California Department of Fish and Game
Bay Delta Region
7329 Silverado Trail
Napa, CA 94558

California Endangered Species Act
Incidental Take Permit No. 2081-2011-002-03

Los Vaqueros Reservoir Expansion Project

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 take[1] 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:	**Contra Costa Water District (CCWD)**
Principal Officer:	**Jerry Brown, General Manager**
Contact Person:	**Fran Garland, (925) 688-8312**
Mailing Address:	**Post Office Box H2O** **Concord, CA 94524**

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 as a result of construction activities and inundation of undeveloped lands shall expire on **December 31, 2014**, and this ITP's authorization to take the Covered Species as a result of operation and maintenance activities shall expire on **December 31, 2026.**

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 7.10 of this ITP.

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[1] Pursuant 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.

Relationship to Memorandum of Understanding/Management Authorization No. 9339:

Pursuant to former Fish and Game Code section 2081, DFG issued Memorandum of Understanding and Management Authorization (MOU/MA) No. 9339 to CCWD on February 16, 1994 for construction and development of the Los Vaqueros Reservoir. ITP No. 2081-2009-013-03 (see below) superseded all provisions of MOU/MA No. 9339 to avoid, minimize, and fully mitigate the incidental take of winter-run Chinook salmon (*Oncorhynchus tshawytscha*) and delta smelt (*Hypomesus transpacificus*) expected to occur with operation and maintenance (O&M) of Los Vaqueros intake facilities.

This ITP supersedes all remaining provisions of MOU/MA No. 9339, including the incidental take of San Joaquin kit fox, California tiger salamander and Alameda whipsnake resulting from O&M activities at the Los Vaqueros Reservoir property. Covered O&M activities are detailed in the Project Description of this ITP.

Relationship to Incidental Take Permit No. 2081-2009-013-03:

On November 5, 2009, DFG issued ITP No. 2081-2009-013-03 to authorize incidental take and impacts on winter-run Chinook salmon, delta smelt, and longfin smelt (*Spirinchus thaleichthys*) expected to occur with construction, operation and maintenance of the Alternative Intake Project that diverts water either to storage in the Los Vaqueros Reservoir or the Contra Costa Canal for direct use in the Contra Costa Water District service area. ITP No. 2081-2009-013-03 replaced all provisions of MOU/MA 9339 pertaining to these species.

This current ITP addresses incidental take of San Joaquin kit fox (*Vulpes macrotis mutica*), California tiger salamander (*Ambystoma californiense*) and Alameda whipsnake (*Masticophis lateralis euryxanthus*) associated with implementation of the Los Vaqueros Reservoir Expansion Project (hereafter, the Project). This ITP does not alter the Permittee's responsibility to meet the requirements of ITP No. 2081-2009-013-03.

Project Location:

The Project site (Figure 1) is CCWD's Los Vaqueros Reservoir property, which includes the upper portion of the Kellogg Creek watershed, west of the City of Byron and south of the City of Brentwood, in Contra Costa County. The Project site is in Section 12 within Township 1S, Range 2E, and Section 18 within Township 1S, Range 3E of the Byron Hot Springs U.S. Geological Survey (USGS) 7.5 minute quadrangle map, and in Section 33, Township 1S, Range 2E of the Tassajara USGS 7.5 minute quadrangle map (Mount Diablo Base and Meridian). Kellogg Creek flows through the Project site in a north-south direction.

Construction Work Areas

Construction will occur at several different work areas in the watershed:

- Dam Work Area: The dam work area is located at the southern terminus of Walnut Boulevard, and includes the existing dam and appurtenant facilities in their entirety as well as the existing interpretive center parking area which will contain the construction trailers.

- Borrow Areas: The primary core borrow area is approximately one mile south of the intersection of Marsh Creek Road and Walnut Boulevard and approximately 100 yards west of Walnut Boulevard and Kellogg Creek near an existing CCWD equipment warehouse. The secondary core borrow area is approximately one half mile south of the primary core borrow area on the south side of Kellogg Creek and Walnut Boulevard. The shell borrow area is approximately one quarter mile west of the dam work area.

Inundation Areas and Work Areas for Relocation of Inundated Facilities:

Areas behind the dam will be inundated as water levels in the dam rise, requiring relocation of existing facilities (a marina, fishing piers, hiking trails and roads) to higher ground. Work areas associated with inundation and relocation activities are as follows:

- Inundation Areas: These areas are along the reservoir shore above the existing high water mark. The largest area of inundation would occur at the northwest corner of the reservoir, within and around Cowboy Cove.

- Work Areas, Recreational Facilities: The marina complex work area is on the southwestern shore of the reservoir near the northern terminus of Los Vaqueros Road. New fishing pier sites have not been determined but will likely be located on the northern shore of the reservoir.

- Work Areas, Trails and Access Roads: New trails and access roads would be installed on the western side of the reservoir above the new water line.

O&M Areas

O&M activities (see Project Description, Phase 3) will continue to be performed at the Project site according to Permittee's existing Resource Management Plan (to be updated after completion of Phases 1 and 2 of the Project). Work areas where O&M activities will occur will vary from year to year depending on conditions at the Project site.

Project Description:

Background

The Los Vaqueros Reservoir is a 100 thousand-acre-foot (TAF) off-stream storage reservoir that was constructed in 1997 to improve water quality and provide emergency storage capacity to serve CCWD's 550,000 municipal and industrial customers in central and eastern Contra Costa County.

Water stored in the Los Vaqueros Reservoir is obtained from the San Joaquin/Sacramento River Delta (Delta) through the Central Valley Project pursuant to a contract with the U.S. Bureau of Reclamation and under CCWD water rights permit # 20749. As discussed above, water diversions are subject to ITP No. 2081-2009-013-03 for winter-run Chinook salmon, delta smelt, and longfin smelt.

The Project was designed to meet the following objectives:

- Increase water supply reliability for water providers within the San Francisco Bay Area to help meet municipal and industrial water demands during drought periods and emergencies or to address shortages due to regulatory and environmental restrictions.
- Improve the quality of water deliveries to municipal and industrial customers in the San Francisco Bay Area, without impairing the Project's ability to meet the environmental and water supply reliability objectives stated above.

Project Activities

The Project will expand the capacity of the existing Los Vaqueros Reservoir from 100 TAF to 160 TAF. This expansion involves three work phases: Phase 1, Dam Construction and Relocation of Facilities; Phase 2, Inundation; and Phase 3, Operation and Maintenance Activities. These phases are described in more detail below.

Phase 1, Dam Construction and Relocation of Facilities

Phase 1 of the Project involves raising the crest of the existing 192-foot-tall earthfill dam by adding fill on top of the existing shell, primarily on the downstream (outboard) side of the reservoir. Following construction, the dam will be 230 feet tall and will have a crest elevation of 523 feet above mean sea level (msl). The existing vertical central core and filter/drainage system will also be raised. The dam axis will move about 20 feet downstream, but the existing dam footprint will not be increased. A retaining wall on the eastern side of the dam (on the upstream/inboard side) will be raised in elevation, and new riprap will be installed above the spillway on the western side of the dam. Existing paved parking lots and roads will be used for staging and access during construction.

The new embankment fill will add about one million cubic yards of fill, quarried from within the watershed, to the current dam volume of 2.8 cubic million yards. Approximately 270,000 cubic yards of clay fill will be extracted from the 41.2-acre primary core borrow area and the 15-acre secondary core borrow/staging area north of the reservoir. Two temporary access roads up to 1,000 feet in length and two temporary crossings at Kellogg Creek will be installed at the borrow sites to allow transportation of materials and equipment to and from these sites. Two temporary turnouts (40 feet wide by 250 feet long) will be added along Walnut Boulevard for large trucks and equipment. Claystone and sandstone for construction of the outer dam shell will be obtained from a 14.5-acre shell borrow area west of the existing dam. Staging and spoils areas for dam construction will be located immediately around the dam footprint. Excess earthen materials, if any, will be disposed of at the downstream toe of the dam.

