

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

California Endangered Species Act Incidental Take Permit No. 2081-2018-016-02

SOUTH SACRAMENTO HABITAT CONSERVATION PLAN

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

Permittee: County of Sacramento

Principal Officer: Leighann Moffitt, Planning Director

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Permittee: City of Rancho Cordova

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Permittee: City of Galt

Principal Officer: Chris Erias, Community Development Director

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²The definition of an endangered, threatened, and candidate species for purposes of CESA are found in Fish and Game

Code sections 2062, 2067, and 2068, respectively.

¹Pursuant to Fish and Game Code section 86, "take' means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." (See also *Environmental Protection Information Center v. California Department of Forestry and Fire Protection* (2008) 44 Cal.4th 459, 507 [for purposes of incidental take permitting under Fish and Game Code section 2081, subdivision (b), "take' ... means to catch, capture or kill"].)

Permittee: Sacramento County Water Agency

Principal Officer: Michael Peterson, Agency Engineer

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Permittee: Capitol Southeast Connector Joint Powers Authority

Principal Officer: Derek Minnema, Executive Director

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Permittee: South Sacramento Conservation Agency

Principal Officer: Kim Hudson, Executive Director

Phone Number: (916) 874-5849
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The above-named permittees are each individually referred to as a Permittee and collectively as Permittees for purposes of this ITP.

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 each Permittee on the last page of this ITP and returned to CDFW's Habitat Conservation Planning Branch at the address listed in the Notices section of this ITP. This ITP's authorization to take the Covered Species shall expire **50 years** from the date it is signed by CDFW so long as the Permittees satisfies the 10-year review process described in the Permit Term section below.

Permit Term:

Permittees are required to prepare and submit to CDFW a 10-year compliance report at least 180 days (6 months) prior to each 10-year anniversary of the signature of this ITP. Permittee shall meet and confer with CDFW within 60 days after the 10-year compliance report submittal to discuss the report and any potential ITP compliance issues. Within 30 days following that meeting, if CDFW determines that there are any outstanding ITP compliance issues, CDFW shall provide a letter describing the outstanding ITP compliance issues and what actions may be necessary for Permittees to remain in or come into compliance. Within 30 days of receiving CDFW's letter, Permittees shall provide CDFW a response in writing listing actions taken or proposed to show how the compliance issues will be resolved. If

Permittees fail to do so, CDFW may consider revocation or suspension of the permit as provided under California Code of Regulations, Title 14, section 783.7.

Permittees shall include in their 10-year compliance report at a minimum the following:

- 1. A list of projects completed over the prior 10-year period, including projects that are currently in progress;
- 2. Acreages of impacts to Covered Species habitat(s) over the last ten years, along with GIS mapping depicting impacts to Covered Species habitat(s) over the last ten years;
- 3. Acres of Covered Species Modeled Habitat that was preserved for projects in the last 10-years;
- 4. Number of take of individual Covered Species, if available;
- 5. Number of and location of active Swainson's hawk (SWHA) nest trees removed over the last 10 years;
- 6. Any new information relevant to the conservation of the Covered Species and/or to the South Sacramento Habitat Conservation Plan (SSHCP) Area;
- 7. A comprehensive summary and assessment of compliance with the Stay-Ahead provision (ITP Section 9.8.2) to assure that mitigation requirements of the Conservation Strategy stay ahead of Covered Activity impacts.

Notwithstanding the expiration date on the take authorization provided by this ITP, Permittees' obligations pursuant to this ITP do not end until CDFW accepts as complete the Permittees' Final Mitigation Report required by Condition of Approval 7.4 of this ITP.

Project Location:

The South Sacramento Habitat Conservation Plan (Project) includes 317,655 acres and is located in the southern portion of Sacramento County, which contains portions of unincorporated Sacramento County, Galt, and the southern half of Rancho Cordova (Plan Area) (Attachment 1, Location Map). Parts of southern Sacramento County, including the community of Rancho Murrieta, the sovereign lands held in trust by the United States for the Miwok Tribe, and much of the Delta are not included within the Plan Area.

The Plan Area is bordered to the east by the counties of El Dorado and Amador, to the South by San Joaquin County, to the north by Highway 50, and to the West by the city of Elk Grove and the Solano and Yuba County lines.

The SSHCP establishes eight Preserve Planning Units (PPUs) that encompass areas where Covered Species resources are present, and where habitat preservation will occur. PPUs were delineated to capture specific habitat or agricultural land cover types or areas identified as being important for a specific suite of species. The majority of PPU 1, PPUs 2 through 4 and 8 are within the Urban Development Area (UDA). The remaining area of PPU 1 and the total area of PPUs 5, 6, and 7 are outside the UDA. A 50-foot minimum preserve setback buffer zone will be left in its natural state and function as a transition area between intensive

development and preserves.

The total Plan Area is comprised of acreage in the following regions (Table 1 below):

Table 1. Plan Area Acreage Location by Jurisdiction

Jurisdiction	Acreage
Sacramento County (unincorporated)	307,142
City of Galt	2,009
City of Rancho Cordova	8,504
Total Acres in the Plan Area	317,655

Project Description:

The Project is a multi-jurisdictional, multi-species, 50-year HCP implementation that will protect 7 State listed species through minimizing and mitigating impacts on those species and their habitats. The final SSHCP was adopted on October 29, 2018. All SSHCP references are based on this version of the Final SSHCP. The Project will allow for the development of 67,618-acres for urban development within the UDA included within the Plan Area. The UDA is defined as all lands within the Sacramento County Urban Services Boundary (USB) that are also within the Plan Area (this includes lands within the Rancho Cordova city limits that are within the Plan Area); and all lands within Galt's city limits and within the City of Galt's sphere of influence. The USB was defined by Sacramento County as the maximum boundary where they are willing to provide future urban services, such as sanitary sewer and water supply. The scope of work outside of the UDA is limited to infrastructure and transportation projects.

The Project includes the development, operation, and maintenance of new urban development structures, public facilities, and utilities; preserve management and monitoring; habitat enhancement, re-establishment, and establishment; species surveys and research; adaptive management activities; and all other activities (collectively referred to as Covered Activities) as detailed in the ITP and shown in Table 2 below that are anticipated in the Plan Area.

