



California Department of Fish and Wildlife
North Central Region
1701 NIMBUS ROAD
RANCHO CORDOVA, CA 95670

RECEIVED

OCT 15 2019
HABITAT CONSERVATION
PLANNING BRANCH

California Endangered Species Act
Incidental Take Permit No. 2081-2018-074-02

DISTRIBUTION SYSTEMS IMPROVEMENT PROJECT

Authority: This California Endangered Species Act (CESA) incidental take permit (ITP) is issued by the California Department of Fish and Wildlife (CDFW) 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 CDFW 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 Cal. Code Regs., tit. 14, § 783.4).

Permittee:	Reclamation District 108
Principal Officer:	Lewis Bair, General Manager
Contact Person:	William Vanderwaal, Deputy Manager
Mailing Address:	Post Office Box 50 Grimes, CA 95950

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 CDFW's Habitat Conservation Planning Branch at the address listed in the Notices section of this ITP. Unless renewed by CDFW, this ITP's authorization to take the Covered Species shall expire on **December 31, 2021**.

Notwithstanding the expiration date on the take authorization provided by this ITP, Permittee's obligations pursuant to this ITP do not end until CDFW accepts as complete the Permittee's Final Mitigation Report required by Condition of Approval 5.7 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." (See also *Environmental Protection Information Center v. California Department of Forestry and Fire Protection* (2008) 44 Cal.4th 459, 507 [for purposes of incidental take permitting under Fish and Game Code section 2081, subdivision (b), "'take' ... means to catch, capture or kill"].)

²"The definition of an endangered, threatened, and candidate species for purposes of CESA are found in Fish and Game Code sections 2062, 2067, and 2068, respectively.

Project Location:

The Distribution Systems Improvement Project (Project) is located at various locations within the unincorporated areas of the counties of Colusa and Yolo (See Table 1 and Figure 1). The Project is located on agricultural fields on private lands within the Permittee's service area between the west side of the Sacramento River and the east side of the Colusa Basin Drain south of the town of Grimes and north of the town of Zamora.

Table 1. Project Locations

Site	Figure 1 Sheet #	Work Type	Latitude	Longitude
3	3	Gate work area	38.82788187	-121.8091684
3	4	Stilling well work area	38.83211498	-121.8069605
4	5	Gate work area	38.83328463	-121.8263756
4	6	Stilling well work area	38.837601	-121.8241284
5	7	Gate work area	38.83591165	-121.835399
5	8	Stilling well work area	38.84045037	-121.83308
Shop	9	Gate work area	38.84007915	-121.848802
Shop	10	Stilling well work area	38.8517126	-121.8486898
7	11	Gate work area	38.84303735	-121.858145
7	12	Stilling well work area	38.85170011	-121.8580682
7 CHK 1	12	Gate work area	38.85227236	-121.8580585
7 CHK 1 & 7 CHK 2	13	Stilling well work area & gate work area (respectively)	38.86644598	-121.8579195
7 CHK 2	14	Stilling well work area	38.87469408	-121.8578487
8	15	Gate work area	38.84414863	-121.8674171
8	16	Stilling well work area	38.85191086	-121.8673714
8 CHK 1	16	Gate work area	38.85240903	-121.8673584
8 CHK 1	17	Stilling well work area	38.86649435	-121.8672482
9	18	Gate work area	38.84517123	-121.8767633
9	19	Stilling well work area	38.8520146	-121.8767153
9 CHK 1	19	Gate work area	38.85269655	-121.8767157
9 CHK 1	20	Stilling well work area	38.86647003	-121.8766175
9 CHK 2	20	Gate work area	38.86686511	-121.8766151
9 CHK 2	21	Stilling well work area	38.87380271	-121.8765462
10	22	Gate work area	38.84642112	-121.8860454
10	23	Stilling well work area	38.85208829	-121.8859963
10 CHK 1	23	Gate work area	38.85255973	-121.8859851
10 CHK 1 & 10 CHK 2	24	Stilling well work area & gate work area (respectively)	38.86675049	-121.8858776
10 CHK 2	25	Stilling well work area	38.87398714	-121.8858263
11	26	Gate work area	38.85269823	-121.8953812
11	27	Stilling well work area	38.87442102	-121.8952561

Incidental Take Permit
No. 2081-2018-074-02
RECLAMATION DISTRICT 108
DISTRIBUTION SYSTEMS IMPROVEMENT PROJECT

