		Permanent (Indirect)	6.07
Swainson's hawk	Foraging (California annual grassland, pasture, barren, fallow field, inactive agriculture, ruderal, field crops, row crops, and irrigated hay crops)	Permanent	393.06 417.15
	Nesting (riparian and eucalyptus woodland)	Permanent	1 nesting tree(s)
San Joaquin kit fox	Upland (California annual grassland, pasture, barren, fallow field, inactive agriculture, ruderal, field crops, row crops, and irrigated hay crops)	Permanent (Preferred)	438.90 92.38
<i>San Joaquin kit fox</i>	<i>Urban, transportation corridors, commercial/industrial, constructed watercourses, and residential rural</i>	<i>Permanent (Marginal)</i>	528.68
Hairy Orcutt grass	vernal pool, seasonal wetland	Permanent (Direct)	0.94
		Permanent (Indirect)	3.35

9. Condition of Approval 9 (Habitat Management Land Acquisition) on page 71 of the ITP, as amended, shall be further amended to read as follows:

CDFW has determined that permanent protection and perpetual management of compensatory habitat is necessary and required pursuant to CESA to fully mitigate Project-related impacts of the taking on the Covered Species that will result with implementation of the Covered Activities. This determination is based on factors including an assessment of the importance of the habitat in the Project Area, the extent to which the Covered Activities will impact the habitat, and CDFW's estimate of the acreage required to provide for adequate compensation.

To meet this requirement for all Covered Species other than hairy Orcutt grass, the Permittee shall purchase 6.9 acres (6.43 acres of currently released vernal pool fairy shrimp credits that are also designated as "future release" CTS aquatic breeding habitat and 0.47 acres of currently released CTS upland habitat that has been identified to hold water with sufficient duration to support breeding) of Covered Species credits from the CDFW approved Dutchman Creek Mitigation Bank (Condition of Approval 9.2). The Permittee shall also either purchase an additional ~~0.64~~ **24.73** acre of Covered Species credit for SWHA foraging habitat and ~~0.64~~ **82.40** acre of Covered Species credit for SJKE upland habitat from a CDFW-approved mitigation or conservation bank with a service area that encompasses the Project Area OR shall provide for the permanent protection and management of an additional ~~0.64~~ **24.73** acre of SWHA foraging habitat and ~~0.64~~ **82.40** acre of SJKE upland Habitat Management (HM) lands pursuant to Condition of Approval 9.3 below and the calculation and deposit of the management funds pursuant to Condition of Approval 9.4 below. The Permittee shall also provide for the permanent protection and management of 392.42 acres of Habitat Management (HM) lands within the Preservation Area at Lazy K Ranch pursuant to Condition of Approval 9.3 below and the calculation and deposit of the management funds pursuant to Condition of Approval 9.4 below. Furthermore, prior to commencement of vegetation- or ground-disturbing activities or any other Covered Activities, Permittee shall permanently preserve and fund the perpetual management of an additional 10.39 acres of California tiger salamander breeding Habitat Management lands.

10. Table 6 of the ITP, as amended, is amended to read as follows:

Table 6. Compensatory Mitigation Acres for Covered Species

Impact Type	Acres
<i>California Tiger Salamander</i>	
Indirect Permanent Breeding Habitat	6.07
Direct Permanent Breeding Habitat	6.47
Direct Permanent Upland Refugia/Foraging Habitat	150.53
Total Impacts	163.07
Upland Compensatory Mitigation	301.06
Breeding Habitat Compensatory Mitigation	25.48
Total Compensatory Mitigation	326.54
<i>Swainson's Hawk</i>	
Direct Permanent Foraging Habitat	393.06 417.15
Direct Permanent Nesting Habitat	1 nest tree
Total Impacts	393.06 417.15
Total Compensatory Mitigation	393.06 417.15
<i>San Joaquin Kit Fox</i>	
Direct Permanent Preferred Foraging/Dispersal Habitat	67.80 92.38
Direct Permanent Marginal Dispersal Habitat	371.10 436.30
Total Impacts	438.90 528.68
Total Compensatory Mitigation	321.47 403.23
<i>Hairy Orcutt Grass</i>	
Direct Permanent	1.85
Indirect Permanent	3.35
Total Impacts	5.20
Compensatory Habitat Mitigation Lands	20.80
Enhancement and Translocation Lands	10.40
Total Compensatory Mitigation	31.20

11. Condition of Approval 9.1 (Cost Estimates) on pages 72 and 73 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 for all Covered Species other than hairy Orcutt grass as follows:

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- 9.1.1. Land acquisition costs for HM lands identified in Condition of Approval 9.3 below, estimated at \$5,025.93/acre for 392.42 acres, \$20,135.06/acre for the additional 10.39 acres of CTS aquatic breeding habitat, ~~\$3,216.60~~ **\$124,291.25** for the additional 0.64 ~~24.73~~ **24.73** acres of SWHA foraging habitat, and ~~\$3,216.60~~ **\$414,136.63** for the additional 0.64 ~~82.40~~ **82.40** acres of SJKF upland habitat for: \$1,970,164.56 for 392.42 acres of HM lands, \$209,203.27 for 10.39 acres of additional CTS aquatic breeding habitat, and ~~\$6,433.20~~ **\$538,427.88** for 0.64 ~~24.73~~ **24.73** acres of additional SWHA foraging habitat and 0.64 ~~82.40~~ **82.40** acres of additional SJKF upland habitat. 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 9.3.5 below, estimated at \$563,381.06 for 392.42 acres of HM lands, \$14,932.47 for 10.39 acres of additional CTS aquatic breeding habitat, and ~~\$1,837.64~~ **\$167,126.43** for 0.64 ~~24.73~~ **24.73** acres of additional SWHA foraging habitat and 0.64 ~~82.40~~ **82.40** acres of additional SJKF upland habitat;
- 9.1.3. Interim management period funding as described in Condition of Approval 9.3.6 below, estimated at \$80,284.12 for 392.42 acres of HM lands, \$2,125.66 for 10.39 acres of additional CTS aquatic breeding habitat, and ~~\$261.88~~ **\$25,647.49** for 0.64 ~~24.73~~ **24.73** acres of additional SWHA foraging habitat and 0.64 ~~82.40~~ **82.40** acres of additional SJKF upland habitat;
- 9.1.4. Long-term management funding as described in Condition of Approval 9.4 below, estimated at \$5,806.00/acre for 392.42 acres and for 10.39 acres of additional CTS aquatic breeding habitat and \$3,715.84/0.64 acre for 0.64 ~~24.73~~ **24.73** acres of additional SWHA foraging habitat and 0.64 ~~82.40~~ **82.40** acres of additional SJKF upland habitat: \$2,275,952.00, \$60,324.34, ~~\$3,715.84~~ **\$143,582.38** and ~~\$3,715.84~~ **\$478,414.40**, respectively. 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 9.5, estimated at ~~\$12,000.00~~ ~~\$24,000.00~~ **\$48,000.00**.

12. Condition of Approval 10.1 (Performance Security) on page 77 of the ITP, as amended, shall be further amended to read as follows:

Security Amount. The Security shall be in the amount of ~~\$4,901,781.74~~ **\$6,001,542.64** for ~~392.42~~ **474.18** acres of HM lands; \$298,585.74 for 10.39 acres of additional CTS aquatic breeding habitat; and \$39,964.40 for 0.64 acre of additional SWHA foraging habitat and 0.64 acre of additional SJKF upland habitat. These amounts are based on the cost estimates identified in Condition of Approval 9.1 above and are Security only for Covered Species other than hairy Orcutt grass.

13. Condition of Approval 10.3 (Performance Security) on page 77 of the ITP, as amended, shall be further amended to read as follows:

14. Security Timeline. The Security shall be provided to CDFW within 30 days after the effective date of this Amendment and within 30 days after the effective date of any subsequent amendment(s), prior to commencement of vegetation- or ground-disturbing activities or any other Covered Activities, whichever comes first.

The corresponding measures in the Mitigation Monitoring and Reporting Plan (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 of the Covered Species compared to the Project as originally approved; however, by implementing the avoidance, minimization, and mitigation measures contained in the ITP, as amended, and in this Amendment, this Amendment will not increase Project impacts on the Covered Species (i.e., "impacts of taking" as used in Fish and Game Code Section 2081, subd. (b)(2)).

Discussion: This Amendment makes five specific changes to the ITP, as amended. First, this Amendment increases the size of the entire Project Construction Footprint by 89.78 acres to a total of 2,130.49 acres of cumulative impact disturbance. This increase in the Construction Footprint is necessary to accommodate 24 additional design variations including additional work to either temporarily or permanently relocate, bypass or modify existing utilities including gas pipeline, electrical distribution lines, telecommunication facilities, sewer, storm drain, water main, and irrigation utilities; some utilities may require additional work and subsurface exploration to find their exact location; additional civil work and maintenance of traffic (MOT) work including removal, temporary installation, modification or new installation of sidewalks, curbs, fences, retaining walls, driveways, roads, ramps, ramp meters, signs traffic lights, roadway improvements including slurry seal and restriping, realignment of bridges and onramps, onramp widening, raising an irrigation levee, clearing and grubbing, demolition of structures, site grading, and site restoration. Acquisition of temporary construction easements or new right of way, of new parcels, or full acquisition of partial parcels, will be required to accomplish these activities and for construction staging areas and parking for both construction and public.

Second, this Amendment adds the description of the 24 design variations, construction of an additional 69,834 linear feet of IPB, and three wildlife crossing variations to the Project Description.