The Covered Activities will be implemented within the UDA and include activities and projects related to urban development and associated infrastructure on all lands zoned or ultimately planned/contemplated for urban development in the adopted General Plans of Sacramento County, and cities of Galt and Rancho Cordova. Covered Activities also include the Capital Southeast Connector Project and other transportation, water, and wastewater development projects in the UDA. In-stream maintenance in the UDA, including vegetation and sediment removal, is also a Covered Activity, however these projects will also require compliance with the Fish and Game Code section 1600 et seq. Urban Development Covered Activities will not occur outside of the UDA boundary. Covered Activities allowed outside the UDA are limited to planned infrastructure projects such as roadway improvements and widening, intersection

improvements, construction of new recycled water pipelines, and maintenance of existing wastewater projects that provide sewer service to existing communities outside of the UDA.

The Covered Activities would also include implementation of the SSHCP Conservation Strategy (ITP Attachment 12), including management and monitoring of the proposed SSHCP Preserve System, habitat enhancement and re-establishment/establishment, species surveys, monitoring, research and adaptive management activities for the Preserve located inside and outside the UDA. The SSHCP Conservation Strategy is designed to provide mitigation for all unavoidable SSHCP Covered Activity effects (SSHCP Chapter 6), including direct and indirect, temporary and permanent, and cumulative effects to Covered Species modeled habitats and Covered Species individuals. Covered Activities will impact 33,497 acres of Covered Species modeled habitat. The Permit Term will allow for the full and successful implementation of the planned SSHCP Covered Activities and the proposed SSHCP Conservation Strategy, including the establishment of an interconnected SSHCP Preserve System in the Plan Area, and the development and implementation of the SSHCP Monitoring and Management Programs. The Conservation Strategy proposes to protect 34,495 acres of Covered Species habitat and establish another 1,787 of Covered Species habitat.

Table 2. Covered Activities

Covered Activity	Description
Residential, Commercial, and Industrial Structures	Construction, use, and maintenance of urban, suburban, and agricultural housing, retail centers, office buildings, factories, warehouses, and associated infrastructure. Also includes public service and cultural facilities such as new police and fire stations, convention centers, theaters, museums, hospitals, schools, colleges, libraries, and parking lots. Maintenance activities include the inspection, cleaning, rehabilitation, repair, and/or replacement of buildings, structures, and facilities.
Urban Park and Recreation Facilities	Construction and maintenance of recreational facilities such as regional parks, neighborhood parks, sports fields and facilities, indoor/outdoor sports complexes, recreation trails, community trails, playgrounds, golf courses, campgrounds, nature centers, racetracks, and associated infrastructure, including roads, bridges, restrooms, and parking areas.
Urban Water Supply Facilities	Construction and installation of new potable and recycled water supply facilities (e.g., pumping stations; water treatment facilities; storage facilities; reclamation facilities; and groundwater wells, valves, gates, weirs, and pipelines), extension of existing water pipelines, and removal and maintenance of existing water supply facilities.
Public and Private Utilities	Construction, replacement, augmentation, and maintenance of electric transmission utilities including underground and aboveground electric transmission and distribution lines, substations, access road maintenance, telecommunications lines,

Table	2.	Covere	d /	Acti	vities
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Covered Activity	Description
	natural gas distribution pipelines, and urban solar energy Projects. Other energy-generating Projects within the UDA may also be determined to be Covered Activities, provided they meet the criteria established for Covered Activities not specifically described in the Project.
Solid Waste Management Facilities	Construction, operation, maintenance, and decommissioning of new transfer stations and operation of new recycling stations within the UDA. Operation and maintenance of existing groundwater extraction and monitoring wells at Kiefer Landfill, as well as the expansion and decommissioning of existing landfills. This Covered Activity would not include operation of landfills.
Wastewater Facilities	Construction, installation, operation, and maintenance of all wastewater facilities in the UDA (e.g., sewage force mains, pumping stations, access facilities, treatment facilities, pipelines, recharge ponds, pipelines, and storage facilities) and all activities that support the provision of wastewater services including collection, diversion, delivery, distribution, conveyance, storage, treatment, and discharge. The extension, removal, replacement, abandonment, and maintenance of existing facilities/pipelines are also included, as are recharge ponds, groundwater wells, and operation and maintenance of existing wastewater Projects in the rural communities of Walnut Grove and Courtland outside of the UDA.
Urban Transportation	Construction, realignment, widening, extension, abandonment, and removal of public and private transportation infrastructure (e.g., roadways, railroads, culverts, bridges, bike paths, street lights, roadside drainage, intersections/interchanges, sidewalks, and traffic signals), as well as other activities necessary to implement adopted transportation or capital improvement plans of the Permit Applicants. In-stream activities for transportation improvements including bridges, culverts, or other stream-crossing facility construction, replacement, and repair.
Flood Control and Stormwater Management in the UDA	All activities that support flood control as described in water drainage, capital improvement, flood control, and storm drain master plans for Sacramento County and Galt and Rancho Cordova. Construction of new facilities and maintenance of new and existing facilities. Stormwater abatement and treatment facilities could include detention basins, stormwater channels, pumping stations, and natural or realigned stream channels. Operations and maintenance activities including vegetation control, silt/sedimentation removal, erosion control, and stream bank stabilization Projects.
Stream Channel Modification	The permanent deepening, widening, and rerouting of existing stream channels during urban development, including that