Several existing recreational facilities surrounding the reservoir, including a marina, a boat ramp, and fishing piers, will be relocated to higher ground prior to inundation (see Phase 2), resulting in additional construction around the reservoir. New and/or expanded upland facilities at the marina complex will include parking facilities, restrooms, picnic areas, a marina building with an outdoor amphitheater, and other small ancillary facilities. These facilities will result in development of no more than 28 acres of undeveloped land. Approximately 13 miles of unpaved multi-purpose service roads/hiking trails will also be installed to provide expanded access on the western side of the reservoir.

During construction, a temporary visitors center will be established off Walnut Boulevard north of the primary core borrow area. The visitors center will be a 40-foot by 12-foot trailer with a graveled parking area of approximately 2,000 square feet. Power will be extended to the trailer from existing power lines; no other infrastructure will be extended to the trailer.

Construction will occur over an 18- to 24-month period, beginning in March 2011, with equipment operating up to 20 hours (two shifts) per day. The construction labor force will consist of up to six crews of 50 to 70 workers.

Phase 2, Inundation

Following construction, Permittee will fill the reservoir to its new 160 TAF capacity. As a result, the water surface elevation will be raised by 35 feet, resulting in inundation of 341 acres of surrounding developed and undeveloped lands and indirect impacts from isolation of approximately 285 acres of grassland habitat. Phase 2 inundation will begin in August 2012.

Phase 3, Operation and Maintenance

The Project also includes O&M activities associated with the dam, reservoir and related facilities and with managing the Project site. O&M activities are detailed in CCWD's Resource Management Plan, which was approved by the U.S. Fish and Wildlife Service

(USFWS) and DFG and adopted by the CCWD Board of Directors in 1999, and which will be updated in December 2011, prior to completion of Phase 1 and Phase 2 activities.

The following O&M activities were previously permitted under MOU/MA No. 9339 as covered activities and are Covered Activities (defined below) under this ITP:

Dam Facilities Maintenance. This includes monitoring and cleaning debris and clearing of vegetation from various dam facilities, including the spillway and the inlet/outlet structure; painting equipment and structures; and repairing or replacing equipment and structures. The outlet structure is cleared annually in the fall; other dam facility maintenance is carried out year-round as needed.

Bridge and Culvert Maintenance. Bridges within the watershed are inspected annually and repaired as needed. Most repairs are to decking or railings and can be done with hand-held power tools. There are approximately 306 culverts and three miles of v-ditches within the watershed that are monitored and maintained to ensure unimpeded conveyance of water. Maintenance activities include clearing debris and sediments, repairing or replacing culvert piping and v-ditches, and installing energy dissipaters at the culvert outlet. Removed debris is disposed of properly at a designated site. Depending on location, heavy equipment and/or hand tools are used. Approximately 15 culverts are cleaned out per year affecting about 0.10 acres.

Road, Trail and Parking Lot Maintenance. There are currently approximately 12 miles of paved roads and 118 miles of unpaved roads and trails in the watershed as well as five graveled and paved parking areas. Additional road/trails will be constructed as part of the expansion project as described under Phase 1 in the Project Description. Maintenance activities include blading, crack filling, patching, sealcoating, grinding, removing, replacing or overlaying, and placing shoulder backing material. A grader or tractor with a mounted blade is used to scrape unpaved trails and roads. Various asphalt products and equipment are used to fill cracks, patch potholes, sealcoat, grind and replace or overlay paved roads and paved parking areas. Paved and unpaved road maintenance disturbs approximately 228 acres annually, and footpath maintenance affects about 0.5 acres. Clean crushed gravel is placed in layers of uniform thickness to maintain gravel parking areas. Loaders and graders are used for these activities. Sealcoating and shoulder backing occur about once every five years; other maintenance is done annually or as needed, generally in summer and fall. Parking lots are refurbished every other year in late spring/early summer, or as needed; these activities affect about 10 acres.

Management of Perennial Grasslands. This activity includes mowing, disking, and other landscaping activities that do not involve the use of heavy equipment,[3] as well as prescribed burning, grazing and grazing-related fenceline maintenance.

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[3] "Heavy equipment" is defined as a piece of equipment greater in size and weight than a light-duty pickup truck.

Mowing and disking require the use of a tractor with a mounted attachment. Herbicides are used to control populations of noxious weeds that are large and/or expanding such that mechanical control methods are not sufficient. Herbicides are applied according to the herbicide label and in compliance with all federal, state and local regulations and are not used within species and habitat specific buffers. Landscape activities include planting for landscaping and for habitat enhancement which may involve the use of machine augers, and minor trenching equipment for irrigation systems, as well as landscape maintenance such as pruning, tree removal, fertilizing, staking, etc. These activities occur throughout the year, with mowing and disking concentrated in the early spring and summer. Approximately 400 acres are mowed annually, and 100 acres are disked.

Prescribed burning is used for both habitat enhancement and fire management. Burns are conducted in compliance with federal, state and local permitting requirements, and where containment can be ensured. The prescribed burns cover approximately 300 acres and occur annually.

Grassland management strategies also include grazing. Both cattle and sheep are grazed within the watershed, and goats may be used in the future. Grazing reduces vegetative cover, helps manage fuel loads and noxious weeds, and may enhance habitat for plant and wildlife species. Troughs, corrals and cattleguards are spread throughout the watershed to facilitate grazing operations. Troughs are equipped with wildlife escape ramps. Trough maintenance may include replacing concrete pads or placing gravel. Cattleguard maintenance may include use of a backhoe or similar equipment to remove existing guards. For corral maintenance, see the description under fencing above. Approximately 11,000 acres per year are grazed by cattle and approximately 6,000 acres are grazed by sheep.

To manage grazing activities, Permittee must maintain approximately 92 miles of fenceline around and within the watershed. Fencing is used for security, safety and to protect resources. Fence installation may involve the use of a tractor mounted post hole digger. Post holes are backfilled with soil, gravel and/or concrete. Fence removal may involve the use of a backhoe. Fence maintenance is conducted year round on an as needed basis.

Firebreak and Fuelbreak Maintenance. There are approximately 35 miles of firebreaks and fuelbreaks in the watershed. Firebreaks are maintained using a bulldozer, grader or tractor with a mounted disk or ripper. The firebreaks are scraped or shallowly tilled. Fuelbreaks are maintained using a tractor with a mounted mower. This work usually takes place in the spring, but may occur more frequently depending on re-growth. This activity disturbs approximately 130 acres annually.

Enhancement of Riparian Areas, Wetlands, Ponds, and Other Sensitive Habitat. Maintenance activities include repair and prevention of erosion and leaks in pond and wetland infrastructure (berms, dikes, liners, spillways, etc.). Erosion repairs involve compacting back fill materials and planting the repaired areas. Leak repairs may need culverts installed,

backfill, and placement of riprap. Equipment used may include backhoes, loaders, compactors and grout pumpers. Additionally, excess sediment in ponds and wetlands is removed using a suction pump, excavator or backhoe, and water may be drained to facilitate sediment removal. These activities are usually conducted in summer and early fall, but the timing can vary. Approximately three acres or eight ponds could be affected each year.

Vertebrate pest control activities are also conducted at the Project site to control introduced invasive competitors and predators of native species in sensitive habitat areas. Manual pest control methods include netting, trapping and relocating or shooting pests. Manual pest control in done in compliance with all federal, state and local regulations, and occurs throughout the year depending on species. Mechanical methods include pond draining, electroshocking, and installing exclusionary fencing. Pond draining is accomplished using portable pumps or siphons, with screens to prevent removal of predators during drainage. Pond dewatering takes place in the fall and covers about one acre annually.

Field Monitoring and Surveying, Research, Education and Recreation Programs. As required under existing permits and plans, CCWD conducts monitoring projects which involve field surveys and sampling efforts for natural and cultural resources. Qualified professionals also collect data for scientific research projects under permits and approvals from federal and state agencies obtained by the researcher. CCWD provides guided educational and interpretive field trips for watershed visitors and students. These organized events attract approximately 9,000 participants per year. Each program begins with age-appropriate instructional guidelines to limit the potential for any negative impacts to physical or biological watershed resources. Periodic recreation-oriented special events are also held such as runs, bike rides and fishing derbies. These events are carefully monitored and designed to be compatible with CCWD's goals of protection of water quality and natural resources at the watershed.