10P1	28	Gate work area	38.92507388	-121.9138989
10P1	28	Stilling well work area	38.92519968	-121.9125751
10P1 EXT	29	Gate work area	38.91080517	-121.9042385
10P1 EXT	30	Stilling well work area	38.90748487	-121.9043131
10P2 G1/G2	31	Gate work area	38.903259	-121.9138824
10P2 G1/G2	32	Stilling well work area	38.89654394	-121.8952762
10Q G1/G2/G3	33	Gate work area	38.99757731	-121.8940462
10Q G1/G2/G3 & 10Q check G1/G2	34	Stilling well work area & gate work area (respectively)	38.97513077	-121.894631
10Q check G1/G2	39	Stilling well work area	38.96923117	-121.8946923
10Q1	35	Gate work area	38.95409898	-121.8854444
10Q1	36	Stilling well work area	38.94016416	-121.8854639
10Q EXT	37	Gate work area	38.95418988	-121.8764429
10Q EXT	38	Stilling well work area	38.9540663	-121.867134
North Steiner Pipeline	North Steiner Pipeline	Pipeline installation	38°59'35.77" – 38°59'57.61"	-121°48'9.07" – -121°49'14.00"
County Line Road Pipeline	County Line Road Pipeline	Pipeline installation	38°55'28.14" – 38°55'28.56"	-121°50'35.98" – -121°50'14.23"

Project Description:

The Project consists of replacing 27 manual control gates with remote monitoring capability (i.e. supervisory control and data acquisition [SCADA]) control gates to provide a system-wide management and monitoring as well as to minimize operational spills. The Project will also install a total of 1.6 miles of buried pipelines split at two locations, North Steiner and County Line Well, that would supplement existing unlined earthen drainage ditches to reduce seepage and evaporation, and to provide the flexibility and infrastructure suitable for high-efficiency irrigation systems. Of the 27 manual control gates, 14 have existing concrete headwalls (see Table 2). Each gate with existing headwalls would be removed and a new automated gate would be attached in its place. The new gates would be custom designed to fit the existing concrete structures with only minor retrofitting. No heavy machinery would be required to replace these gates and no vegetation clearing would be necessary.

Thirteen of the existing 27 manual control gates lack an existing headwall (see Table 2). These sites would entail installing a precast Briggs concrete headwall with an automated control gate on the upstream end at each site, as well as replacing an existing pipe that runs through the access road. An excavator or backhoe would trench the length of the existing pipe running through the check structure. The trench depth would be limited to a maximum of eight feet and minimal excavation would be needed within the canals for headwall installation. The existing pipe would be removed and disposed at the Yolo County Central Landfill. The new precast headwall will be lowered into place using a boom truck or excavator at the

upstream end of the check structure, and the new pipe installed. The excavated soil would be backfilled over the pipeline and the site substrate would be compressed with jumping jack compactors.

Each new gate will have a six-inch diameter stilling well installed downstream of the gate site that would relay water level data to the automated gate and control how much the automated gate is opened. The stilling well would be placed on the upstream side of the first canal crossing that is downstream, ranging between approximately 1,200 feet and 8,000 feet downstream of each of the new gate replacement location, depending on the site. To construct each stilling well, a one-foot wide, up to 15-foot long and up to eight-foot deep trench would be cut into the canal bank using a backhoe, and the pipe, sensors, solar panels, battery pack, and SCADA antenna would be installed. Once the pipe is installed, the trench will be backfilled with the excavated soil.

After the automated control gates are installed, the remote operating equipment will be installed and would include motors, SCADA control system, solar panels, and a backup battery pack.

Table 2. Existing Gate Site Headwall Status and Ground Disturbing Activity

Site	Existing Headwall	Ground Disturbing	Site	Existing Headwall	Ground Disturbing
3	No	Yes	10 CHK 2	Yes	No
4	No	Yes	11	No	Yes
5	No	Yes	10P1	No	Yes
SHOP	No	Yes	10P1 EXT	Yes	No
7	No	Yes	10P2 G1	Yes	No
7 CHK 1	Yes	No	10P2 G2	Yes	No
7 CHK 2	Yes	No	10Q G1	Yes	No
8	No	Yes	10G G2	Yes	No
8 CHK 1	Yes	No	10Q G3	Yes	No
9	No	Yes	10Q check G1	No	Yes
9 CHK 1	Yes	No	10Qcheck G2	No	Yes
9 CHK 2	Yes	No	10Q1	No	Yes
10	No	Yes	10Q EXT	Yes	
10 CHK 1	Yes	No			

The Project will also include the installation of a total of 1.6 miles of buried pipeline for both North Steiner Bend and County Line Well. North Steiner Bend will involve the installation of 1.3 miles of 27-inch diameter pipeline allowing the current North Steiner Bend Pumping Plant to be phased out of use and ultimately abandoned. An outfall will be installed in the ditch that is located parallel to the land side of the levee toe of the Sacramento River. The new pipeline would deliver water to the same standpipe that received water from the North Steiner Bend Pumping Plant and would extend from the South Steiner pipeline, which receives water via

the New Steiner Pumping Plant, to the North Steiner Pumping Plant site. The new pipeline would be routed within the footprint of the agricultural access roads, with the exception of one aerial drainage ditch crossing and crossing an agricultural field at the eastern end of the alignment. The pipeline would be installed using a backhoe/excavator to excavate a 3- to 6-foot deep by 4-foot trench. After the pipeline is installed the excavated soil will be used to backfill the trench.