Table 2.	Covered	Activities
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Covered Activity	Description
	associated with construction of water supply, wastewater, and urban transportation infrastructure.
Master Plans Known at the Time of the Project	Urban development associated with five development Projects within the UDA (Arboretum, Cordova Hills Specific Plan, Jackson Township Moster Plan, New Bridge Specific Plan, and SupCrock
Preparation	Township Master Plan, NewBridge Specific Plan, and SunCreek Specific Plan) that were preparing land use plans during project preparation. These five master plans were designed to comply with project requirements, including compliance with the Covered Activity descriptions and the avoidance, minimization, and/or mitigation measures required by the HCP.
Capital Southeast Connector	Construction, operation, and maintenance of the Capital Southeast Connector, including but not limited to initial vegetation clearing, grading of the Project footprint, pouring of concrete or asphalt, excavation, staging of equipment and materials, compacting soil, and landscaping, as well as operation and maintenance. During construction it may be necessary to temporarily divert stream channels using appropriate measures to avoid or minimize impacts to stream habitat.
Mather Airport Master Plan Development Projects	Development Projects at Mather Airport including the maintenance, replacement, and improvements of existing airfields (runway extensions, new taxiways, and aprons) and construction of new airfields, aircraft facilities (aircraft storage facilities, aircraft maintenance facilitates, and jet fuel storage and dispensary facilities), and commercial facilities.
Mining Projects	Mining activities including surface extraction of rock or mineral resources and construction of associated infrastructure, buildings, and facilities (e.g., surface mining pits, processing sites, and access roads), and construction and operation of detention basins. A total of five surface mines (500 acres) are anticipated to occur within the UDA. The reclamation of previously mined land is also included as a Covered Activity.
Trails	Construction, operation, and maintenance of paved bike/pedestrian trails may be sited within a Preserve Setback under certain conditions.
Low-velocity Bio-Retention Swales	Construction, operation, and maintenance of a bio-retention swale next to trails designed to hold and remove rainwater runoff from trails, which may be sited within a Preserve Setback under certain conditions.
Fencing	Installation of post and cable, split rail, or other open fencing adjacent to trails within the setback areas, which may be sited within a Preserve Setback under certain conditions.
Interpretive Signs and Kiosks	Construction, operation, and maintenance of safety and directional signs and kiosks intended to educate trail users about the benefits of the preserve and the importance of the setback to the resources that they are protecting.

Table 2	. Covered	Activities
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Covered Activity	Description
Fire Breaks	Construction and maintenance of fire breaks, including shallow
	tilling or scraping vegetation if required by local fire regulations.
Benches, Shade Structures,	Installation of benches, shade structures, and trash receptacles
and Shade Trees	along trails if on the outer edge of the trail farthest from the
	preserve, which may be sited within a Preserve Setback under
	certain conditions.
Trails	Construction and maintenance of permeable or semi-permeable
	hiking trails, paved trails, and their associated infrastructure.
Crossings Perpendicular to	New roads, bike/pedestrian trails, railroads, sewer/water pipelines,
the Stream	and public utility transmission lines that cross perpendicular to
01	streams.
Stream Bank Stabilization	Construction of in-stream structures for erosion control and bank
Projects	stabilization.
Fencing	Installation of post and cable, split rail, or other open fencing along
Danahas Chada Ctrusturas	trails to keep users on the trail and out of the Stream Setbacks.
Benches, Shade Structures, and Shade Trees	Installation of benches, shade structures, and trash receptacles
and Shade Trees	along trails if located on the outer edge of the trail farthest from the creek.
Riparian Re-Establishment	Actions associated with re-establishment or establishment of
or Establishment	riparian vegetation.
Outfalls	Construction and operation of outfall structures that allow the
Oddans	discharge of stormwater into streams from adjacent urban areas.
Flood Control Structures and	Construction of detention basins, bio-retention swales, and water
Stormwater Management	quality facilities that are designed to be compatible with the habitat
Ctomwater management	and wildlife values of the adjacent stream corridor.
Septic Systems	Existing subsurface sewage disposal systems. Note: The operation,
	maintenance, or replacement of entitled or currently existing
	subsurface sewage disposal systems are not Covered Activities.
Nonconforming Structures	Existing nonconforming structures and nonconforming uses of land
	subject to specific requirements.
General Activities	Transportation Projects consistent with the Circulation Element of
	Sacramento County General Plan. Construction, operation, and
	maintenance of roadways are Covered Activities. See Chapter 5 of
	the SSHCP for a complete list of roadway Projects.
Rural Collector Road	Roadway widening, increase of shoulder width, and drainage
Improvements (two-lane rural	improvements.
roads)	
Arterial Road Improvements	Roadway widening.
(four-lane roadways)	
Road Realignment Projects	Rerouting/constructing existing roadways to facilitate more direct or
	new road connections.
Road Interchange Projects	Construction of four planned interchange Projects.
Sacramento County	Construction and maintenance of facilities (e.g., pumping stations,
Agriculture and Habitat	pipelines, recycled water facilities, groundwater recharge facilities)
Lands Recycled Water	associated with the South County Agricultural and Habitat Lands

Table 2.	Covered	Activ	ities
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Covered Activity	Description
Project (South County Agricultural Program)	Recycled Water Project, plus a small section of pipeline that would provide recycled water to the existing Bartley-Cavanaugh Golf Course.
Preserve Management and Monitoring	Construction, maintenance, and use of facilities needed for preserve management and monitoring, including but not limited to roads, bridges, culverts, fences, gates, wells, stock tanks, and stock ponds.
Habitat Enhancement, Re- Establishment, and Establishment	Enhancement actions including but not limited to improvement of the hydrologic regime of a site to benefit a Covered Species, and vegetation management activities include installing perching poles and bat houses or other nesting/roosting improvements. Habitat reestablishment and establishment actions including but not limited to earth moving; regrading or recontouring of a site; restoring the past hydrologic regime or creating a hydrologic regime; and seeding or planting herbaceous vegetation, trees, shrubs, grasses, or other vegetation.
Species Surveys, Monitoring, Research, and Adaptive Management Activities	Species surveys conducted on preserve lands and on properties identified for potential acquisition, intensive management of habitat for research (e.g., new grazing regimes, controlled burns, cycling crop harvests), and other actions associated with adaptive management activities.
Water Supply for Livestock	New wells and associated infrastructure to provide water for livestock that are used to manage grassland vegetation as part of a preserve's management plan.
Groundwater Monitoring and Extraction Wells	Monitoring of existing and construction of new extraction wells for testing and treating existing contaminated groundwater on Kiefer Landfill Buffer lands.
Pesticide Use for Land Management	Pesticide use if part of an approved Preserve Management Plan (PMP) (e.g., exotic plant or exotic animal control). Only when necessary, pesticide use is allowed (1) within Project Preserves, (2) within Preserve Setbacks, and (3) within road rights-of-way that border preserves.
Detention Basins	In limited situations, stormwater detention basins would be allowed on certain Linkage Preserves.
Low-Impact Nature Trails	Construction, maintenance, and improvement of a limited number of unpaved, low-impact nature trails within the Preserve System. Improvements include removal of upland vegetation, minor grading, directional and educational signs, and benches.