The following activities represent new O&M activities for the purposes of this ITP:

Water Pipeline Repairs or Replacement. There are 10 miles of water pipeline in the watershed. Pipeline is repaired and/or replaced as needed. Water pipeline maintenance includes excavation, repair, backfill and compaction and involves the use of heavy equipment. This activity disturbs approximately 12 acres per year.

Facilities Maintenance and Improvements. Maintenance activities include painting, repair and replacement of building system components (e.g., HVAC components), equipment, signs, recreation amenities (benches, restrooms, shade structures, etc.) minor facility and infrastructure construction or installation, including temporary facilities for special events at the watershed. This work occurs as needed and involves the use of both hand-held tools and heavy equipment. These O&M activities take place in developed areas of the watershed and will result in conversion of less than one acre of existing habitat to developed uses per year.

Enhancement and Management of Habitat Management (HM) Lands. HM Lands are lands containing habitat for the Covered Species (defined below) that will be acquired by Permittee to offset impacts from the Covered Activities (defined below) (see Condition 9 below). Enhancement activities will include wetland creation (including associated earth-moving activities), removal of structures, invasive weed eradication, revegetation, and other activities approved by DFG in a Long-Term Management Plan (see Condition 9.2.8). Management activities at HM Lands will include activities similar to habitat management activities currently performed at the Project site.

Covered Species Subject to Take Authorization Provided by this ITP:

This ITP covers the following species:

Name	CESA Status[4]
San Joaquin kit fox (*Vulpes macrotis mutica*)	Threatened[5]
Alameda whipsnake (*Masticophis lateralis euryxanthus*)	Threatened[6]
California tiger salamander (*Ambystoma californiense*)	Threatened[7]

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

Impacts of the Taking of 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 that are expected to result in incidental take of individuals of the Covered Species during Phase 1 include excavation within the borrow areas; installation of temporary access routes, staging areas and the visitors' center; construction of new roads and new/expanded recreational facilities; dam construction; and transport of materials, supplies, and workers. Incidental take of Covered Species could occur during Phase 2 as a result of inundation of existing habitat. Incidental take of Covered Species could occur during Phase 3 as a result of disking; herbicide use; firebreak construction; prescribed burns; pond and wetland maintenance; field monitoring; and other activities described in the Resource Management Plan and described under Phase 3, above. Monitoring and management activities performed on habitat management lands (HM Lands) acquired under Condition 9, below, pursuant to the conditions of a DFG-approved land management plan, could also result in incidental take. These activities and only these activities are hereinafter referred to as "Covered Activities."

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[4] Under 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."

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

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

[7] See Cal. Code Regs. tit. 14 § 670.5, subd. (b)(3)(G).

Incidental take of individuals of the Covered Species may occur from the Covered Activities in the form of mortality ("kill") from vehicle strikes, crushing by equipment, burrow collapse, inundation of breeding ponds, upland habitat inundation, drowning, entrapment in excavated pits, and introduction of predators through disturbances and habitat modification. Incidental take of individuals of the Covered Species may also occur from the Covered Activities in the form of pursuit, catch, capture, and/or attempts to do so resulting from efforts to relocate Covered Species to minimize the impacts of Covered Activities.

Take could occur in the construction work areas, inundation areas, and work areas for relocation of inundated facilities, as identified in the Project Location section, and take could occur throughout the Project site and on HM Lands with implementation of O&M activities, which will vary in location from year to year (Project Area).

Phase 1 activities will result in permanent impacts to approximately 113.7 acres of habitat and temporary impacts to 8.5 acres of habitat,[8] while Phase 2 will result in permanent impacts to 625.3 acres and no temporary impacts to existing habitat.[9] Together, implementation of Phases 1 and 2 of the Project will result in the permanent loss of approximately 739 acres of habitat and temporary loss of approximately 8.5 acres of habitat for the Covered Species, as shown in Table 1.

As stated previously, Phase 3 will continue existing O&M activities in the Project Area and will expand monitoring and management activities at HM Lands (see Condition 9, below). Most impacts associated with these O&M activities were previously covered under MOU/MA No. 9339; however, implementation of Phase 3 activities would include an additional 12 acres of temporary, annual habitat impacts associated with repair and replacement of water pipelines (approximately 180 acres total) and up to one acre of permanent, annual impacts associated with miscellaneous facilities improvements (15 acres total). Impacts associated with habitat enhancement activities at HM Lands, as approved in the Long-Term Management Plan (see Condition 9.2.8), are also covered in this ITP. This ITP assumes that the acreage of affected habitat listed under each Phase 3 activity in the Project Description will not increase in the future. If the area of habitat impacts associated with O&M activities increases as a result of subsequent revisions of the Resource Management Plan, an amendment to this ITP will be required.

Impacts of the proposed taking also include adverse impacts to the Covered Species related to temporal losses, increased habitat fragmentation and edge effects, noise and vibration disturbances, modification of vegetative cover, stress resulting from capture and relocation, and the Project's incremental contribution to cumulative impacts (e.g., long-term effects due to increased air and water pollution, increased competition for food and habitat, and

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[8] "Permanent impacts" are impacts that cannot be restored after a single season. "Temporary impacts" are impacts that do not last beyond a single season.

[9] Permanent Phase 2 impacts include direct inundation of 341 acres and indirect isolation of 285 acres.

increased vulnerability to predation through introduction of habitat disturbances). The Project will also contribute to cumulative loss of habitat connectivity in southeastern Contra Costa County for San Joaquin kit fox by restricting this species' access to the northern portion of its range.

Fully Protected Species:

This ITP does not authorize the take of any fully protected species as defined by state law. (See Fish and Game Code §§ 3511, 4700, 5050, 5515). DFG has advised the Permittee that take of any species designated as fully protected under the Fish and Game Code is prohibited. DFG also recognizes that certain fully protected species are documented to occur within the vicinity of the Project site, or that such species have some potential to occur on, or in, the vicinity of the Project site, due to the presence of suitable habitat. These fully protected species include golden eagle (*Aquila chrysaetos*) and white-tailed kite (*Elanus leucurus*). DFG believes that the Permittee can implement the Project as described in this ITP in a manner consistent with the Fish and Game Code provisions governing fully protected species. DFG's determination regarding Project consistency with Fish and Game Code provisions governing fully protected species is based, in part, on the Permittee's obligation independent of this ITP to implement and adhere to avoidance and minimization measures during Project implementation related to golden eagle and white-tailed kite.

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.

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 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 the mitigation measures related to the Covered Species in the Environmental Impact Study/Environmental Impact Report (EIS/EIR, State Clearinghouse Number 2006012037) certified by the lead agency, CCWD Board of Directors, for the Project under the California Environmental Quality Act (CEQA) on April 1, 2010.

3. LSA Agreement Compliance. Permittee shall implement and adhere to the mitigation measures and conditions related to the Covered Species in the Lake and Streambed Alteration (LSA) agreement (Notification Number 1600-2010-0346-R3) for the Project pursuant to Fish and Game Code section 1602 et seq.

4. ESA Compliance. Permittee shall implement and adhere to the terms and conditions related to the Covered Species in the Biological Opinion on the Los Vaqueros Reservoir Expansion (Biological Opinion 81420-2009-F-0201) for the Project pursuant to the federal Endangered Species Act (ESA), unless those terms and conditions are less protective of the Covered Species or conflict with the conditions of this ITP.

5. 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.

6. General Provisions:

6.1. Right of Access to Verify Compliance. Permittee shall provide DFG staff with reasonable access to the Project Area and mitigation lands under Permittee control, and shall otherwise fully cooperate with DFG efforts to verify compliance with or effectiveness of mitigation measures set forth in the ITP.

6.2. Designated Representative. Before initiating 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.

6.3. 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 30 days before starting Covered Activities. Permittee shall ensure that the Designated Biologist is knowledgeable and experienced in the biology and 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.

6.4. Authority of the Designated Biologist. 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.

6.5. Education Program. Permittee shall conduct an education program for all persons employed or otherwise working in the Project Area prior to performing any work on-site. 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 under CESA including legal protection, recovery efforts, penalties for violations and Project-specific protective measures described in this ITP. Interpretation shall be provided for non-English speaking workers, and the same instruction shall be provided for any new workers prior to their performing work on-site. Copies of this ITP shall be maintained at the worksite. Permittee shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry on-site. Upon completion of the program, employees shall sign a form stating they attended the program and understand all protection measures. These forms shall be filed at the worksite offices and shall be made available to DFG upon request.

