
FINAL ENVIRONMENTAL ASSESSMENT (EA/IS-09-080)

BUENA VISTA WASTER STORAGE DISTRICT

BV8 STATE WATER PROJECT TURNOUT

Appendix K

California Department of Fish and Game

Incidental Take Permit (No. 2081-2011-056-04)

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December 2011



**California Department of Fish and Game
Central Region
1234 EAST SHAW AVENUE
FRESNO, CALIFORNIA 93710**

California Endangered Species Act
Incidental Take Permit No. 2081-2011-056-04

BV8 STATE WATER PROJECT TURNOUT

Authority: This California Endangered Species Act (CESA) Incidental Take Permit (ITP) is issued by the Department of Fish and Game (DFG) pursuant to Fish and Game Code section 2081, subdivisions (b) and (c), and California Code of Regulations, Title 14, section 783.0 et seq. CESA prohibits the take¹ of any species of wildlife designated by the California Fish and Game Commission as an endangered, threatened, or candidate species.² DFG, however, may authorize the take of any such species by permit if the conditions set forth in Fish and Game Code section 2081, subdivisions (b) and (c) are met. (See also Cal. Code Regs., tit. 14, § 783.4.)

Permittee:	Buena Vista Water Storage District
Principal Officer:	Dan Bartel, District Manager
Contact Person:	David Hampton, 661-324-1101
Mailing Address:	Post Office Box 756 Buttonwillow, California 93206

Effective Date and Expiration Date of this ITP:

This ITP shall be executed in duplicate original form and shall become effective once a duplicate original is acknowledged by signature of the Permittee on the last page of this ITP and returned to DFG's Habitat Conservation Planning Branch at the address listed in the Notices section of this ITP. Unless renewed by DFG, this ITP's authorization to take the Covered Species shall expire on **April 1, 2013**.

Notwithstanding the expiration date on the take authorization provided by this ITP, Permittee's obligations pursuant to this ITP do not end until DFG accepts as complete the Permittee's Final Mitigation Report required by Condition 6.7 of this ITP.

¹Pursuant to Fish and Game Code section 86, "'Take' means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill."

²"Candidate species" are species of wildlife that have not yet been placed on the list of endangered species or the list of threatened species, but which are under formal consideration for listing pursuant to Fish and Game Code section 2074.2.

Project Location:

The BV8 State Water Project Turnout (Project) is located approximately 18 miles west of the City of Bakersfield between the California Aqueduct and the West Side Canal near the town of Buttonwillow, Kern County (See Figures 1 and 2). The Project is located at approximately 35° 19' 41.40" latitude, 119° 24' 36.05" longitude. The Project site is in Section 9, Township 30 South, and Range 24 East, Mount Diablo Meridian.

Project Description:

The proposed Project includes the construction and operation of a new water turnout on the east bank of the Department of Water Resources' (DWR) California Aqueduct to deliver water into Buena Vista Water Storage District's (BVWSD) West Side Canal via a new underground pipeline and outlet structure. The turnout will be approximately 20 feet tall, 19 feet wide, and 54 feet long; constructed of reinforced concrete; and will include a 78-inch by 78-inch cast iron sluice gate with automatic actuator, trash racks, and galvanized steel handrails. Water will be transported from the California Aqueduct to the West Side Canal through the construction of a belowground reinforced concrete pipe (RCP) of approximately 1,510 feet in length and 78-inches in diameter. Installation of the pipe will run underground across the Kern River flood channel and will require construction of a trench approximately 30 feet wide by 13 feet deep within a temporary 100-foot wide easement for the length of the pipeline. The RCP will include a pitot tube with a flow meter within a reinforced concrete vault near the California Aqueduct and a 66-inch butterfly valve near the West Side Canal. An outlet structure will be constructed in the West Side Canal, upstream of the Arizona Canal. The discharge bay of the outlet structures is approximately 14 feet tall, 17 feet wide, and 25 feet long. To reduce the erosion, the discharge area around the outlet structure will be reinforced with approximately 167 cubic yards of 12-inch thick rock rip-rap above a 6-inch gravel bed. The outlet structure will have galvanized steel handrails. Finally, a 10 foot by 12 foot electrical building will be constructed approximately 200 feet from the California Aqueduct inlet structure. The building will include a 0.18 acre elevated graded pad for access from the existing Aqueduct road.