The Project activities listed in Table 3 below are not Covered Activities for the SSHCP and are not included as Covered Activities for this ITP.

Table 3. Activities Not Covered by this ITP

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Agricultural Practices	
2. Community of Rancho Murrieta Projects	Ĺ
3. Activities on Native American Tribal Lands	
4. Agricultural-Residential Development Outside the	UDA
5. Trails System Projects Outside the UDA	
6. Airport Operations and Expansions Outside the U	DA
7. Rural Infrastructure that is Not Identified as a Cov	ered Activity
8. Landfills	
9. Mining Outside the UDA	
10. Oil and Gas Extraction or Production	
11. Projects Permitted in Advance of the SSHCP	
12. Existing or Planned Preserves Not Under SSHCP	Management
13. Mitigation and Conservation Banking Options	
14. Pesticide Use	
15. Dam Construction or Removal	
16. Water Diversion	
17. Wind Energy Projects	.1.
18. Power Lines Outside the UDA	
19. Energy, Safety, and Police Services	

The Covered Species occurrences and/or the Covered Species modeled habitat can be found in the Attachments listed below, relative to each species:

Name:		Attachment(s):
1.	California tiger salamander (Ambystoma californiense)	, 3
2.	Giant garter snake (Thamnophis gigas)	4
3.	Tricolored blackbird (Agelaius tricolor)	5
4.	Swainson's hawk (Buteo swainsoni)	6
5.	Slender Orcutt grass (Orcuttia tenuis)	, 7
6.	Sacramento Orcutt grass (Orcuttia viscida)	8
7.	Boggs Lake hedge-hyssop (Gratiola heterosepla)	9

California tiger salamander (Ambystoma californiense):

Project activities and their resulting impacts are expected to result in the incidental take of California tiger salamander (CTS). The Covered Activities expected to result in incidental take of CTS include all Covered Activities listed in Table 2 above.

Covered Activities are anticipated to impact approximately 1,677 acres of CTS modeled upland habitats and 78 acres of CTS modeled aquatic habitat (ITP Table 4) within the Plan Area (California Tiger Salamander Modeled Habitat and Occurrences Map, Attachment 3). As detailed in Table 4 below, this would include approximately 78 acres of modeled aquatic breeding and foraging habitat (Seasonal Wetland and Vernal Pool) and up to approximately 1,677 acres of modeled upland habitat (Valley Grassland, Blue Oak Savanna, Blue Oak Woodland) within the Plan Area. The majority of impacts to modeled habitat (81%) occur inside the UDA, including 1,366 acres of modeled upland habitat and 55 acres of modeled aquatic habitat. Covered Activities outside the UDA will directly impact 311 acres of modeled upland habitat and 25 acres of modeled aquatic habitat. SSHCP Covered Activities will not impact aquatic or upland habitat within California tiger salamander Critical Habitat.

Giant garter snake (Thamnophis gigas):

Project activities and their resulting impacts are expected to result in the incidental take of giant garter snake (GGS). The Covered Activities expected to result in incidental take of giant garter snake include all Covered Activities listed in Table 2 above.

Covered Activities are anticipated to impact up to approximately 169 acres of GGS modeled aquatic habitat and up to 2,189 acres of GGS modeled upland habitat (SSHCP Table 6-65 and ITP Table 4) within the Plan Area (GGS Modeled Habitat and Occurrences Map, Attachment 4). As detailed in in Table 4 below, this would include approximately 144 acres of modeled aquatic habitat (Seasonal Wetland 39 acres, Freshwater Marsh 71 acres, Open Water 25 acres, Streams and Creeks 34 acres) and 1,965 acres of modeled upland habitat (Mixed Riparian Scrub 135 acres, Valley Grassland 2,054 acres) within the Plan Area. Covered Activities outside the UDA will directly impact approximately 25 acres of modeled aquatic habitat and 224 acres of modeled upland habitat. The majority of impacts to modeled habitat (89%) occur inside the UDA, including 144 acres of modeled aquatic habitat and 1,965 acres of modeled upland habitat. Covered Activities outside the UDA will directly impact approximately 25 acres of modeled aquatic habitat and 224 acres of modeled upland habitat.

Tricolored blackbird (Agelaius tricolor):

Project activities and their resulting impacts are expected to result in the incidental take of the tricolored blackbird (TRBL). The activities expected to result in incidental take of TRBL include all Covered Activities listed in Table 2.

Covered Activities are anticipated to impact up to approximately 31,058 acres of modeled habitat for TRBL (ITP Table 4) in the Plan Area (TRBL Modeled Habitat and Occurrences Map, Attachment 5). As detailed in Table 4 below, this would include approximately 27,531 acres of nesting/foraging habitat (Cropland 5,285 acres, Valley Grassland 22,014 acres,

Seasonal Wetland 105 acres, and Freshwater Marsh 127 acres) and 3,527 acres of modeled foraging habitat (Irrigated Pasture-Grassland 2,749 acres, Vernal Pool 389 acres, Swale 234 acres and Open Water 155 acres).

Swainson's hawk (Buteo swainsoni):

Project activities and their resulting impacts are expected to result in the incidental take of Swainson's hawk (SWHA). The Covered Activities expected to result in incidental take of SWHA include all Covered Activities listed in Table 2.

Covered Activities are anticipated to impact approximately of 373 acres of modeled nesting habitat and 30,739 acres of modeled foraging habitat, for a total of 31,112 acres of SWHA modeled habitat for SWHA (SSHCP Table 6-78 and ITP Table 4) in the Plan Area (SWHA Modeled Habitat and Occurrences Map, Attachment 6). As detailed in Table 4 below, this would include direct effects to 373 acres of modeled nesting habitat (including Mixed Riparian Woodland and Mixed Riparian Scrub) and 30,739 acres of modeled foraging habitat (Cropland, Irrigated Pasture-Grassland, Valley Grassland, Vernal Pool, Seasonal Wetland, and Swale). Of the 31,112 acres of impacts to modeled habitat, 7,413 acres are within an area designated as high-value habitat for SWHA. The majority of impacts to Swainson's hawk nesting and foraging habitat (73%) will be inside the UDA.