6.6. 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 within the Project Area upon request by DFG.

6.7. Delineation of Work Area. Permittee shall clearly delineate the limits of construction areas with fencing, stakes, or flags unless work area limits are defined on the contract drawings. Habitat and environmentally sensitive areas shall be delineated as described under Condition 6.8.

6.8. Delineation of Habitat/Environmentally Sensitive Areas. Permittee shall clearly delineate habitat of the Covered Species around each work area with posted signs, posting stakes, flags, and/or rope or cord, and shall place fencing as necessary to minimize disturbance of Covered Species' habitat (see Condition 8.2). The No Borrow Zone designated in the ITP application shall be delineated and shall not be excavated or used for access or staging.

6.9. Access Routes. Project-related personnel shall access the Project Area during construction and development activities using existing routes and shall not cross Covered Species' habitat outside of and en route to the Project Area. Project-related vehicle traffic shall be restricted to established roads, staging, and parking areas. Off-road and unpaved service road vehicle speeds shall not exceed 15 miles per hour. All other vehicle speeds shall be limited to 20 miles per hour. If Permittee determines that construction of off-site routes for travel are necessary outside of the Project Area Permittee shall contact DFG prior to carrying out any such activity. DFG may require an amendment to this ITP if additional take of Covered Species may result from Project modification.

6.10. 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 boundaries unless specifically provided for in this ITP.

6.11. Hazardous Materials Storage and Handling. Permittee shall immediately stop and follow pertinent state and federal statutes and regulations to arrange for repair and clean up 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.

6.12. Vehicle/Equipment Maintenance. Permittee shall maintain all equipment or vehicles driven and/or operated in proximity to surface water bodies in good working order to prevent the release of contaminants that if introduced to water could be deleterious to aquatic life, wildlife, or riparian habitat. Permittee shall fuel and perform maintenance on vehicles and other equipment at least 70 feet from any riparian habitat or water body.

6.13. Disposal of Construction Wastes. Permittee shall remove and properly dispose of all raw construction materials, wastes, temporary fences, barriers, and/or flagging from the Project Area following the completion of construction.

6.14. Trash Abatement. Permittee shall maintain a trash abatement program throughout the duration of Covered Activities. Trash and food items shall be contained in closed (animal-proof) containers and removed regularly (at least once a week) to avoid attracting opportunistic predators such as ravens, coyotes, and feral dogs.

6.15. Stormwater Pollution Prevention Plan. Before the onset of work, Permittee shall prepare a stormwater pollution prevention plan and water pollution control plan to allow prompt and effective response to any accidental spills.

6.16. Dust Control. Permittee shall implement dust control measures during Covered Activities to facilitate visibility for monitoring of the Covered Species by the Designated Biologist.

6.17. Firearms and Dogs. Permittee shall prohibit firearms and domestic dogs from the Project Area and site access routes during construction and development of the Project, except those in the possession of authorized security personnel or local, state, or federal law enforcement officials.

7. Monitoring, Notification and Reporting Provisions:

7.1. Notification Process. All required notifications shall be submitted in writing (email is acceptable) to DFG's Regional Representative or as described in the conditions below. If DFG has not responded to a notification within three business days, Permittee shall follow up with a phone call to confirm that the notification was received.

7.2. Notification of Commencement. For each phase of the Project, Permittee shall notify DFG seven (7) calendar days prior to initiating Covered Activities and shall document compliance with all pre-Project Conditions of Approval (designation of a qualified biologist, completion of pre-construction surveys, flagging of environmentally sensitive areas, etc.) before initiating such activities.

7.3. 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.

7.4. Compliance Monitoring. The Designated Biologist shall be on-site while Covered Activities are taking place to ensure that mitigation and avoidance measures designed to minimize take of the Covered Species are being followed. The Designated Biologist shall also verify compliance with designated

exclusion zones, ensure that signs, stakes, and fencing are intact, and that human activities have not encroached within these protective zones.

7.5. Compliance Reports. The Designated Biologist shall conduct compliance inspections a minimum of once per month during periods of inactivity and/or after clearing, grubbing, and grading are completed. These inspections shall be compiled into Compliance Reports and submitted by mail to DFG Bay Delta Region and via e-mail to DFG's Regional Representative. 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 is inadequate, DFG will notify Permittee by letter of the new reporting schedule.

7.6. Report of Covered Species Observation(s). The Designated Representative or Designated Biologist shall prepare written reports of all observations of Covered Species, oversight activities, verifications, compliance inspections, surveys, monitoring, and records required by this ITP. Permittee shall gather these written reports on a monthly basis and submit them to DFG as a Monthly Compliance Report. 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.

7.7. Notification to the California Natural Diversity Database. The Designated Biologist shall report any Covered Species or other special-status species observed during project surveys, during construction, or during the course of O&M activities to California Natural Diversity Database (CNDDB) within five working days of the sighting(s) using standard CNDDB forms (available on DFG's website). The Designated Representative shall provide DFG Bay Delta Region with copies of the CNDDB forms and location maps.

7.8. Report of Take. If a Covered Species is injured or otherwise taken as a result of Covered Activities, or if a Covered Species is otherwise found dead within the Project Area, Permittee shall immediately notify the Designated Biologist. The Designated Representative shall immediately call the DFG Regional Office at (707) 944-5500 or (707) 944-5596. The initial notification to DFG shall include information regarding the location, species, number of animals injured or taken, and the ITP Number. Following the initial notification, the Designated Biologist 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 injury or death, and any other pertinent information.

7.9. Annual Status Report. Permittee shall provide DFG with an Annual Status Report (ASR) no later than January 31 of every year beginning with issuance of the ITP and continuing until DFG accepts the Final Mitigation Report identified below. Each ASR shall include, at a minimum: (1) a general description of the status of the Project Area and construction activities, including actual or projected completion dates, if known; (2) a copy of the table in the MMRP with notes showing the current implementation status of each mitigation measure; (3) an assessment of the effectiveness of each completed or partially completed mitigation measure in avoiding, minimizing, and mitigating Project impacts; (4) a summary of all monthly compliance reports for the year, (5) all available information about Project-related incidental take of the Covered Species; and (6) information about other Project impacts on the Covered Species.

7.10. 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 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 and mitigate the impacts of future projects on the Covered Species; and (8) any other pertinent information.

8. 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:

Multi-Species Protective Measures

8.1. Covered Species Injury. If a Covered Species is injured as a result of Project-related activities, the Designated Biologist shall immediately transport it to a DFG-approved wildlife rehabilitation or veterinary facility. Permittee shall identify appropriate facilities prior to initiating Covered Activities. Permittee shall bear any costs associated with the care or treatment of injured Covered Species. Permittee shall notify DFG of the injury to the Covered Species according to Condition 7.8.

8.2. Construction Barriers. Prior to beginning Covered Activities, Permittee shall construct a temporary barrier along the limits of areas of grading and disturbance. The barrier shall consist of silt fencing at least 42 inches tall with 36 inches above the soil surface and buried to a depth of six inches below the soil surface. The Designated Biologist shall inspect the work area prior to installation of this barrier. The barrier shall be designed to prevent Covered Species from entering the work area, while allowing trapped individuals to leave the work area, and shall remain in place until all construction activities have been completed. This barrier shall be inspected daily by the Designated Biologist and/or the construction manager and maintained and repaired as necessary to ensure that it is functional and is not a hazard to the Covered Species on the outer side of the fence.

8.3. Pipes and Culverts. Because the Covered Species are attracted to cave-like structures such as pipes and culverts, animals may enter stored pipes and become trapped. All construction pipes, culverts, or similar structures that are stored at a construction site for one or more overnight periods shall be either securely capped by the Permittee prior to storage or thoroughly inspected by the Designated Biologist and/or the construction manager for Covered Species before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a Covered Species is discovered inside a pipe by the Designated Biologist or anyone else, the Designated Biologist shall move the animal to a safe nearby location and monitor it until it is determined that it is not imperiled by predators, or other dangers (see Condition 8.16). San Joaquin kit fox shall be allowed to disperse without intervention.