Covered Species Subject to Take Authorization Provided by this ITP:

This ITP covers the following species:

Name	CESA Status ³
1. San Joaquin kit fox (<i>Vulpes macrotis mutica</i>)	Threatened ⁴
2. San Joaquin antelope squirrel (<i>Ammospermophilus nelsoni</i>)	Threatened ⁵
3. Tipton kangaroo rat (<i>Dipodomys nitratoides nitratoides</i>)	Endangered ⁶

³Under CESA, a species may be on the list of endangered species, the list of threatened species, or the list of candidate species. All other species are "unlisted."

⁴See Cal. Code Regs. tit. 14 § 670.5, subd. (b)(6)(E).

⁵See Cal. Code Regs. tit. 14 § 670.5, subd. (b)(6)(B).

⁶See Cal. Code Regs. tit. 14 § 670.5, subd. (a)(6)(D).

These species and only these species are hereinafter referred to as "Covered Species."

Impacts of the Taking on Covered Species:

Project activities and their resulting impacts are expected to result in the incidental take of individuals of the Covered Species. BVWSD conducted a number of biological resource surveys in 2008 on the Project site to establish the environmental baseline. Since those initial surveys were conducted, the BVWSD conducted additional surveys in 2011 to determine the density and distribution of the proposed Covered Species. The combined survey effort provided an intensive analysis that informed the calculation of occupied habitat acreages and number of known occurrences of species within the Project footprint. The activities described above that are expected to result in incidental take of individuals of the Covered Species include the construction of the BV8 State Water Project turnout and appurtenances which includes habitat clearing, grading, compaction, and fencing related to structure site preparation; heavy equipment operations; construction of forms and pouring concrete; installation of turnout equipment; excavation of a trench to contain pipeline; installation of pipeline, back-fill, and compaction of the trench; construction of an outlet structure including the deposition of gravel and rip rap; and increased traffic along the unpaved access corridors as well as along existing access roads (Covered Activities).

The Project will result in permanent and temporary impacts to habitat, which provides foraging and burrowing habitat for Tipton kangaroo rat (TKR) and San Joaquin antelope squirrel (SJAS) and foraging and denning habitat for San Joaquin kit fox (SJKF), and Covered Species individuals may be incidentally taken over the two-year term of the ITP.

Incidental take of individuals of the Covered Species may occur from the Covered Activities in the form of mortality ("kill") from den or burrow collapse associated with site preparation and excavation resulting in crushing or suffocation of underground individuals; capture in on-site pipeline trench; crushing by heavy equipment on the Project Area; and vehicle strike on access roads due to increased Project-related traffic. Incidental take of individuals of the Covered Species may also occur from the Covered Activities in the form of pursue, catch, capture, or attempt to do so of the Covered Species via entrapment in equipment or in holes or trenches, uncovering Covered Species through the excavation of dens and burrow systems, by corralling Covered Species into a confined area when barrier fencing is constructed around the Project Area, and Covered Species are relocated out of harms way.

Take could occur at any location within the Project footprint or along access roads (Project Area). The Project will also cause the permanent loss of 0.3 acres of habitat and the temporary loss of 3.0 acres of habitat for the Covered Species. Impacts of the proposed taking also include adverse impacts to the Covered Species related to temporal losses, increased habitat fragmentation and edge effects, and the Project's incremental contribution to cumulative impacts (indirect impacts). These impacts include: stress resulting from noise and vibrations resulting from ground disturbance, long-term effects due to displacement from

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occupied and preferred habitat, increased competition for food and space, and increased vulnerability to predation.

Incidental Take Authorization of Covered Species:

This ITP authorizes incidental take of the Covered Species and only the Covered Species. With respect to incidental take of the Covered Species, DFG authorizes the Permittee, its employees, contractors, and agents to take Covered Species incidentally in carrying out the Covered Activities, subject to the limitations described in this section and the Conditions of Approval identified below. This ITP does not authorize take of Covered Species from activities outside the scope of the Covered Activities, take of Covered Species outside of the Project Area, take of Covered Species resulting from violation of this ITP, or intentional take of Covered Species except for capture and relocation of Covered Species as authorized by this ITP.

Fully Protected Species:

This ITP does not authorize the take of any fully protected species as defined by State law. (See Fish & G. Code, §§ 3511, 4700, 5050, and 5515.) DFG has advised the Permittee that take as defined by State law of any species designated as fully protected under the Fish and Game Code is prohibited. DFG recognizes that the State-listed endangered blunt-nosed leopard lizard (*Gambelia sila*) is a fully protected reptile that has some potential to occur on or in the vicinity of the Project Area due to the presence of suitable habitat.