Slender Orcutt Grass (Orcuttia tenuis):

Project activities and their resulting impacts are expected to result in the incidental take of Slender Orcutt Grass. The activities expected to result in incidental take of slender Orcutt grass include all Covered Activities listed in Table 2.

Covered Activities are anticipated to impact approximately 7,187 acres of slender Orcutt grass modeled habitat (SSHCP Table 6-28 and ITP Table 4) in the Plan Area (Slender Orcutt Grass Modeled Habitat and Occurrences Map, Attachment 7). All impacted modeled habitat for slender Orcutt grass is within the Vernal Pool Ecosystem, comprising 196 acres of slender Orcutt grass modeled aquatic habitat and 6,991 acres of surrounding uplands (Valley Grassland) needed to support continued habitat functions and values of the aquatic habitats (Table 4 below). These impacts include direct effects to up to approximately 148 acres of Vernal Pool Ecosystem within slender Orcutt grass Critical Habitat. In all, 98% of impacts to the Vernal Pool Ecosystem will occur in the UDA, including approximately 191 acres of impact to slender Orcutt grass modeled habitat and 6,925 acres of impact to supporting uplands.

Sacramento Orcutt Grass (Orcuttia viscida):

Project activities and their resulting impacts are expected to result in the incidental take of Sacramento Orcutt grass. The activities expected to result in incidental take of slender Orcutt grass include all Covered Activities listed in Table 2.

Covered Activities are anticipated to impact approximately 7,187 acres of Sacramento Orcutt grass modeled habitat (SSHCP Table 6-23 and ITP Table 4) in the Plan Area (Sacramento Orcutt Grass Modeled Habitat and Occurrences Map, Attachment 8). All impacted modeled habitat for Sacramento Orcutt grass is within the Vernal Pool Ecosystem, comprising 148 acres of Sacramento Orcutt grass modeled aquatic habitat and 6,991 acres of surrounding uplands (Valley Grassland) needed to support continued habitat functions and values of the aquatic habitats (Table 4 below). These impacts include direct and indirect effects to up to approximately 248 acres of Vernal Pool Ecosystem within Sacramento Orcutt grass Critical Habitat. In all, 98% of impacts to the Vernal Pool Ecosystem will occur in the UDA, including approximately 191 acres of impact to Sacramento Orcutt grass modeled habitat and 6,991 acres of impact to supporting uplands.

Bogg's Lake hedge-hyssop (Gratiola heterosepala):

Project activities and their resulting impacts are expected to result in the incidental take of Bogg's Lake hedge-hyssop. The activities expected to result in incidental take of Bogg's Lake hedge-hyssop include all Covered Activities listed in Table 2.

Covered Activities are anticipated to impact up to approximately 8,672 acres of Boggs Lake hedge-hyssop modeled habitat (SSHCP Table 6-11 and ITP Table 4) in the Plan Area (Bogg's Lake Hedge-Hyssop Modeled Habitat and Occurrences Map, Attachment 9). Total impacts to modeled Boggs Lake hedge-hyssop Vernal Pool Ecosystem are 8,711 acres, comprising 240 acres of Boggs Lake hedge-hyssop modeled aquatic habitat and 8,419 acres of surrounding uplands (Valley Grassland) needed to support continued habitat functions and values of the aquatic habitats (Table 4 below). In addition, the SSHCP will impact approximately 13 acres of Seasonal Wetland in the Plan Area. In all, 98% of impacts to the Vernal Pool Ecosystem and 91% to Seasonal Wetland will occur in the UDA.

Table 4:
Total Impacts to Covered Species by Land Cover\Habitat Types (acres)

Cover Type	СТЅ	GGS	TRBL	SWHA	Slender Orcutt Grass	Sacramento Orcult Grass	Boggs Lake Hedge Hyssop
Blue Oak Savanna	ĺ				Ì		
Cropland			5,285*	5,285			
Mixed Riparian Scrub		135		189			
Mixed Riparian Woodland				184			
Valley Grassland	1,677	2,054	22,014*	21,977	6,991	6,991	8,419
TOTAL UPLAND IMPACT ACRES:	1,677	2,189	27,299	27,635	6,991	6,991	8,419

	CTS	GGS	TRBL	SWHA	Slender Orcutt Grass	Sacramento Orcutt Grass	Boggs Lake Hedge Hyssop
Freshwater Marsh		71	127*				
Irrigated Pasture- Grassland	- 7		2,749	2,749			
Open Water		25	155				
Seasonal Wetland	21	39	105*	105		71.	13
Streams/Creeks		34					
Swale			234	234			
Vernal Pool	57		389	389	196	196	240
TOTAL AQUATIC IMPACT ACRES:	78	169	3,759	3,477	196	196	253
TOTAL IMPACT ACRES:	1,755	2,358	31,058	31,112	7,187	7,187	8,672

*(TRBL Nest and Foraging Habitat)

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

Conditions of Approval: Unless specified otherwise, the following measures apply to all Covered Activities within the Plan Area, including areas used for vehicular, aircraft (e.g. helicopter) ingress and egress, staging and parking, and noise and vibration generating activities that may/will cause take. CDFW's issuance of this ITP and Permittee's authorization to take the Covered Species are subject to Permittee's compliance with and implementation of the following Conditions of Approval:

- 1. Legal Compliance: Permittees shall comply with all applicable federal, State, and local laws in existence on the effective date of this ITP or adopted thereafter.
- 2. CEQA Compliance: Permittees shall implement and adhere to the mitigation measures related to the Covered Species in the Biological Resources section of the Environmental Impact Report (SCH No.: 2008062030) certified by the County of Sacramento on

- 3. ESA Compliance: Permittees shall implement and adhere to the terms and conditions related to the Covered Species in the Section 10(a)(1)(B) Permit for the South Sacramento Habitat Conservation Plan TE35886D for the Project pursuant to the Federal Endangered Species Act (ESA). For purposes of this ITP, where the terms and conditions for the Covered Species in the federal authorization are less protective of the Covered Species or otherwise conflict with this ITP, the conditions of approval set forth in this ITP shall control.
- 4. ITP Time Frame and ESA Compliance: Permittees shall implement and adhere to the terms and conditions related to the Covered Species in the SSHCP pursuant to the Federal Endangered Species Act (ESA). For purposes of this ITP, where the terms and conditions for the Covered Species in the SSHCP are less protective of the Covered Species or otherwise conflict with this ITP, the conditions of approval set forth in this ITP shall control.