Third, this Amendment increases the Covered Species impacts for Swainson's hawk by 24.09 acres and San Joaquin kit fox by 89.78 acres resulting in a total increase of impacts to habitat of 89.78 acres.

Fourth, this Amendment requires either the purchase of additional Covered Species credits or the permanent protection of additional HM lands and accompanying management costs to compensate for Covered Species impacts associated with the increase in the Construction Footprint.

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

CDFW has determined that although the Amendment may result in an increase in take of the Covered Species, any additional impacts of the taking that would arise will be minimized and fully mitigated through implementation of the Conditions of Approval. Accordingly, 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 March 2014 that the Project as approved, met the standards for issuance of an ITP under CESA. CDFW determined in August 2014, in June 2015, in September 2016, in October 2016, in June 2017, in August 2018, in February 2109, and in May 2019 that Minor Amendment No. 1, Major Amendments No. 2 and No. 3, Minor Amendment No. 4, and Major Amendments No. 5, No. 6, No. 7, and No. 8, 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 impact due to the increase in habitat impact 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 March 2014, Minor Amendment No. 1 to the ITP in August 2014, Major Amendment No. 2 in June 2015, Major Amendment No. 3 in September 2016, Minor Amendment No. 4 in October 2016, Major Amendment No. 5 in June 2017, Major Amendment No. 6 in August 2018, Major Amendment No. 7 in February 2019, and Major Amendment No. 8 in May 2019, 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: Merced to Fresno Section Final Project Environmental Impact Report/Environmental Impact Statement (EIR/EIS) (SCH No. 2009091125) certified by the lead agency, California High-Speed Rail Authority, on May 3, 2012; Addendum 2013-1 to the Final Merced to Fresno Project Section EIR/EIS (October 2013); and Addendum 2013-2 to the Final Merced to Fresno Section Project EIR/EIS (November 2013). 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 Construction Footprint by 89.78 acres to accommodate 24 additional design variations including additional work to either temporarily or permanently relocate, bypass or modify existing utilities including gas pipeline, electrical distribution lines, telecommunication facilities, sewer, storm drain, water main, and irrigation utilities; some utilities may require additional work and subsurface exploration to find their exact location; additional civil work and maintenance of traffic (MOT) work including removal, temporary installation, modification or new installation of sidewalks, curbs, fences, retaining walls, driveways, roads, ramps, ramp meters, signs traffic lights, roadway improvements including slurry seal and restriping, realignment of bridges and onramps, onramp widening, raising an irrigation levee, clearing and grubbing, demolition of structures, site grading, and site restoration. Acquisition of temporary construction easements or new right of way, of new parcels, or full acquisition of partial parcels, will be required to accomplish these activities and for construction staging areas and parking for both construction and public. This Amendment also adds the description of the 24 design variations, construction of an additional 69,834 linear feet of IPB, and three wildlife crossing variations to the Project Description. This Amendment also increases the Covered Species impacts for Swainson's hawk by 24.09 acres and San Joaquin kit fox by 89.78 acres resulting in a total increase of impacts to habitat of 89.78 acres. This Amendment also requires either the purchase of additional Covered Species credits or the permanent protection of additional HM lands and accompanying management costs to compensate for Covered Species impacts associated with the increase in the Construction Footprint. Lastly, this Amendment also increases the Performance Security amount required in order for the Permittee to proceed with Covered Activities. As described above, these changes to the ITP, as amended, will increase the Project impacts on Covered Species previously analyzed and authorized by the ITP, as amended, affect Permittees' substantive mitigation obligations under the ITP, as amended, and will increase temporal impacts on the Covered Species. 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).

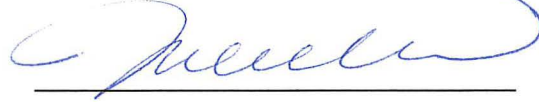
The authorization provided by this Amendment is not valid until Permittee signs and dates the acknowledgement below, and returns one of the duplicate originals of this Amendment by registered first class mail to CDFW at:

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

APPROVED BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

on

6/10/19

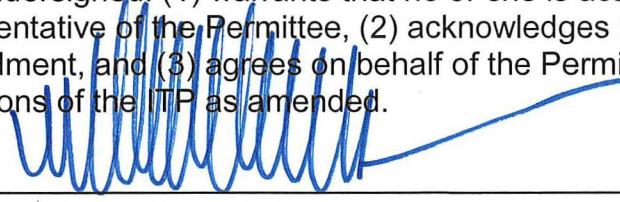


Julie A. Vance
Regional Manager
Central Region

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.

By:



Date:

June 13, 2019

Printed Name:

Mark H. McLoughlin

Title:

Director of Environmental Services

Major Amendment No. 9
Incidental Take Permit 2081-2013-025-04
CALIFORNIA HIGH-SPEED RAIL AUTHORITY
CALIFORNIA HIGH-SPEED TRAIN PROJECT
Merced to Fresno Section Permitting Phase 1