The Project will install an approximately 0.3-mile long, 18-inch diameter pipeline connected to the County Line Well, which will allow the Permittee to pump directly into a nearby supply canal through an outfall that would be installed on the canal's west side which runs parallel to the toe side of the levee. The pipeline would be placed in the agricultural access roadway prism and be constructed using the same methods described above for the North Steiner Bend pipeline. The footprint for this pipeline installation is between approximately 15 and 60 feet in width. No trees will be removed for this pipeline.

The Project includes the disturbance to 7.657 acres of Covered Species habitat and existing access roads of which 0.078 acres of Covered Species habitat will be developed into a water distribution facility. Project activities include trench digging, water diversion, installation of pipelines, control gates, headwalls, and other activities.

Covered Species Subject to Take Authorization Provided by this ITP:

This ITP covers the following species:

Name	CESA Status
1. Giant garter snake (<i>Thamnophis gigas</i>)	Threatened ³

This species and only this species is the "Covered Species" for the purposes of this ITP.

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. The activities described above expected to result in incidental take of individuals of the Covered Species include excavation, cofferdams, dewatering, capture and relocation of Covered Species, staging of equipment, storage of materials, erosion control materials, and fencing (Covered Activities).

Incidental take of individuals of the Covered Species in the form of mortality ("kill") may occur as a result of Covered Activities such as crushing, entombing, relocation, and thermal stress. 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 from the biologist's attempts to capture and translocate the Covered Species. The areas

³See Cal. Code Regs. tit. 14 § 670.5, subd. (b)(4)(E).

where authorized take of the Covered Species is expected to occur include the areas listed in Table 1 above and shown in Figure 1 (collectively, the Project Area).

The Project is expected to cause the permanent loss of 0.002 acres of aquatic habitat and 0.002 acres of upland habitat for the Covered Species, and temporary loss of 0.076 acres of aquatic habitat and 0.074 acres of upland habitat for the Covered Species (see Table 3). Impacts of the authorized 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: capture and relocation, and long-term effects due to increased pollution, displacement from preferred habitat, increased competition for food and space, and increased vulnerability to predation.

Table 3. Project Impacts on Covered Species Habitat

Site	Aquatic Habitat (acres)		Upland Habitat (acres)	
	Permanent	Temporary	Permanent	Temporary
3	0.0002	0.006	0	0.0054
4	0.0002	0.005	0	0.0048
5	0.0002	0.005	0	0.0061
SHOP	0.0002	0.005	0	0.0054
7	0.0002	0.005	0	0.0054
7 CHK 1	0	0	0	0.0002
7 CHK 2	0	0	0	0.0002
8	0.0002	0.005	0	0.0048
8 CHK 1	0	0	0	0.0002
9	0.0002	0.005	0	0.0048
9 CHK 1	0	0	0	0.0002
9 CHK 2	0	0	0	0.0002
10	0.0002	0.0005	0	0.0048
10 CHK 1	0	0	0	0.0002
10 CHK 2	0	0	0	0.0002
11	0.0001	0.008	0	0.0039
10P1	0.0001	0.005	0	0.0057
10P1 EXT	0	0	0	0.0002
10P2 G1/G2	0	0	0	0.0002
10Q G1/G2/G3	0	0	0	0.0002
10Q check G1/G2	0.0002	0.017	0	0.0105
10Q1	0.0002	0.005	0	0.0061
10Q EXT	0	0	0	0.0002
N Steiner Bend Pipeline	0	0	0.002	0.004
County Road Well	0	0	0	0
Total	0.002	0.076	0.002	0.074

Incidental Take Permit
No. 2081-2018-074-02
RECLAMATION DISTRICT 108
DISTRIBUTION SYSTEMS IMPROVEMENT PROJECT

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, CDFW 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.

Conditions of Approval:

Unless specified otherwise, the following measures apply to all Covered Activities within the Project Area, including areas used for vehicular, ingress and egress, staging and parking that may cause take. CDFW'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 federal, state, 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 (SCH No.: 201852058) adopted by Reclamation District 108 on June 28, 2018, as lead agency for the Project pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.).
3. **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.
4. **General Provisions:**
 - 4.1. Designated Representative. Before starting Covered Activities, Permittee shall designate a representative (Designated Representative) responsible for communications with CDFW and overseeing compliance with this ITP. Permittee shall notify CDFW in writing before starting Covered Activities of the Designated Representative's name, business address, and contact information, and shall notify CDFW in writing if a substitute Designated Representative is selected or identified at any time during the term of this ITP.

- 4.2. Designated Biologist. Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information of a biological monitor (Designated Biologist) at least 30 days before starting Covered Activities. Permittee shall ensure that the Designated Biologist is knowledgeable and experienced in the biology, natural history, collecting and handling 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 CDFW 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.
- 4.3. 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 does not comply with this ITP, and/or to order any reasonable measure to avoid the unauthorized take of an individual of the Covered Species.
- 4.4. 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 to any new workers before they are authorized to perform 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. This training shall be repeated at least once annually for long-term and/or permanent employees that will be conducting work in the Project Area.
- 4.5. 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 CDFW.