The Permittee believes it can implement the Project as described in this ITP in a manner consistent with the Fish and Game Code. This determination is based on Permittee's implementation of general operational procedures identified in the BV8 State Water Project Turnout Mitigated Negative Declaration (SCH No. 2010081076) dated October 12, 2010 (MND), and the Permittee's Mitigation Monitoring and Reporting Program for the Project which includes the following species' specific measures:

- Permittee will perform a protocol-level blunt nosed leopard lizard survey within the Project Area before altering any habitat (e.g., non-native grassland, saltbush scrub, or ruderal habitats). Permittee intends for the survey to be consistent with the methodology in DFG's Approved Survey Methodology for the Blunt-Nosed Leopard Lizard, dated May 2004.
- Qualified biologists will be present during all Project activities to ensure that the Project does not result in adverse impacts to blunt-nosed leopard lizard.
- If the results of any protocol-level survey detect the presence of blunt-nosed leopard lizard within the construction boundary of the Project, Permittee will notify and consult with DFG prior to any activity that could result in take of blunt-nosed leopard lizard, in

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order to develop and implement measures that will avoid take of individuals of the species.

Conditions of Approval:

Unless specified otherwise, the following measures shall pertain to all Covered Activities within the Project Area, including areas used for vehicular ingress and egress, staging and parking and noise and vibration generating activities that may/will cause take. DFG's issuance of this ITP and Permittee's authorization to take the Covered Species are subject to Permittee's compliance with and implementation of the following Conditions of Approval:

1. **Legal Compliance:** Permittee shall comply with all applicable State, federal, and local laws in existence on the effective date of this ITP or adopted thereafter.
2. **CEQA Compliance:** Permittee shall implement and adhere to the mitigation measures related to the Covered Species in the Biological Resources section of the Mitigated Negative Declaration and Initial Study (SCH Number: 2010081076) adopted by the lead agency, Buena Vista Water Storage District, for the Project pursuant to the California Environmental Quality Act (CEQA) on October 12, 2010.
3. **Lake and Streambed Alteration (LSA) Agreement Compliance:** Permittee shall implement and adhere to the mitigation measures and conditions related to the Covered Species in the LSA agreement (notification number 1600-2010-0176-R4) for the Project pursuant to Fish and Game Code section 1602 et seq.
4. **ITP Time Frame Compliance:** Permittee shall fully implement and adhere to the conditions of this ITP within the time frames set forth below and as set forth in the Mitigation Monitoring and Reporting Program (MMRP), which is included as Attachment 1 to this ITP.

5. General Provisions:

- 5.1. Designated Representative. Before starting Covered Activities, Permittee shall designate a representative (Designated Representative) responsible for communications with DFG and overseeing compliance with this ITP. Permittee shall notify DFG in writing before starting Covered Activities of the Designated Representative's name, business address, and contact information, and shall notify DFG in writing if a substitute Designated Representative is selected or identified at any time during the term of this ITP.
- 5.2. Designated Biologist. Permittee shall submit to DFG in writing the name, qualifications, business address, and contact information of a biological monitor (Designated Biologist) at least 14 days before starting Covered Activities.

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Permittee shall ensure that the Designated Biologist is knowledgeable and experienced in the biology, natural history of the Covered Species. The Designated Biologist shall be responsible for monitoring Covered Activities to help minimize and fully mitigate or avoid the incidental take of individual Covered Species and to minimize disturbance of Covered Species' habitat. Permittee shall obtain DFG approval of the Designated Biologist in writing before starting Covered Activities, and shall also obtain approval in advance in writing if the Designated Biologist must be changed.

- 5.3. Designated Biologist Authority. To ensure compliance with the Conditions of Approval of this ITP, the Designated Biologist shall have authority to immediately stop any activity that is not in compliance with this ITP, and/or to order any reasonable measure to avoid the unauthorized take of an individual of the Covered Species, or a species not covered by this ITP.
- 5.4. Education Program. Permittee shall conduct an education program for all persons employed or otherwise working in the Project Area before performing any work. The program shall consist of a presentation from the Designated Biologist that includes a discussion of the biology and general behavior of the Covered Species, information about the distribution and habitat needs of the Covered Species, sensitivity of the Covered Species to human activities, its status pursuant to CESA including legal protection, recovery efforts, penalties for violations and Project-specific protective measures described in this ITP. Permittee shall provide interpretation for non-English speaking workers, and the same instruction shall be provided for any new workers before their performing work in the Project Area. Permittee shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry in the Project Area. Upon completion of the program, employees shall sign a form stating they attended the program and understand all protection measures.
- 5.5. Construction Monitoring Notebook. The Designated Biologist shall maintain a construction-monitoring notebook on-site throughout the construction period which shall include a copy of this ITP with attachments and a list of signatures of all personnel who have successfully completed the education program. Permittee shall ensure a copy of the construction-monitoring notebook is available for review at the Project site upon request by DFG.
- 5.6. Trash Abatement. Permittee shall initiate a trash abatement program before starting Covered Activities and shall continue the program for the duration of the Project. Permittee shall ensure that trash and food items are contained in closed (animal-proof) containers and removed regularly (at least once a week) to avoid attracting opportunistic predators or Covered Species.