8.4. Excavated Pits. To prevent inadvertent entrapment of the Covered Species during construction, the Designated Biologist and/or construction manager shall ensure that all excavated, steep-walled holes or trenches more than 6-inches deep are provided with one or more escape ramps constructed of earth fill or wooden planks. Excavated pits shall be inspected by the Designated Biologist prior to sunrise each morning. Before such holes or trenches are filled, the Designated Biologist and/or construction manager shall thoroughly inspect them for trapped animals.

8.5. Rodent Control. Permittee shall prohibit the use of rodenticides in the Project Area. Squirrel and rodent control efforts shall be focused only in localized areas where needed to avoid public health problems or to prevent damage to building foundations, roadways, or other structural facilities. Control efforts shall emphasize non-toxic means (e.g. trapping).

8.6. Use of Plastic Mono-Filament Netting. Permittee shall use tightly woven fiber netting or similar material for all applications and shall not use plastic mono-filament netting. Plastic mono-filament netting or similar material shall not be

used in the Project Area because Covered Species may become entangled or trapped in it.

8.7. Prescribed Burns. Prior to conducted prescribed burns, Permittee shall inspect the work area as described in Conditions 8.9 and 8.17. Permittee shall minimize the duration and intensity of prescribed burns to minimize take of Covered Species in underground burrows. A 50-foot buffer shall be maintained around riparian zones within which burning shall be prohibited.

San Joaquin Kit Fox

8.8. Standard Protective Guidance for Kit Fox. Permittee shall follow the USFWS's Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance.

8.9. Pre-work Surveys for Kit Fox. Within 15 days prior to any habitat modification, the Designated Biologist shall conduct transect surveys to detect potential San Joaquin kit fox dens. The Designated Biologist shall conduct walking transects such that 100% visual coverage of Project work areas is achieved. Transect width shall be adjusted based on vegetation height, topography, etc., to facilitate the detection of dens and other signs. The walking transect surveys shall be used to detect and map known dens, potential dens, and signs (tracks, scat, prey remains). The Designated Biologist may use detection dogs if practicable. The Designated Biologist shall collect and label potential San Joaquin kit fox scat based on mapped location. Potential dens shall be considered to be any subterranean hole in the Project Area that have entrances of appropriate dimensions, and for which available evidence is insufficient to conclude that it is being used or has been used by a San Joaquin kit fox.

8.10. Construction Buffers for Kit Fox. If a potential San Joaquin kit fox den is discovered, or a San Joaquin kit fox is found in an "atypical" den such as a pipe or culvert, Permittee shall establish a 50-foot buffer around the den using flagging. If a known kit fox den (one that shows evidence of current use or is known to have been used in the past) is discovered, Permittee shall establish a buffer of at least 100 feet using fencing. If a natal den is discovered, Permittee shall establish a buffer of at least 200 feet using fencing. Fencing shall not fully encircle the area but shall include exits on the opposite side from construction, near refuge/movement habitat. The Designated Representative or Designated Biologist shall notify USFWS and DFG of all known and natal kit fox dens found prior to or during construction or O&M activities. Buffer zones shall be considered Environmentally Sensitive Areas, and Permittee shall prohibit entry to construction personnel and maintenance staff.

8.11. Protection of Kit Fox Natal Dens. Permittee shall not excavate natal dens for San Joaquin kit fox until the pups and adults have vacated and only after receiving written permission from USFWS and DFG. Permittee may destroy known dens only after the Designated Biologist has conducted three days of monitoring with tracking medium or infra-red camera and has determined that a San Joaquin kit fox is not present.

8.12. Destruction/Collapse of Kit Fox Dens. When collapse of San Joaquin kit fox dens is necessary, Permittee shall collapse the dens gradually by careful excavation until it is certain that no San Joaquin kit foxes are inside. Following initial collapse, Permittee shall fully excavate, fill with dirt, and compact the den to ensure that San Joaquin kit foxes cannot reenter the den during the construction period. If at any point during excavation a San Joaquin kit fox is discovered inside the den, Permittee shall cease excavation immediately and resume monitoring of the den, as described in Condition 8.11. Permittee shall re-commence collapse of the den only when, in the judgment of the Designated Biologist, the animal has escaped from or otherwise vacated the partially destroyed den.

Alameda Whipsnake

8.13. Pre-work Surveys for Alameda Whipsnake. In areas within 2,500 feet of scrub habitat, the Designated Biologist shall complete walking surveys of identified Alameda whipsnake habitat prior to commencement of construction and O&M activities. For O&M activities, the Designated Biologist may train a designated individual(s) to perform pre-work surveys. Surveys are not required during the Alameda whipsnake dormancy period, from November through February when snakes retreat underground and are not detectable; and, surveys are not required in advance of routine, minimally disturbing O&M activities such as mowing.

California Tiger Salamander

8.14. Seasonal Work Window for Work in Streams, Ponds and Pools. Permittee shall limit work within ponds and pools (those that will not be inundated during Phase 2) to the period between June 15 and October 31. Permittee shall limit O&M activities within ponds or pools, such as sediment removal or vegetation management, to the dry period of the year and to periods of low rainfall (less than 0.25 inches per 24-hour period), time periods with less than a 20% chance of rain, or dry weather periods. The Designated Biologist shall monitor the National Weather Service (NWS) 72-hour forecast for the Project Area. If rain is predicted based on the above criteria, within 72 hours during project activity, Permittee shall cease all activities within streams, ponds, and pools until no

further rain is forecast. If the ponds/pools remain dry after the rain, Permittee may continue activities.

8.15. Daily Work Hours. Permittee shall suspend night-time construction activities during rain events in areas not surrounded by construction barriers (see Condition 8.2). A rain event is defined as weather conditions resulting in 0.25 inches of precipitation within the previous 12 hours, or ongoing measurable precipitation at nightfall.

8.16. Relocation Plan for California Tiger Salamander. The Designated Biologist shall prepare a detailed California tiger salamander relocation plan at least three weeks before the start of Covered Activities, and shall submit the plan to DFG for review. The purpose of the plan is to standardize amphibian relocation methods and relocation sites. The plan shall allow sufficient time for the Designated Biologist to move California tiger salamanders from the work sites before work begins. If California tiger salamanders are not found during pre-work surveys (see Condition 8.17), Covered Activities may proceed. The Designated Biologist shall use professional judgment to determine whether (and if so, when) the California tiger salamanders are to be moved. The Designated Biologist shall immediately inform the construction manager that work should be halted, if necessary, to avert avoidable take of California tiger salamanders.

8.17. Pre-work Surveys for California Tiger Salamander. The Designated Biologist shall complete walking surveys of construction and inundation areas and areas where ground-disturbing O&M activities will occur prior to commencement of these activities. The Designated Biologist shall follow the earthmoving/ground-disturbing equipment to look for California tiger salamanders. If a California tiger salamander is discovered by the Designated Biologist or anyone else, the Designated Biologist shall move the animal to a safe nearby location (see Condition 8.18).

8.18. Relocation of California Tiger Salamander. Permittee shall relocate any California tiger salamander found within the work area, including excavated pits, to an active rodent burrow system located no more than 300 feet outside of the work area boundary unless otherwise approved by DFG. The Designated Biologist shall identify relocation areas prior to the start of construction based upon best suitable habitat available. The Designated Biologist shall submit a list of proposed relocation areas to DFG for approval prior to moving any California tiger salamanders.

8.19. Breeding Pond Hydrology. Where needed to maintain California tiger salamander breeding in existing mitigation wetlands that are presently supplemented with water, but will not be directly disrupted by construction, Permittee shall continue to provide supplemental water to these ponds during

and after construction according to the existing terms and conditions for these mitigation sites.

8.20. Predator Abatement. Permittee shall humanely dispatch bullfrogs, non-native fish, or non-native crawfish observed in ponds, streams, and wetlands in the Project Area to the extent practicable throughout the duration of this ITP.

9. Habitat Management Land Acquisition and Restoration:

DFG 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 DFG's estimate of the acreage required to provide for adequate compensation.