- 4.6. 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 animal-proof containers and removed at least once a week to avoid attracting opportunistic predators such as ravens, coyotes, and feral dogs.
- 4.7. 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.
- 4.8. Erosion Control Materials. Permittee shall prohibit use of erosion control materials potentially harmful to Covered Species and other species, such as monofilament netting (erosion control matting) or similar material, in potential Covered Species' habitat.
- 4.9. Delineation of Habitat. Permittee shall clearly delineate habitat of the Covered Species within the Project Area with ground disturbing activities with posted signs, posting stakes, flags, and/or rope or cord, and place fencing as necessary to minimize the disturbance of Covered Species' habitat.
- 4.10. Project Access. Project-related personnel shall access the Project Area using existing routes, or routes identified in the Project Description 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 10 miles per hour on unpaved roads 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 CDFW for written approval before carrying out such an activity. CDFW may require an amendment to this ITP, among other reasons, if additional take of Covered Species will occur as a result of the Project modification.
- 4.11. 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 unless provided for as described in Condition of Approval 4.10 of this ITP.
- 4.12. Hazardous Waste. Permittee shall immediately stop and, pursuant to 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.

- 4.13. CDFW Access. Permittee shall provide CDFW staff with reasonable access to the Project and shall otherwise fully cooperate with CDFW efforts to verify compliance with or effectiveness of mitigation measures set forth in this ITP.
- 4.14. 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.

5. Monitoring, Notification and Reporting Provisions:

- 5.1. Notification Before Commencement. The Designated Representative shall notify CDFW 14 calendar days before starting Covered Activities and shall document compliance with all pre-Project Conditions of Approval before starting Covered Activities.
- 5.2. Notification of Non-compliance. The Designated Representative shall immediately notify CDFW 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 CDFW within 24 hours.
- 5.3. 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 Covered Activities 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.
- 5.4. Quarterly Compliance Report. The Designated Representative or Designated Biologist shall compile the observation and inspection records identified in Condition of Approval 5.3 into a Quarterly Compliance Report and submit it to

CDFW along with a copy of the MMRP table with notes showing the current implementation status of each mitigation measure. Quarterly Compliance Reports shall be submitted to the CDFW offices listed in the Notices section of this ITP and via e-mail to CDFW's Region 2 and Headquarters CESA Program. Email addresses for CDFW Region 2 is R2CESA@wildlife.ca.gov and Headquarters CESA Program is CESA@wildlife.ca.gov. CDFW 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 CDFW determines the reporting schedule must be changed, CDFW will notify Permittee in writing of the new reporting schedule.

- 5.5. Annual Status Report. Permittee shall provide CDFW with an Annual Status Report (ASR) no later than January 31 of every year beginning with issuance of this ITP and continuing until CDFW accepts the Final Mitigation Report identified below. Each ASR shall include, at a minimum: (1) a summary of all Quarterly Compliance Reports for that year identified in Condition of Approval 5.4; (2) a general description of the status of the Project Area and Covered Activities, including actual or projected completion dates, if known; (3) a copy of the table in the MMRP with notes showing the current implementation status of each mitigation measure; (4) an assessment of the effectiveness of each completed or partially completed mitigation measure in avoiding, minimizing and mitigating Project impacts; (5) all available information about Project-related incidental take of the Covered Species; (6) an accounting of the number of acres subject to both temporary and permanent disturbance, both for the prior calendar year, and a total since ITP issuance; and (7) information about other Project impacts on the Covered Species.
- 5.6. CNDDDB Observations. The Designated Biologist shall submit all observations of Covered Species to CDFW's California Natural Diversity Database (CNDDDB) within 60 calendar days of the observation and the Designated Biologist shall include copies of the submitted forms with the next Quarterly Compliance Report or ASR, whichever is submitted first relative to the observation.
- 5.7. Final Mitigation Report. No later than 45 days after completion of all mitigation measures, Permittee shall provide CDFW 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 Quarterly Compliance Reports and all ASRs; (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.

- 5.8. Notification of Take or Injury. 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 CDFW by calling the Regional Office at (916) 358-2930 and emailing R2CESA@wildlife.ca.gov. The initial notification to CDFW shall include information regarding the location, species, and number of animals taken or injured and the ITP Number. Following initial notification, Permittee shall send CDFW 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.
- 5.9. Permit Consultation. When take of the Covered Species is documented, specifically one giant garter snake, consultation with CDFW is required to review circumstances causing take and evaluate whether all prudent and feasible measures have been implemented to minimize and fully mitigate the take that has occurred or may continue to occur. Permittee shall request consultation with the CDFW Regional Representative within 48 hours when take of the Covered Species occurs by emailing R2CESA@wildlife.ca.gov.