- 5.7. Dust Control. Permittee shall implement dust control measures during Covered Activities to facilitate visibility for monitoring of the Covered Species by the Designated Biologist. Permittee shall keep the amount of water used to the minimum amount needed, and shall not allow water to form puddles.
- 5.8. Erosion Control Materials. Permittee shall prohibit use of erosion control materials potentially harmful to Covered Species and other species, such as mono-filament netting (erosion control matting) or similar material, in potential Covered Species' habitat.
- 5.9. Firearms and Dogs. Permittee shall prohibit firearms and domestic dogs from the Project Area and site access routes during Covered Activities, except those in the possession of authorized security personnel or local, State, or federal law enforcement officials.
- 5.10. Delineation of Property Boundaries. Before starting Covered Activities, Permittee shall clearly delineate the boundaries of the Project Area with fencing, stakes or flags. Permittee shall restrict all Covered Activities to within the fenced, staked or flagged areas. Permittee shall maintain all fencing, stakes and flags until the completion of Covered Activities.
- 5.11. Delineation of Habitat. Permittee shall clearly delineate habitat of the Covered Species within the Project Area with posted signs, posting stakes, flags, and/or rope or cord, and place fencing as necessary to minimize the disturbance of Covered Species' habitat.
- 5.12. Project Access. Project-related personnel shall access the Project Area using existing routes, and shall not cross Covered Species' habitat outside of or en route to the Project Area. Permittee shall restrict Project-related vehicle traffic to established roads, staging, and parking areas. Permittee shall ensure that vehicle speeds do not exceed 20 miles per hour to avoid Covered Species on or traversing the roads. If Permittee determines construction of routes for travel are necessary outside of the Project Area, the Designated Representative shall contact DFG for written approval before carrying out such an activity. DFG may require an amendment to this ITP if additional take of Covered Species may result from Project modification.
- 5.13. Staging Areas. Permittee shall confine all Project-related parking, storage areas, laydown sites, equipment storage, and any other surface-disturbing activities to the Project Area using, to the extent possible, previously disturbed areas. Additionally, Permittee shall not use or cross Covered Species' habitat outside of the marked Project Area.

- 5.14. Hazardous Waste. Permittee shall immediately stop and following pertinent State and federal statutes and regulations arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so. Permittee shall exclude the storage and handling of hazardous materials from the Project Area and shall properly contain and dispose of any unused or leftover hazardous products off-site.
- 5.15. DFG Access. Permittee shall provide DFG staff with reasonable access to the Project, and shall otherwise fully cooperate with DFG efforts to verify compliance with or effectiveness of mitigation measures set forth in this ITP.
- 5.16. Refuse Removal. Upon completion of Covered Activities, Permittee shall remove from the Project Area and properly dispose of all construction refuse, including, but not limited to, broken equipment parts, wrapping material, cords, cables, wire, rope, strapping, twine, buckets, metal or plastic containers, and boxes.

6. Monitoring, Notification and Reporting Provisions:

- 6.1. Notification Before Commencement. The Designated Representative shall notify DFG 14 calendar days before starting Covered Activities and shall document compliance with all pre-Project Conditions of Approval before starting Covered Activities.
- 6.2. Notification of Non-compliance. The Designated Representative shall immediately notify DFG in writing if it determines that the Permittee is not in compliance with any Condition of Approval of this ITP, including but not limited to any actual or anticipated failure to implement measures within the time periods indicated in this ITP and/or the MMRP. The Designated Representative shall report any non-compliance with this ITP to DFG within 24 hours.
- 6.3. SJAS Relocation Plan. The Permittee shall submit a SJAS relocation plan to DFG prior to initiating ground-disturbing activities in any areas occupied by SJAS. Relocation activities shall not proceed until the relocation plan has been approved in writing by DFG's Regional Representative.
- 6.4. TKR Relocation Plan. The Permittee shall submit a TKR relocation plan to DFG prior to initiating ground-disturbing activities in any areas occupied by TKR. Relocation activities shall not proceed until the relocation plan has been approved in writing by DFG's Regional Representative.
- 6.5. Compliance Monitoring. The Designated Biologist shall be on-site daily when Covered Activities occur. The Designated Biologist shall conduct compliance

inspections to (1) minimize incidental take of the Covered Species; (2) prevent unlawful take of species; (3) check for compliance with all measures of this ITP; (4) check all exclusion zones; and (5) ensure that signs, stakes, and fencing are intact, and that Project activities are limited to those defined as Covered Activities and that they are only occurring in the Project Area. The Designated Representative or Designated Biologist shall prepare daily written observation and inspection records summarizing: oversight activities and compliance inspections, observations of Covered Species and their sign, survey results, and monitoring activities required by this ITP.