5. General Administrative Provisions:

- 5.1 Implementing Entity. The SSHCP Implementing Entity is a Joint Powers Authority (JPA) called the South Sacramento Conservation Agency (Agency). The JPA has been created which includes a governing board made up of four elected officials from the County of Sacramento, two elected officials from the City of Rancho Cordova, and one elected official from the City of Galt. The JPA Governing Board may delegate the authority to administer the Plan to the Implementation Review Committee or the Executive Director. However the establishment or modification of mitigation fees (defined in ITP Section 10.3), hiring of the Executive Director, approval of the Implementing Entity's annual budget and Annual Report, approval of the purchase of easements or other interests in land to form the SSHCP preserve system, and resolution of disputes among the Permittees regarding implementation of the Plan or disputes with Authorized Parties (also known as Third Party Project Proponents in the SSHCP) will remain the responsibility of the JPA Board and cannot be delegated to others.
- 5.2 <u>Implementation Review Committee</u>. The Implementation Review Committee (IRC), (Section 9.3.1 of the SSHCP) will assist the JPA Board with implementation duties, and will be made up of a member from each of the Permittees and the Plan Partners, two members from the agricultural stakeholder community (one representing cultivated farmland and one representing rangeland), and one each from the development and environmental stakeholder communities.
- 5.3 The Technical Advisory Committee. The Technical Advisory Committee (TAC) (Section 9.3.4 of the SSHCP) will be composed of the Implementing Entity staff, including the Executive Director, one member from each of the Permitting Agencies. Permitting Agencies are the agencies that are issuing permits for the SSHCP or developing programmatic

agreements for the SSHCP. In the SSHCP the permitting agencies are: CDFW, U.S. Fish and Wildlife Service (USFWS), U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and U.S. Environmental Protection Agency (EPA). The TAC will provide a forum for the Permittees, the Executive Director and the Permitting Agencies to discuss and review specific components of Plan implementation. Other entities with expertise in any of the topics to be discussed by the TAC, including representatives of the building industry, the agricultural community, the scientific community, and the environmental community, may also be invited to participate in TAC meetings.

- 5.4 Interagency Review Team. The Interagency Review Team (IRT) is composed of the USACE, the USEPA, the RWQCB, the USFWS and CDFW. While the Wildlife Agencies (USFWS and CDFW) will also serve as regular members of the TAC, the USACE, the USEPA and the RWQCB will also attend TAC meetings when necessary when issues pertaining to their jurisdiction are reviewed and discussed (waters of the U.S. in the case of USACE and USEPA, and the quality of waters of the State, in the case of the RWQCB). The specific charge of the IRT then, with participation from the Wildlife Agencies, will be to:
 - Review and approve sites for aquatic resource habitat establishment/reestablishment.
 - Review and approve aquatic resource establishment/re-establishment plans,
 - Review and approve success criteria for aquatic resource and wetland establishment/re-establishment projects.
- 5.5 Extension of Incidental Take Authorization for Development Projects. A project within the Plan Area that requires issuance by a Permittee of a grading permit, building permit, urban development permit, or similar authorization (Covered Activity Authorization) that could result in take of a State listed species will be considered a Development Project for the purpose of this ITP. The project proponent of a Development Project will be known as an Authorized Party in this ITP (also known as a Third-Party Project Proponent in the SSHCP). The Authorized Party may receive incidental take coverage for a Development Project's Covered Activities under this ITP only in accordance with the notification and approval procedure described in ITP Sections 5.5, 5.6 and 5.7.
 - 5.5.1 <u>Incidental Take Authorization Requirements</u>. The minimum eligibility requirements for the Authorized Party to receive incidental take authorization under this ITP are as follows:
 - a) The Authorized Party is subject to the Permittee's general land use jurisdiction for the Development Project;

- b) The Development Project has the potential to result in take of a State listed species;
- c) Neither the Permittee nor the Authorized Party is currently in violation of the ITP:
- d) The Development Project must fall within the Covered Activities authorized by this ITP and be consistent with the ITP;
- e) The Authorized Party has submitted to the Permittee a complete South Sacramento Habitat Conservation Plan Application Form (Application Form). The Application Form must provide sufficient detail to demonstrate that the Development Project, if implemented with any applicable ITP Conditions of Approval and HCP Avoidance and Minimization Measures (AMMs) will conform with and satisfy the requirements of this ITP;
- f) The Authorized Party agrees to grant Permittee and CDFW reasonable access to Development Project lands under the Authorized Party's control and agrees to cooperate with Permittee and CDFW for purposes of monitoring and compliance with the Covered Activity Authorization and ITP; and
- g) The Authorized Party has paid all Mitigation Fees applicable to the Development Project.
 - 1. <u>Mitigation Fee</u>: The proposed fee for any Covered Activities that affect Covered Species or Covered Species habitat. These fees will fund the cost of implementing of the SSHCP including (1) land acquisition, (2) habitat establishment, re-establishment and enhancement, (3) monitoring and long-term management, and (4) plan administration components of the SSHCP.
- 5.6 Process for Extending Incidental Take Authorization to an Authorized Party for a Development Project:
 - 5.6.1 The Authorized Party Submits SSHCP Application Form. For each Development Project, the Authorized Party must submit a complete Application Form to the Permittee with jurisdiction over the Development Project.
 - 5.6.2 Permittee Review of Application Package. The Application Package, which includes the Application Form and the Covered Activity Authorization Form, will be reviewed by Permittee to ensure the Authorized Party meets the requirements specified in ITP Section 5.5.1 above and that the Application Form is complete.