6. 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:

- 6.1. Timing of Work for Construction Activities. All ground disturbing Covered Activities occurring in-channel and in upland areas within 200 feet of aquatic habitat shall be conducted during the GGS active period (May 1 – October 1). Covered Activities initiated prior to October 1 may continue beyond October 1 for areas already under construction and only during periods of dry weather, with CDFW pre-approval. Non-ground disturbing activities may occur outside of GGS active period.
- 6.2. Dewatering of Aquatic Habitat. Prior to construction activities with ground disturbing activities within 200 feet of suitable aquatic GGS habitat, Permittee shall dewater the channel and the channel shall remain dry for at least fifteen (15) consecutive days. The dewatered area shall remain dry until construction activities in the dewatered area are complete. During installation of cofferdams, a Designated

Biologist shall remain in the channel to identify aquatic species. The Designated Biologist will relocate non-covered species. If Covered Species are identified, the Designated Biologist will either remove the species or relocate per Conditions 6.15, 6.16, and 6.18. For gate replacement activities with no ground disturbance, the channel shall also be dewatered but does not have to be dry for the minimum of 15 days.

- 6.3. Flow Diversions. Work within channels must be performed in isolation from the flowing water. To isolate the work area, watertight coffer dams shall be constructed as close as practicable upstream and downstream of the work area. The water shall be diverted through a suitably sized pipe from upstream of the cofferdam and discharge downstream of the downstream cofferdam. Cofferdams shall be constructed of a non-erodible material, which does not contain soil or fine sediment. Cofferdam construction shall be adequate to prevent seepage into or from the work area. The entire work area shall be dewatered. Cofferdams and the water diversion system shall remain in place and functional throughout the construction period. If the cofferdams or water diversion fails, then they shall be repaired immediately. Normal flows shall be restored immediately upon completion of work at that location.
- 6.4. Pollution/Siltation Prevention. Flow diversions shall be done in a manner that shall prevent pollution and/or siltation and shall provide flows to downstream reaches. Flows to downstream reaches shall be provided during all times that the natural flow would have supported aquatic life. Said flows shall be sufficient quality and quantity, and of appropriate temperature to support fish and other aquatic life both above and below the diversion.
- 6.5. Invasive Species. The following measures shall be implemented to avoid and minimize spread or introduction of invasive species:
- Clean construction equipment and vehicles in designated areas prior to entering and exiting the Project site
 - Educate construction supervisors and managers about invasive species identification and the importance of controlling and preventing the spread of invasive species
 - Minimize surface disturbance to the greatest extent feasible to complete the work
 - Use native, non-invasive species or non-persistent hybrids in erosion-control plantings to stabilize site conditions and prevent invasive plant species from colonizing
 - Use weed-free imported erosion-control materials (or rice straw) in upland areas
 - One year after construction and maintenance activities, conduct a monitoring

site visit to ensure no new occurrences have established

- 6.6. Equipment Maintenance. Staging and storage areas for equipment materials, fuels, lubricants and solvents, will be located outside of the channel and banks. Stationary equipment such as motors, pumps, generators, compressors and welders, located within or adjacent to the channel will be positioned over drip pans. Any equipment or vehicles driven and/or operated within or adjacent to the channel will be checked and maintained daily to prevent leaks of materials that if introduced to water could be deleterious to aquatic life. Vehicles will be moved away from the channel prior to refueling and lubrication. When refueling of equipment outside of the channel is infeasible, refueling activities shall be conducted in such a way that spilled petroleum products will not enter the watercourse.
- 6.7. Pre-Construction Survey. No more than 72-hours prior to commencement of Covered Activities, the Project site shall be surveyed for the Covered Species by the Designated Biologist. The Designated Biologist shall provide the results of the pre-construction survey to CDFW prior to commencement of Covered Activities.
- 6.8. Vegetation Height. In areas of tall grass or vegetation in Covered Species upland habitat, Permittee shall trim vegetation to a height of no greater than six inches (6") prior to Covered Activities in order to see movement of the Covered Species. Permittee shall start trimming activities farthest from the water in order to force snakes towards the water when trimming fields near streams or canals.
- 6.9. Exclusion fencing. Exclusion fencing shall be installed 200 feet from the edge of Covered Species aquatic habitat within the Project area and remain in place during construction activities during their active period. The exclusion fence shall consist of 3-foot tall erosion fencing buried six inches below the ground level and soil shall be compacted on both sides of the fence. Permittee shall avoid damage to small mammal burrows to the maximum extent possible during installation of the exclusion fencing. If burrows cannot be avoided, burrows shall be hand excavated by the Designated Biologist prior to trenching activities. Covered Species found during excavation shall be relocated per Condition 6.16. The Designated Biologist shall inspect the fence at the start of each workday. Permittee shall maintain the fence until completion of the Project. Permittee shall ensure fence is taut and bottom edge of fence remains buried. Permittee shall remove the fencing upon completion of the Project.
- 6.10. Monofilament material. Permittee shall not use plastic monofilament netting on the Project site for erosion control or other purposes to avoid entanglement of the Covered Species.