To meet this requirement, Permittee shall provide for the permanent protection and management of 5,079 acres of Habitat Management (HM) lands by completing the transfer of fee title to a DFG-approved public agency or the recordation of a conservation easement pursuant to Government Code 65965 (Condition 9.2), and calculation and deposit of management funds (Condition 9.3) and administrative funds (Condition 9.4). Permittee shall also complete a plan for HM land management (Condition 9.5), shall restore temporarily impacted Covered Species habitat at the Project site (Condition 9.6), and shall preserve, enhance, create and/or restore wetland and riparian habitat on the Project site and HM Lands (Conditions 9.7 and 9.8). If the acreage of habitat available for wetland enhancement and restoration opportunities on HM Lands exceeds the acreage of habitat needed to address the impacts of the Covered Activities, Permittee shall allow the East Contra Costa Habitat Conservancy to conduct wetland enhancement and restoration activities on HM Lands (Condition 9.9).

9.1. Cost Estimates. DFG has estimated the cost of acquisition, protection, and perpetual management of the HM Lands and habitat restoration for each phase of the Project as follows (see Tables 2 and 3 for details):

9.1.1. The total land acquisition costs for HM Lands identified in Condition 9.2 below, estimated at $6,000/acre for 5,079 acres: **$30,474,000**. Land acquisitions costs are estimated using local fair market current value for lands with habitat values meeting mitigation requirements. The total acreage of HM Lands required to mitigate impacts for each phase of the Project is shown in Table 2.

9.1.2. Start-up costs for HM Lands, including initial site protection and enhancement costs as described in Condition 9.2.6 below, estimated at **$4,063,200**.

9.1.3. Interim management period funding as described in Condition 9.2.7 below, estimated at **$1,015,800**.

9.1.4. Long-term management funding as described in Condition 9.3 below, estimated at $3,000/acre for 5,079 acres: **$15,237,000**. The long-term management endowment fund is estimated initially for the purpose of providing Security to ensure implementation of HM land management; actual costs will be calculated by Permittee as described in Condition 9.3.2.

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 DFG as described in Condition 9.4, estimated at **$150,000**.

9.1.6. Restoration of on-site temporary effects to Covered Species habitat as described in Condition 9.6, calculated at $1,200/acre for 8.47 acres: **$10,164**.

9.2. Habitat Acquisition and Protection. To provide for the acquisition and protection of the HM Lands, the Permittee shall:

9.2.1. Timing of Acquisition. Ensure that at all times the ratio comprised of the acres of permanently protected and managed HM Lands compared to the acres of ground disturbance caused by Project activities shall equal or exceed the total HM land requirement for the associated Project phase. The HM Lands requirement for each phase of the Project shall be proportionate to the total impacted acreage for that phase as shown in Table 2.

9.2.2. Fee Title/Conservation Easement. Transfer fee title to the HM Lands to DFG pursuant to terms approved by DFG. Alternatively, a DFG-approved non-profit organization qualified pursuant to California Government Code section 65965 or DFG-approved public agency (collectively "approved entity") may hold fee title or act as grantee for a conservation easement over the HM Lands. If an approved entity holds fee title, Permittee shall record a conservation easement in favor of DFG or a DFG-approved entity as grantee. If an approved entity holds a conservation easement, DFG shall be named third-party beneficiary.

The Permittee shall obtain DFG approval of any conservation easement before its recordation.

9.2.3. HM Lands Approval. Obtain DFG approval of the HM Lands before acquisition and/or transfer of the land by submitting, at least three months before acquisition and/or transfer of the HM Lands, a formal Proposed Lands for Acquisition Form (see Attachment 2A) identifying the land to be purchased or property interest conveyed to an approved entity as mitigation for the Project's impacts on Covered Species.

9.2.4. HM Lands Documentation. Provide a recent preliminary title report, initial hazardous materials survey report, and other necessary documents (see Attachment 2B). All documents conveying the HM Lands and all conditions of title are subject to the approval of DFG, and if applicable, the Wildlife Conservation Board and the Department of General Services.

9.2.5. Land Manager. Designate an interim and long-term land manager. Permittee may select the conservation easement grantee, land owner, or other party as the land manager. Documents related to land management shall identify the land manager. Permittee shall notify DFG of any subsequent changes in the land manager within 30 days of the change. If DFG will hold fee title to the mitigation land, DFG will also act as long-term land manager unless otherwise specified.

9.2.6. Start-up Activities. Provide for the implementation of start-up activities, including the initial site protection and enhancement of HM Lands, once the HM Lands have been approved by DFG. Start-up activities include, at a minimum: (1) preparing a final long-term management plan for DFG approval (see http://www.dfg.ca.gov/habcon/conplan/mitbank/ and Condition 9.2.8); (2) conducting a baseline biological assessment and land survey report within four months of recording or transfer; (3) developing and transferring Geographic Information Systems (GIS) data if applicable; (4) establishing initial fencing; (5) conducting litter removal; (6) conducting initial habitat restoration or enhancement, if applicable; and (7) installing signage.

9.2.7. Interim Management (Initial and Capital). Provide for the interim management of the HM Lands. The interim management period shall be a minimum of three years from the date of HM land acquisition and protection and full funding of the Endowment and includes expected annual management (described in the final management plan) following start-up activities. Interim management period activities include fence repair, continuing trash removal, site monitoring, vegetation

management, removal of structures, and restoration of disturbed habitat. Permittee shall either (1) provide a security for the 3-year interim management amount that the land owner, Permittee, or land manager agrees to manage at their own expense, (2) establish an escrow account with instructions to pay the land manager annually in advance, (3) establish a short-term enhancement sub-account with the National Fish and Wildlife Foundation (NFWF) for annual payment to the land manager, or (4) establish a short-term enhancement account with DFG for annual payment to the land manager.

9.2.8. Long-term Management Plan. Permittee shall prepare a long-term management plan (HM Lands Management Plan) for the HM Lands that describes Permittee's proposed ongoing habitat enhancement activities, restoration projects, predator and invasive species control activities, and other appropriate management actions. The HM Lands Management Plan shall be submitted to DFG for approval within 12 months of issuing the ITP. The HM Lands Management Plan shall include all of the required components of the Resource Management Plan (see Condition 9.5) and may be incorporated into or amended to that document. If HM Lands are adjacent to lands owned by or acquired on behalf of the East Contra Costa County Habitat Conservancy (Conservancy), Permittee shall work with the Conservancy to develop cooperative management practices, access provisions, and other management terms that are acceptable to both parties.

9.3. Endowment Fund. After obtaining DFG approval of the HM Lands, Permittee shall provide long-term management funding for the in-perpetuity management of the HM Lands by establishing a long-term management fund (Endowment Fund). The Endowment Fund is a sum of money, held in a DFG-authorized trust fund that provides funds for the perpetual management, maintenance, monitoring, and other activities on the HM Lands consistent with the management plan(s) required by Conditions 9.2.6 and 9.2.8. Endowment Fund as used in this ITP shall refer to the endowment deposit and all interest, dividends, other earnings, additions and appreciation thereon.

9.3.1. Identify an Endowment Fund Manager. The Endowment Fund shall be held by NFWF, DFG, or another entity approved by DFG (Endowment Fund Manager).

9.3.2. Calculate the Endowment Funds Deposit. After obtaining DFG approval of the HM Lands, long-term management plan, and Endowment Fund Manager, Permittee shall prepare a Property Analysis Record (PAR) or PAR-equivalent analysis (hereinafter "PAR") to calculate the amount of funding necessary to ensure the long-term management of the HM

Lands (Endowment Deposit Amount). The Permittee shall submit to DFG for review and approval the results of the PAR before transferring funds to the Endowment Fund Manager.

9.3.3. Capitalization Rate and Fees. Permittee shall obtain the capitalization rate from the selected Endowment Fund Manager for use in calculating the PAR and adjust for any additional administrative, periodic, or annual fees.

9.3.4. Endowment Buffers/Assumptions. Permittee shall include in PAR assumptions the following buffers for endowment establishment and use that will substantially ensure long-term viability and security of the Endowment Fund:

- 10 Percent Contingency. A 10 percent contingency shall be added to each endowment calculation to hedge against underestimation of the fund, unanticipated expenditures, inflation, or catastrophic events.