- (a) If the Permittee determines the Authorized Party has satisfied these two requirements, the Permittee will complete Parts I through VII of a draft Covered Activity Authorization. Permittee is encouraged to consult with CDFW as needed in completing the draft Covered Activity Authorization form to ensure all necessary terms and conditions are included to facilitate a timely review of the draft Covered Activity Authorization by CDFW.
- (b) The Permittee will sign (or initial) and date the first page of the draft Covered Activity Authorization and forward a copy of the Application Form and the draft Covered Activity Authorization to CDFW for review.
- 5.6.3 CDFW Review of Application Package. CDFW will review the Application Package provided by the Permittee to confirm: (1) the Development Project falls within the type of Covered Activities authorized by this ITP, (2) all applicable AMMs and ITP Conditions of Approval have been included in the draft Covered Activity Authorization, and (3) the Development Project, if implemented in accordance with the Covered Activity Authorization, would be consistent with this ITP and the final Environmental Impact Report for the SSHCP and includes all required ITP Conditions of Approval and SSHCP Avoidance and Minimization Measures (AMMs).
 - 5.6.3.1 Covered Activity Authorization Form. The Covered Activity
 Authorization Form shall remain in substantially the same form as
 the template in Attachment 11. Any substantive changes to the
 Covered Activity Authorization template must be approved by
 CDFW in writing.
 - Approval. CDFW will review and sign the draft Covered Activity Authorization if it finds that all requirements and processes in ITP Sections 5.5 and 5.6 have been met. CDFW will not add additional Conditions of Approval or AMMs to the draft Covered Activity Authorization that are not contained within this ITP. CDFW will provide Permittee with the CDFW-signed draft Covered Activity Authorization which signifies CDFW's determination that the Development Project, if implemented as detailed in that final Covered Activity Authorization, is consistent with this ITP.
 - 5.6.3.3 <u>Disapproval</u>. If CDFW finds that a proposed Development Project as described in the Application Package would be inconsistent with this ITP CDFW will provide a written disapproval letter (or email) to the Permittee and explain the actions necessary to address any deficiency. If an Application Package is disapproved or the

Authorized Party withdraws the Application Package, then the Authorized Party will have no incidental take authorization for the Development Project under this ITP. The Permittee may resubmit a disapproved Application Package after attempting to address in writing any deficiencies identified by CDFW.

- 5.6.3.4 Additional Information Required. If CDFW finds that a proposed Development Project as described in the Application Package does not contain enough information to determine if the Development Project is consistent with this ITP, CDFW will respond in writing to the Permittee with the additional information that is necessary to approve or disapprove a project. Once the Application Package is resubmitted to CDFW, the 30-calendar day timeline will begin as described in ITP Section 5.6.3.5 below.
- 5.6.3.5 CDFW Review Timelines. CDFW will have 30 calendar days from receipt of the Permittee-signed Application Package to approve or disapprove the Application Package, with the exception of building permits which will have a 15-calendar day review period. If CDFW fails to issue a written determination within 30 days (or 15 days for building permits), then the Application Package will be deemed automatically approved. If the Application Package is disapproved and resubmitted, CDFW again will have 30 days (or 15 days for building permits) to review and approve or disapprove. The Permittee must receive a copy of the draft Covered Activity Authorization signed by CDFW prior to: (1) Permittee approving the Development Project and (2) the Authorized Party commencing a Development Project under this ITP.
- 5.6.4 <u>Signature by Authorized Party</u>. The Authorized Party signature on the Covered Activity Authorization Form indicates acceptance of liability and ITP compliance requirements when implementing the Development Project.
- 5.6.5 Signature by Permittee. After the Permittee receives the Mitigation Fees from the Authorized Party for the Development Project, the Permittee will sign the Covered Activity Authorization acknowledging the Authorized Party's requirements to comply with the ITP and the final Covered Activity Authorization. The Permittee will forward a copy of the approved Covered Activity Authorization form to CDFW and the Implementing Entity.
- 5.6.6 <u>Authorized Party Authorization to Conduct a Development Project.</u> Authorized Party's receipt of a final Covered Activity Authorization

signed by CDFW and Permittee constitutes CDFW's approval of the Authorized Party as a permittee under this ITP, without the need to amend this ITP. As a permittee, the Authorized Party is authorized for incidental take of Covered Species for the Development Project, unless such authorization is suspended or revoked. The Development Project must be implemented as detailed in the final Covered Activity Authorization and be consistent with this ITP.

- 5.7 Implementing Entity and Permittee Responsibilities for Development Projects:
 - 5.7.1 <u>Maintaining Fully Executed Copies of all Covered Activity</u>
 <u>Authorizations</u>. The Permittees and the Implementing Entity shall maintain copies of all fully executed final Covered Activity
 Authorizations for the term of this ITP.
 - 5.7.2 <u>Development Authorization</u>. The Implementing Entity and the Permittee responsible for issuing the Development Authorization must require any proposed Development Project within the Plan Area to comply with the terms of this ITP, including its Conditions of Approval and the SSHCP AMMs. Permittees shall not issue or grant such Development Authorizations until the Authorized Party demonstrates compliance with this ITP.
 - 5.7.3 Authorized Party Compliance. If sufficient evidence is presented to the Implementing Entity or Permittee with jurisdiction to demonstrate that the Authorized Party violated the provisions of the ITP or Covered Activity Authorization, the Permittee with jurisdiction shall notify the Authorized Party of the violation within 48 hours and shall issue an order in accordance with procedures in the applicable City or County Building Code that prohibits development activities which may result in ground disturbance (e.g., Stop Work Order) until the alleged violation is corrected or resolved. The Permittee with jurisdiction shall also notify the Implementing Entity, and CDFW in writing of the violation at or before the time the Authorized Party is notified. Upon the Authorized Party providing the appropriate Permittee with written confirmation from CDFW that the Authorized Party has corrected the violation, the appropriate Permittee may lift the Stop Work Order and the Authorized Party may then resume the Development Project.
- 5.8 <u>Joint and Several Liability</u>. All terms and conditions of this ITP, including those set forth in the ITP Conditions of Approval, the SSHCP AMMs, and other attachments, shall be binding upon Permittees. Notwithstanding California Civil Code section 1431 or any other provision of law, Permittees are jointly and severally liable for performance of all terms, conditions, and obligations of this ITP, including, but not

limited to, those set forth in the SSHCP AMMs, attached MMRP and Covered Activity Authorizations for Development Projects. Any failure by a Permittee to comply with any term, condition, or obligation of this ITP shall be deemed a failure to comply by all Permittees. Any failure by the Authorized Party to comply with any terms, conditions, or obligations of the ITP or a Covered Activity Authorization for a Development Project shall be deemed a failure to comply by the Authorized Party and all Permittees. This provision does not relieve the Authorized Party of joint and several liability for any violations of a Covered Activity Authorization.