- 6.6. Monthly Compliance Report. The Designated Representative or Designated Biologist shall compile the observation and inspection records identified in Condition 7 into a Monthly Compliance Report and submit it to DFG along with a copy of the MMRP table with notes showing the current implementation status of each mitigation measure. Monthly Compliance Reports shall be submitted to DFG's Regional Office at the office listed in the Notices section of this ITP and via e-mail to DFG's Regional Representative. At the time of this ITP's approval, the DFG Regional Representative is Brandon Sanderson (bsanderson@dfg.ca.gov). DFG may at any time increase the timing and number of compliance inspections and reports required under this provision depending upon the results of previous compliance inspections. If DFG determines the reporting schedule must be changed, DFG will notify Permittee in writing of the new reporting schedule.
- 6.7. Final Mitigation Report. No later than 45 days after completion of all mitigation measures, Permittee shall provide DFG with a Final Mitigation Report. The Designated Biologist shall prepare the Final Mitigation Report which shall include, at a minimum: (1) a summary of all Monthly Compliance Reports; (2) a copy of the table in the MMRP with notes showing when each of the mitigation measures was implemented; (3) all available information about Project-related incidental take of the Covered Species; (4) information about other Project impacts on the Covered Species; (5) beginning and ending dates of Covered Activities; (6) an assessment of the effectiveness of this ITP's Conditions of Approval in minimizing and fully mitigating Project impacts of the taking on Covered Species; (7) recommendations on how mitigation measures might be changed to more effectively minimize take and mitigate the impacts of future projects on the Covered Species; and (8) any other pertinent information.
- 6.8. California Natural Diversity Database (CNDDDB) Observations. The Designated Biologist shall submit all observations of Covered Species to DFG's CNDDDB and the Designated Biologist shall include copies of the submitted forms with the next Monthly Compliance Report.

- 6.9. Notification of Take. Permittee shall immediately notify the Designated Biologist if a Covered Species is taken or injured by a Project-related activity, or if a Covered Species is otherwise found dead or injured within the vicinity of the Project. The Designated Biologist or Designated Representative shall provide initial notification to DFG by calling the Regional Office at (559) 243-4005. The initial notification to DFG shall include information regarding the location, species, number of animals taken or injured and the ITP Number. Following initial notification, Permittee shall send DFG a written report within two calendar days. The report shall include the date and time of the finding or incident, location of the animal or carcass, and if possible provide a photograph, explanation as to cause of take or injury, and any other pertinent information.

7. Take Minimization Measures:

The following requirements are intended to ensure the minimization of incidental take of Covered Species in the Project Area during Covered Activities. Permittee shall implement and adhere to the following conditions to minimize take of Covered Species:

- 7.1. Designated Biologist On-site. The Designated Biologist shall be on-site during all activities that may result in the take of Covered Species. Workers shall convey all observations of listed species and their sign during construction activities to the Designated Biologist or Designated Representative.
- 7.2. Work Hours. Permittee shall confine all construction to daylight hours (sunrise to sunset). Permittee shall ensure that all vehicle traffic necessary during nighttime hours associated with emergency response shall be conducted with extra caution to minimize impacts to nocturnal Covered Species such as SJKF and TKR.
- 7.3. Covered Species Observations. During all phases of Project construction, operation, and maintenance, all workers shall inform the Designated Biologist(s) if a Covered Species is seen within or near the Project Site. All work in the vicinity of the Covered Species, which could injure or kill the animal, shall cease until the Covered Species is moved by the Designated Biologist(s) or it moves from the construction area of its own accord.
- 7.4. Inspection for Trapped Animals. Workers shall inspect all open holes, and trenches within the Project Area at the beginning, middle, and end of each day for trapped animals. To prevent inadvertent entrapment of Covered Species or any other animals, the Designated Biologist shall oversee the covering of all excavated, steep-walled holes or trenches more than two feet deep, or of any depth if they contain water or other material, at the close of each working day by plywood or other barrier materials such that animals are unable to enter and become entrapped. Permittee shall provide escape ramps in holes of less than

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