- 6.11. Wildlife Checks. Before the start of work each morning, the Designated Biologist shall check for wildlife under any equipment such as vehicles and stored pipes. The Designated Biologist shall check all excavated steep-walled holes or trenches greater than one-foot deep for any wildlife. The Designated Biologist shall survey the areas graded for any wildlife each morning. Wildlife shall be removed by the Designated Biologist and relocated to a safe location.
- 6.12. Trench Escape. To prevent inadvertent entrapment of wildlife during construction and periods of inactivity, the Designated Biologist shall ensure all excavated trenches and holes have one or more escape ramps prior to sunrise each morning. The ramps shall be constructed of earth fill or wooden ramps.
- 6.13. Trench Filling. Prior to filling any trenches, the Permittee shall inspect the trenches for trapped Covered Species. If at any time trapped Covered Species are discovered, the Designated Biologist shall move out of harm's way the Covered Species in accordance with Condition 6.15.
- 6.14. Covered Species Encounter. If a Covered Species is encountered during construction activities, construction activities shall immediately cease. The Covered Species should be allowed to leave the area on its own accord and construction activities may not start back up until the Covered Species has safely moved out of harm's way. If the Covered Species cannot move out of harm's way on its own, then the Designated Biologist shall relocate the Covered Species (Condition 6.15).
- 6.15. Covered Species Relocation. The Designated Biologist shall relocate Covered Species found within the Project area to appropriate habitat within 100 meters of the captured location and monitor the Covered Species until it is determined that the Covered Species is not imperiled by predators or other dangers. The Designated Biologist shall notify CDFW immediately or no later than noon of the next business day of any Covered Species relocation. Notification shall be via telephone, or email, followed by a written incident report. Notification shall include the ITP number, date, time, location, circumstances of the incident, and any associated data (pictures, weight, length, sex, tag #, etc.).
- 6.16. Covered Species Handling. The Designated Biologist may capture the Covered Species by hand or facilitated with a snake stick. The Covered Species may be pinned down by placing a hand or snake stick directly behind the head and applying gentle pressure. The amount of pressure required will depend on the size of the Covered Species, but it should be sufficient to prevent it from moving its head without injury. Grasp the Covered Species by the tail, handling firmly but with great care. Pick up the Covered Species gently mid-body and deposit the Covered Species in the bottom of a snake bag. Support the body of the Covered Species in

addition to holding the head. Following capture, tie the top of the snack bag with a cord. Captured Covered Species shall be released as soon as practicable.

- 6.17. Covered Species Transport. During transport, all equipment used for capturing, handling and transportation shall be well maintained and checked before use. If a container other than a snake bag is used, the container shall be inspected to ensure no sharp edges, protrusions, or rough surfaces are present that could cause injury. Covered Species shall be protected from exposure to inclement weather, harsh environmental conditions, and major temperature fluctuations and extremes. Covered Species shall be observed periodically to determine their state of well-being during transport. Following use of transport containers, all items used shall be cleaned thoroughly and disinfected or discarded, as appropriate.
- 6.18. Covered Species Injury. If a snake is injured as a result of Project-related activities, the Designated Biologist shall immediately take it to a CDFW pre-approved wildlife rehabilitation, veterinary facility, or other qualified individual. Permittee shall identify the facility and receive CDFW approval before starting Covered Activities. Permittee shall bear any costs associated with the care or treatment of such injured Covered Species. The Permittee shall notify CDFW of the injury to the Covered Species immediately by telephone and e-mail to R2CESA@wildlife.ca.gov followed by a written incident report. Notification shall include the ITP number, date, time, location, circumstances of the incident, any associated data (pictures, weight, length, sex, tag #, etc.) and the name of the facility or individual caring for the Covered Species.

7. Habitat Management Land Acquisition and Restoration:

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, the Permittee shall purchase 0.16 acres of Covered Species credits from a CDFW-approved mitigation or conservation bank with the appropriate Service Area (Condition of Approval 9.2). The purchase of Covered Species credits must be complete before starting Covered Activities, or within 18 months of the effective date of this ITP if Security is provided pursuant to Condition of Approval 8 below for all uncompleted obligations. The Permittee shall also restore on-site 0.15 acres of temporarily impacted Covered Species habitat pursuant to Condition of Approval 7.2 below.

Incidental Take Permit
No. 2081-2018-074-02
RECLAMATION DISTRICT 108
DISTRIBUTION SYSTEMS IMPROVEMENT PROJECT

- 7.1. Covered Species Credits. Permittee shall purchase 0.16 acres of Covered Species habitat from a CDFW-approved mitigation or conservation bank within the appropriate Service Area.
- 7.2. Habitat Restoration. Permittee shall restore on-site the 0.15 acres of Covered Species habitat that will be temporarily disturbed during construction to pre-Project or better conditions. Within 6 months of issuance of this ITP, and at least 30 days before starting restoration work, Permittee shall submit a Vegetation Restoration Plan (Plan) to CDFW for review and approval. The Plan will facilitate revegetation of the 0.15 acres of temporary construction disturbance on-site and shall ensure that the contractor successfully implements the Plan. The Plan shall include detailed specifications for restoring all temporarily disturbed areas, such as seed mixes and application methods. The Plan shall also indicate the best time of year for seeding to occur as well as seeding with only native plants.
- 7.3. Cost Estimates. CDFW has estimated the purchase of Covered Species credits at a conservation or mitigation bank identified in Condition of Approval 7.1, estimated at \$60,000 per credit, at **\$9,600**. Temporary restoration activities have been estimated at \$5,000 per acre, at **\$750**.
- 7.4. Bill of Sale. Permittee shall submit to CDFW prior to Project activities if no Security is provided for the Covered Species Credit cost estimates, a copy of the Bill of Sale(s) and payment receipt or within 18 months from issuance of this ITP if Security is provided.