- Three Years Delayed Spending. The endowment shall be established assuming spending will not occur for the first three years after full funding.

- Non-annualized Expenses. For all large capital expenses to occur periodically but not annually such as fence replacement or well replacement, payments shall be withheld from the annual disbursement until the year of anticipated need or upon request to Endowment Fund Manager and DFG.

9.3.5. Transfer Long-term Endowment Funds. Permittee shall transfer the long-term endowment funds to the Endowment Fund Manager upon DFG approval of the Endowment Deposit Amount identified above. The approved Endowment Fund Manager may pool the Endowment Fund with other endowments for the operation, management, and protection of HM Lands for local populations of the Covered Species but shall maintain separate accounting for each Endowment Fund.

9.4. Administrative Expenses. Permittee shall reimburse DFG for all reasonable expenses incurred by DFG such as transaction fees, 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 DFG.

9.5. Resource Management Plan. Permittee shall submit a draft of the Resource Management Plan to DFG and USFWS for review in December 2011 or prior to implementing any additional or expanded O&M activities, whichever occurs first. Permittee shall incorporate any changes recommended by DFG and USFWS into the Resource Management Plan. The Resource Management Plan shall be written for use by maintenance staff and contractors and shall contain clearly stated, measurable management goals, species identification procedures, species and habitat avoidance/minimization conditions, detailed management procedures, and long-term monitoring strategies that will provide Permittee with data about the success of management activities. Permittee shall hold a two-hour training for all CCWD watershed maintenance staff to familiarize them with the contents of the final document. The Resource Management Plan should also include a tracking mechanism that will allow Permittee to record data pertaining to individual management actions (activity performed, names of staff conducting each activity, the number of acres and type of habitat affected, avoidance measures employed, any incidents of take resulting from the activity, etc.). Each management activity shall be approved in advance by the Watershed Manager (the person responsible for coordinating maintenance activities within the Project site) or her/his designee and shall be reviewed (desk or field review, as appropriate) by the Watershed Manager or designee upon completion. Data pertaining to ongoing O&M activities shall be provided to DFG upon request.

9.6. Restoration of Temporarily Impacted Areas. Permittee shall restore on-site the 8.47 acres of Covered Species habitat that will be temporarily disturbed as a result of Phase 1 to pre-Project or better conditions. Habitat temporarily disturbed under Phase 3 (up to 12 acres of disturbance annually) will be restored to pre-Project or better conditions immediately after completion of Covered Activities. Permittee shall restore the natural contours of temporarily impacted lands and shall revegetate all areas disturbed by the project with an appropriate assemblage of native vegetation suitable to the area. Permittee shall append its watershed management plan to incorporate five years of post-restoration maintenance and monitoring to ensure that restoration meets DFG-approved success criteria. Within three months of issuance of this ITP, the Permittee shall prepare a Vegetation Restoration Plan to facilitate revegetation of the 8.47 acres of temporary construction disturbance on-site, and shall ensure that the Plan is successfully implemented by the contractor. 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. Plantings undertaken between May 1 and October 15 shall include regular watering to ensure adequate growth. The following minimum success criteria shall apply:

- All plantings shall have a minimum of 80% survival at the end of five years.

- Plantings shall attain 70% groundcover after three years and 75% coverage after five years.

If the survival and/or cover requirements are not meeting these goals, Permittee is responsible for replacement planting, additional watering, weeding, invasive exotic eradication, or any other practice to achieve these requirements. Replacement plants shall be monitored with the same survival and growth requirements for five years after planting.

Revegetation monitoring shall be conducted annually for a period of five years to determine whether these goals have been met. If the survival and/or cover requirements are not projected to meet these goals based on annual monitoring, Permittee is responsible for replacement planting, additional watering, weeding, invasive exotic eradication, or any other practice(s) that would to achieve these requirements.

9.7. Wetland Preservation, Enhancement, Restoration and/or Creation. Prior to initiation of Phase 2 activities, Permittee shall preserve, enhance, restore and/or create[10] a minimum of 20.01 acres of wetland habitat to compensate for impacts to 3.35 acres of impacts to wetland habitat. The following conditions shall apply:

9.7.1. Permanent Protection. All preserved, enhanced, restored and created wetland habitat on the HM Lands shall be protected and managed in perpetuity.

9.7.2. Consistency with Wetland Mitigation Plan. Preservation, enhancement, restoration and creation activities shall be consistent with the Los Vaqueros Reservoir Expansion Project Wetland Compensatory Mitigation Plan (Wetland Mitigation Plan) prepared on behalf of Permittee by ESA in January 2011.

9.7.3. On-site Wetland Creation. Following completion of excavation activities at the primary core borrow area, a four-acre seasonal wetland shall be created on-site within the primary core borrow area. Permittee shall grade appropriate topographical contours, amend soils if necessary to

[10] "Preservation" refers to protection of intact, high-quality habitat. "Enhancement" refers to management of intact but degraded habitat to increase the biological value of that habitat. "Restoration" refers to the process of re-establishing a particular habitat type at a site where the habitat historically occurred. "Creation" refers to construction of habitat in a location where the habitat did not historically occur but where such habitat would provide important habitat value in light of changed landscape conditions.

enhance water retention, and revegetate the wetland with an appropriate assemblage of native vegetation suitable to the area. Permittee shall conduct five years of maintenance and monitoring to ensure that the wetland creation meets DFG-approved success criteria.

9.7.4. Off-site Wetland Preservation/Enhancement. Permittee shall preserve and enhance a minimum of 14.73 acres of wetland habitat on HM Lands.

9.7.5. Off-site Wetland Restoration/Creation. Permittee shall restore and/or create at least 1.28 acres of wetland habitat on the HM Lands at a location approved by DFG.

9.8. Riparian Preservation, Enhancement, Restoration and/or Creation. Permittee shall also preserve, enhance, restore and/or create a minimum of 10.87 acres of riparian habitat on the HM Lands to mitigate 4.11 acres of impacts to valley/foothill riparian habitat. All preserved, enhanced, restored and created habitat shall be protected and managed in perpetuity. Mitigation sites and designs shall be chosen to mimic the hydrology and vegetation of impacted habitats as closely as possible. The planting, monitoring and success criteria in Condition 9.6 shall be used to determine whether Permittee has met the requirements of this condition. Permittee shall conduct five years of maintenance and monitoring to ensure that the wetland creation meets DFG-approved success criteria.

9.9. Transfer of Wetland Restoration Rights. After Permittee completes preservation, enhancement, restoration and creation activities on HM lands, Permittee shall make up to five acres of land on HM Lands, Assessor Parcel Numbers 007020002, 007020003 and 007010007 (the Evergreen property), available to the East Contra Costa Habitat Conservancy for wetland enhancement and restoration, provided that the wetland enhancement and restoration activities do not conflict with the terms of this ITP. The Conservancy shall fund wetland enhancements and restoration and ongoing maintenance of the enhanced habitat features. If the Conservancy declines to use this site for wetland enhancement and restoration or does not pursue wetland enhancement within a period of ten years, other parties, including Permittee, have the option, but not the obligation, to enhance and restore wetlands on the Evergreen Property.

10. Performance Security:

Permittee may proceed with Covered Activities only after Permittee has ensured funding (Security) to complete any activity required by Condition 9 that has not been

completed before Covered Activities begin. Permittee shall provide Security as follows:

10.1. Security Amount. The Security for each phase of the Project, based on the cost estimates identified in Condition 9.1, above, and detailed in Tables 2 and 3, shall be as follows:

- The Security for Phase 1 shall be in the amount of **$7,599,905**;
- The Security for Phase 2 shall be in the amount of **$40,401,097**;
- The Security for Phase 3 shall be in the amount of **$2,949,162**;

Land acquisition costs shown in Table 3 may be subtracted from the total security amount for each Phase if proof that sufficient HM Lands have been acquired to offset impacts associated with the Phase is provided to DFG prior to initiation of Covered Activities for that Phase.

10.2. Security Form. The Security shall be in the form of an irrevocable letter of credit (see Attachment 3) or another form of Security approved in advance in writing by DFG's Office of the General Counsel.

10.3. Security Timeline. The Security for Phase 1 must be paid at least 7 days prior to the commencement of Covered Activities, and securities for Phases 2 and 3 must be paid at least 30 days prior to the commencement of Covered Activities for each of those Phases. The estimated Phase costs are shown in Table 3 (see Condition 9).

10.4. Security Holder. The Security shall be held by DFG or in a manner approved in advance in writing by DFG.

10.5. Security Transmittal. If DFG holds the Security, Permittee shall transmit it to DFG with a completed Mitigation Payment Transmittal Form (see Attachment 4) or by way of an approved instrument such as escrow, irrevocable letter of credit, or other.

10.6. Security Drawing. The Security shall allow DFG to draw on the principal sum if DFG, in its sole discretion, determines that Permittee has failed to comply with the Conditions of Approval of this ITP.

10.7. Security Release. The Security (or any portion of the Security then remaining) shall be released to Permittee after all secured requirements have been met as evidenced by:

- Timely submission of all required reports;

- An on-site inspection by DFG; and
- Written approval from DFG.

Even if Security is provided, Permittee must complete the required acquisition, protection and transfer of all HM Lands (for all phases of the Project) and submit any required conservation easements for DFG approval no later than 18 months from the effective date of this ITP. Permittee shall ensure that any required conservation easements are approved by DFG and recorded no later than 36 months from the effective date of this ITP. DFG may require 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 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 regulations and law. This ITP may also be amended without the concurrence of Permittee as required by law, including if DFG determines that continued implementation of the Project under existing ITP conditions would jeopardize the continued existence of the Covered Species or that Project changes or changed biological conditions necessitate an ITP amendment to ensure that impacts to the Covered Species are minimized and fully mitigated.

Stop-Work Order:

DFG may issue Permittee a written stop-work order to suspend any activity covered by this ITP for an initial period of up to 25 days to prevent or remedy a violation of any ITP condition(s) (including but not limited to failure to comply with reporting, monitoring, or habitat acquisition obligations) or to prevent the illegal take of an endangered, threatened, or candidate species. Permittee shall comply with the stop-work order immediately upon receipt thereof. DFG may extend a stop-work order under this provision for a period not to exceed 25 additional days, upon written notice to the Permittee. DFG may commence the formal suspension process pursuant to California Code of Regulations, Title 14, section 783.7 within five working days of issuing a stop-work order. Neither the Designated Biologist nor DFG shall be liable for any costs incurred in complying with the Conditions of Approval, including stop-work orders issued by DFG.

Compliance with Other Laws:

This ITP contains DFG's requirements for 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 state, federal, and local laws.

Notices:

Permittee shall deliver the 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 Game
Attention: CESA Permitting Program
1416 Ninth Street, Suite 1260
Sacramento, CA 95814

Written notices, reports and other communications relating to this ITP shall be delivered to DFG by registered first class mail at the following addresses, or at addresses DFG may subsequently provide the Permittee. Notices, reports, and other communications shall reference the Project name, Permittee, and ITP Number (2081-2011-002-03) in a cover letter and on any other associated documents.

Original cover with attachments to:

Carl Wilcox, Regional Manager
Bay Delta Region
California Department of Fish and Game
7329 Silverado Trail
Napa, CA 94558
Telephone (707) 944-5518
Fax (707) 944-5563

Copy of cover without attachments to:

Office of the General Counsel
California Department of Fish and Game
1416 Ninth Street, 12th Floor
Sacramento, CA 95814

And:

Habitat Conservation Planning Branch
California Department of Fish and Game
1416 Ninth Street, Suite 1260
Sacramento, CA 95814

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

Randi Adair, Environmental Scientist
Bay Delta Region
California Department of Fish and Game
7329 Silverado Trail
Napa, CA 94558
Telephone (707) 944-5596
Fax (707) 944-5563

Compliance with CEQA:

DFG's issuance of this ITP is subject to CEQA. DFG is a responsible agency pursuant to CEQA with respect to this ITP because of prior environmental review of the Project by the lead agency, CCWD Board of Directors. (See generally Pub. Resources Code, §§ 21067, 21069). The lead agency's prior environmental review of the Project is set forth in the Los Vaqueros Reservoir Expansion Project Environmental Impact Statement/Environmental Impact Report (EIR/EIR) (State Clearinghouse Number 2006012037) dated February 2010 that the CCWD Board of Directors certified for the Los Vaqueros Reservoir Expansion Project on April 1, 2010. At the time the lead agency certified the EIS/EIR and approved the Project it also adopted all mitigation measures described in the EIS/EIR as conditions of Project approval.

In fulfilling its obligations as a responsible agency, DFG's obligations pursuant to CEQA are more limited than those of the lead agency. DFG, in particular, is responsible for considering only the effects of those Project activities that it is required by law to carry out or approve, and mitigating or avoiding only the direct or indirect environmental effects of those parts of the Project that it decides to carry out, finance, or approve [Pub. Resources Code, § 21002.1, subd. (d); CEQA Guidelines, §§ 15041, subd. (b), 15096, subds. (f)-(g)].[11]. Accordingly, because DFG's exercise of discretion is limited to issuance of this ITP, DFG is responsible for considering only the environmental effects that fall within its permitting authority pursuant to CESA.

This ITP, along with DFG's CEQA findings for this ITP and Project, which are available as a separate document, provide evidence of DFG's consideration of the lead agency's EIS/EIR for the Project and the environmental effects related to issuance of this ITP [CEQA Guidelines, § 15096, subd. (f)]. DFG 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, DFG finds adherence to and implementation of the Conditions of Project Approval adopted by the lead agency, as well as adherence to and implementation of the Conditions of Approval

[11] The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

imposed by DFG through the issuance of this ITP, will avoid or reduce to below a level of significance any such potential effects. DFG 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 DFG's compliance with the specific findings requirements set forth in CESA and related regulations. [Fish and Game Code § 2081, subs. (b)-(c); Cal. Code Regs., tit. 14, §§ 783.4, subds, (a)-(b), 783.5, subd. (c)(2)].

DFG finds 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 of 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) permanent habitat protection and management; (2) establishment of avoidance zones; (3) worker education; and (4) Monthly Compliance Reports. DFG 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 DFG's estimate of the acreage required to provide for adequate compensation. Based on this evaluation, DFG determined that the protection and management in perpetuity of 5,079 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 because, in part, this ITP provides for adequate funding to monitor compliance with the Mitigation Monitoring and Reporting Program as discussed further below;

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 by, in part, before commencing Covered Activities in each Project phase, Permittee will provide Security in the form of an irrevocable letter of credit or another form of Security approved in advance in writing by DFG's Office of the General Counsel; and

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 including the EIS/EIR and Biological Opinion 81420-2009-F-0201, and this finding includes consideration of the species' capability to survive and reproduce, 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. DFG's finding is based, in part, on DFG's express authority to amend the terms and conditions of this ITP without concurrence of Permittee as necessary to avoid jeopardy and as required by law. Furthermore, the permanent and temporary loss of Covered Species Habitat would be mitigated by the restoration of temporarily impacted acreage and the permanent conservation and management of approximately 5,079 acres of HM Lands; including the preservation, enhancement, restoration, and/or creation of at least 20.1 acres of wetland habitat.

Attachments:

FIGURE 1	Map of Project Site
TABLE 1	Habitat Impacts, Phases 1 and 2
TABLE 2	Estimated HM Land Requirement by Phase of Project
TABLE 3	Security Requirements by Phase of Project
ATTACHMENT 1	Mitigation Monitoring and Reporting Program
ATTACHMENT 2A, 2B	Proposed Lands for Acquisition Form; Habitat Management Lands Checklist
ATTACHMENT 3	Letter of Credit Form
ATTACHMENT 4	Mitigation Payment Transmittal Form

ISSUED BY THE CALIFORNIA DEPARTMENT OF FISH AND GAME

on 3/1/11.

FOR Scott Wilson

Carl Wilcox, Regional Manager
Bay Delta Region

ACKNOWLEDGMENT

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

By: Jerry Brown Date: 3/2/11

Printed Name: Jerry Brown Title: General Manager

APPROVED AS TO FORM

DISTRICT COUNSEL