8. Performance Security

The Permittee may proceed with Covered Activities only after the Permittee has ensured funding (Security) to complete any activity required by Condition of Approval 7 that has not been completed before Covered Activities begin. Permittee shall provide Security as follows:

- 8.1. Security Amount. The Security shall be in the amount of **\$10,350**. This amount is based on the cost estimates identified in Condition of Approval 7.3 above.
- 8.2. Security Form. The Security shall be in the form of an irrevocable letter of credit (see Attachment 2) or another form of Security approved in advance in writing by CDFW's Office of the General Counsel.
- 8.3. Security Timeline. The Security shall be provided to CDFW before Covered Activities begin or within 30 days after the effective date of this ITP, whichever occurs first.

- 8.4. Security Holder. The Security shall be held by CDFW or in a manner approved in advance in writing by CDFW.
- 8.5. Security Transmittal. If CDFW holds the Security, Permittee shall transmit it to CDFW with a completed Mitigation Payment Transmittal Form (see Attachment 3) or by way of an approved instrument such as escrow, irrevocable letter of credit, or other.
- 8.6. Security Drawing. The Security shall allow CDFW to draw on the principal sum if CDFW, in its sole discretion, determines that the Permittee has failed to comply with the Conditions of Approval of this ITP.
- 8.7. Security Release. The Security (or any portion of the Security then remaining) shall be released to the Permittee after CDFW has conducted an on-site inspection and received confirmation that all secured requirements have been satisfied, as evidenced by:
- Copy of the bill of sale
 - Copy of the payment receipt
 - Timely submission of all required reports

Even if Security is provided, the Permittee must complete the required acquisition, protection and transfer of all HM lands and record any required conservation easements no later than 18 months from the effective date of this ITP. CDFW may require the Permittee to provide additional HM lands and/or additional funding to ensure the impacts of the taking are minimized and fully mitigated, as required by law, if the Permittee does not complete these requirements within the specified timeframe.

Amendment:

This ITP may be amended as provided by California Code of Regulations, Title 14, section 783.6, subdivision (c), and other applicable law. This ITP may be amended without the concurrence of the Permittee as required by law, including if CDFW determines that continued implementation of the Project as authorized under this ITP would jeopardize the continued existence of the Covered Species or where Project changes or changed biological conditions necessitate an ITP amendment to ensure that all Project-related impacts of the taking to the Covered Species are minimized and fully mitigated.

Stop-Work Order:

CDFW may issue Permittee a written stop-work order requiring Permittee to suspend any Covered Activity for an initial period of up to 25 days to prevent or remedy a violation of this ITP, including but not limited to the failure to comply with reporting or monitoring obligations, or to prevent the unauthorized take of any CESA endangered, threatened, or candidate

Incidental Take Permit
No. 2081-2018-074-02
RECLAMATION DISTRICT 108
DISTRIBUTION SYSTEMS IMPROVEMENT PROJECT

species. Permittee shall stop work immediately as directed by CDFW upon receipt of any such stop-work order. Upon written notice to Permittee, CDFW may extend any stop-work order issued to Permittee for a period not to exceed 25 additional days. Suspension and revocation of this ITP shall be governed by California Code of Regulations, Title 14, section 783.7, and any other applicable law. Neither the Designated Biologist nor CDFW shall be liable for any costs incurred in complying with stop-work orders.

Compliance with Other Laws:

This ITP sets forth CDFW's requirements for the Permittee to implement the Project pursuant to CESA. This ITP does not necessarily create an entitlement to proceed with the Project. Permittee is responsible for complying with all other applicable federal, state, and local law.

Notices:

The Permittee shall deliver a fully executed duplicate original ITP by registered first class mail or overnight delivery to the following address:

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

Written notices, reports and other communications relating to this ITP shall be delivered to CDFW by registered first class mail at the following address, or at addresses CDFW may subsequently provide the Permittee. Notices, reports, and other communications shall reference the Project name, Permittee, and ITP Number (2081-2018-074-02) in a cover letter and on any other associated documents.

Original cover with attachment(s) to:

Kevin Thomas, Regional Manager
c/o CESA Desk
California Department of Fish and Wildlife
North Central Region
1701 Nimbus Road
Rancho Cordova, CA 95670
Telephone (916) 359-2900
Fax (916) 358-2912

and a copy to:

Habitat Conservation Planning Branch

Incidental Take Permit
No. 2081-2018-074-02
RECLAMATION DISTRICT 108
DISTRIBUTION SYSTEMS IMPROVEMENT PROJECT

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

Unless Permittee is notified otherwise, CDFW's Regional Representative for purposes of addressing issues that arise during implementation of this ITP is:

CESA Desk
1701 Nimbus Road
Rancho Cordova, CA 95670
Telephone (916) 358-2930
Fax (916) 358-2912
R2CESA@wildlife.ca.gov

Compliance with CEQA:

CDFW's issuance of this ITP is subject to CEQA. CDFW is a responsible agency pursuant to CEQA with respect to this ITP because of prior environmental review of the Project by the lead agency, Reclamation District 108. (See generally Pub. Resources Code, §§ 21067, 21069.) The lead agency's prior environmental review of the Project is set forth in the Distribution Systems Improvement Project Mitigated Negative Declaration and Initial Study (SCH No.: 2018052058) dated June 2018 that Reclamation District 108 adopted for the Distribution Systems Improvement Project on June 21, 2018. At the time the lead agency adopted the Mitigated Negative Declaration and approved the Project it also adopted various mitigation measures for the Covered Species as conditions of Project approval.

This ITP, along with CDFW's related CEQA findings, which are available as a separate document, provide evidence of CDFW's consideration of the lead agency's Mitigated Negative Declaration for the Project and the environmental effects related to issuance of this ITP (CEQA Guidelines, § 15096, subd. (f)). CDFW finds that issuance of this ITP will not result in any previously undisclosed potentially significant effects on the environment or a substantial increase in the severity of any potentially significant environmental effects previously disclosed by the lead agency. Furthermore, to the extent the potential for such effects exists, CDFW finds adherence to and implementation of the Conditions of Project Approval adopted by the lead agency, and that adherence to and implementation of the Conditions of Approval imposed by CDFW through the issuance of this ITP, will avoid or reduce to below a level of significance any such potential effects. CDFW consequently finds that issuance of this ITP will not result in any significant, adverse impacts on the environment.

Findings Pursuant to CESA:

These findings are intended to document CDFW's compliance with the specific findings requirements set forth in CESA and related regulations. (Fish & G. Code § 2081, subs. (b)-

Incidental Take Permit
No. 2081-2018-074-02
RECLAMATION DISTRICT 108
DISTRIBUTION SYSTEMS IMPROVEMENT PROJECT

(c); Cal. Code Regs., tit. 14, §§ 783.4, subds, (a)-(b), 783.5, subd. (c)(2).)

CDFW finds based on substantial evidence in the ITP application, the Distribution Systems Improvement Project Mitigated Negative Declaration, and the administrative record of proceedings, that issuance of this ITP complies and is consistent with the criteria governing the issuance of ITPs pursuant to CESA:

- (1) Take of Covered Species as defined in this ITP will be incidental to the otherwise lawful activities covered under this ITP
- (2) Impacts of the taking on Covered Species will be minimized and fully mitigated through the implementation of measures required by this ITP and as described in the MMRP. Measures include: (1) purchase of Covered Species credits; (2) establishment of avoidance zones; (3) worker education; and (4) Quarterly Compliance Reports. CDFW evaluated 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. Based on this evaluation, CDFW determined that the purchase of 0.16 acres of compensatory habitat that is contiguous with other protected Covered Species habitat and/or is of higher quality than the habitat being destroyed by the Project, along with the minimization, monitoring, reporting, and funding requirements of this ITP minimizes and fully mitigates the impacts of the taking caused by the Project
- (3) The take avoidance and mitigation measures required pursuant to the conditions of this ITP and its attachments are roughly proportional in extent to the impacts of the taking authorized by this ITP
- (4) The measures required by this ITP maintain Permittee's objectives to the greatest extent possible
- (5) All required measures are capable of successful implementation
- (6) This ITP is consistent with any regulations adopted pursuant to Fish and Game Code sections 2112 and 2114
- (7) Permittee has ensured adequate funding to implement the measures required by this ITP as well as for monitoring compliance with, and the effectiveness of, those measures for the Project
- (8) Issuance of this ITP will not jeopardize the continued existence of the Covered Species based on the best scientific and other information reasonably available, and this finding includes consideration of the species' capability to survive and reproduce,

Incidental Take Permit
No. 2081-2018-074-02
RECLAMATION DISTRICT 108
DISTRIBUTION SYSTEMS IMPROVEMENT PROJECT

and any adverse impacts of the taking on those abilities in light of (1) known population trends; (2) known threats to the species; and (3) reasonably foreseeable impacts on the species from other related projects and activities. Moreover, CDFW's finding is based, in part, on CDFW's express authority to amend the terms and conditions of this ITP without concurrence of the Permittee as necessary to avoid jeopardy and as required by law

Attachments:

FIGURE 1	Map of Project
ATTACHMENT 1	Mitigation Monitoring and Reporting Program
ATTACHMENT 2	Letter of Credit Form
ATTACHMENT 3	Mitigation Payment Transmittal Form

ISSUED BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

on 4/19/19


Kevin Thomas, Regional Manager
North 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 this ITP, and (3) agrees on behalf of the Permittee to comply with all terms and conditions.

By:  Date: 7 OCT 2019

Printed Name: W.R. VANDERWAAL Title: DEPUTY GM

Incidental Take Permit
No. 2081-2018-074-02
RECLAMATION DISTRICT 108
DISTRIBUTION SYSTEMS IMPROVEMENT PROJECT