- 5.9 Funding for CDFW Employee. Sufficient funding shall be provided through a contract, for a CDFW Environmental Scientist position. The position and their duties will be detailed in the contract and are expected to include all SSHCP and ITP administration, review and implementation tasks requiring CDFW participation, as detailed in the SSHCP. The position will also coordinate and process all CDFW approvals necessary for SSHCP and ITP implementation. The CDFW employee shall track and submit all billable hours spent on SSHCP and ITP implementation tasks and provide an invoice to the South Sacramento Conservation Agency on a regular basis, as detailed in the contract.
- 5.10 <u>Permittee Projects</u>. Projects that are carried out directly by Permittee's do not require issuance of a Permittee Authorization but are subject to all measures of this ITP, including but not limited to payment of the Mitigation Fee (also called a Development fee in the SSHCP) described in ITP Section 10.3.

6. General Project Provisions

In addition to all ITP terms and conditions, the Permittees shall adhere to all SSHCP Avoidance Minimization Measures (SSHCP AMMs) outlined in ITP Attachment 10 and species specific AMM's and conditions included in ITP Section 8.1 through Section 8.9.

- 6.1. <u>CNDDB Observations</u>. If any special-status species are observed during project implementation, the Permittee shall submit the California Natural Diversity Data Base (CNDDB) Online Field Survey Form electronically at https://www.wildlife.ca.gov/data/CNDDB/submitting-data within five (5) working days of the sightings, and provide a copy of the form, survey map and/or report to the CDFW's Regional office as instructed in Regional Contact Information section below.
- 6.2. <u>CDFW Access</u>. Permittee shall provide CDFW staff with reasonable access to the Project and mitigation lands under Permittee control and shall otherwise fully cooperate with CDFW efforts to verify compliance with or effectiveness of mitigation measures set forth in this ITP.

- 6.3. <u>Approved Biologist</u>. The Implementing Entity shall develop a checklist of the qualifications for Approved Biologist in the first six months after implementation, in coordination with the Wildlife Agencies.
- 6.4. <u>Designated Representative</u>. Before starting Covered Activities, each Permittee shall designate a representative (Designated Representative) responsible for communications with CDFW and overseeing compliance with this ITP. Permittee shall notify CDFW in writing before starting Covered Activities of the Designated Representative's name, business address, and contact information, and shall notify CDFW in writing if a substitute Designated Representative is selected or identified at any time during the term of this ITP.

7. Monitoring, Notification and Reporting Provisions

- 7.1. Notification of Non-Compliance. The Permittees shall immediately notify CDFW in writing if it determines that a project proponent is not in compliance with any Condition of Approval of this ITP, including but not limited to any failure to implement measures within the time periods indicated in this ITP, SSHCP AMM and/or the MMRP related to a State listed species. The Permittees shall report any non-compliance with this ITP to CDFW within 72 hours of discovery by email or letter.
- 7.2. Compliance Monitoring. The Approved Biologist shall be on-site daily when Covered Activities occur in Covered Species habitat. The Approved Biologist shall conduct compliance inspections to (1) minimize incidental take of the Covered Species; (2) prevent unlawful take of species; (3) check for compliance with all measures of this ITP; (4) check all exclusion zones; and (5) ensure that signs, stakes, and fencing are intact, and that Covered Activities are only occurring in the Plan Area.
- 7.3. Annual Reports. Permittees will submit Annual Reports to CDFW by January 31 each year, following the end of the previous year's reporting cycle. The reporting cycle is October 1 of one year through September 30 of the following year. No annual report will be required for the first partial fiscal year. The available inventory of each Covered Species modeled-habitats remaining in the Plan Area will be tracked and included in each annual report. Each year, no more than 30 days after receiving the annual report, the TAC will convene to review report results to assess success of the SSHCP and to formulate recommendations to the Implementing Entity for Plan implementation in the next year. At a minimum, all Annual Reports will include the following information:
 - a. Number and acreage of each Covered Activity implemented during the reporting period categorized by Covered Activity type. Reporting will include a map of Covered Activity locations.

- b. A year-to-date and cumulative summary (i.e., from the start of the Permit Term) of permanent and temporary impacts on all SSHCP land cover types. Impacts to riparian and wetland land cover types will also be reported by watersheds. Reporting will include a map of impacted locations.
- c. A year-to-date and cumulative summary of impacts to modeled habitat of Covered Species. Reporting will include a map of impacted areas.
- d. A year-to-date and cumulative summary of the total impacts to Critical Habitat of Sacramento Orcutt grass, slender Orcutt grass, and California tiger salamander, and to Covered Species plant occurrences. Reporting will include a map of Critical Habitat impacts.
- e. A year-to-date and cumulative summary of impacts associated with projects exempt from fees and/or conditions of the SSHCP.
- f. An accounting of all conditions on Covered Activities applied to these activities.
- g. A list of all Stream Setback exceptions and any other exceptions granted each calendar year.
- h. A description of all re-establishment and establishment implemented during the reporting period. Riparian and wetland re-establishment and establishment will also be reported by the watersheds shown in the SSHCP Figure 3-1 to facilitate regional coordination of wetland mitigation for the U.S. Army Corps of Engineers (USACE), State Water Resources Control Board (SWRCB), and Regional Water Quality Control Board (RWQCB). Reporting will include a map of re-establishment/establishment project locations.
- i. A year-to-date and cumulative summary of the acreage of SSHCP land cover types preserved, re-established, and/or established. The success rate for re-establishment and establishment projects will also be documented. For each Preserve parcel acquired, document whether it was purchased in fee title or protected under a conservation easement. If conservation easements were used, the report will describe who holds the easements. Maps and GIS shape files will be provided identifying which parcels have been acquired and whether acquisition was via fee title or easement.
- j. A year-to-date and cumulative summary of the extent of modeled habitat for Covered Species preserved. This will be calculated by overlaying the most current species habitat models. Reporting will include a map of modeled habitat preservation for each Covered Species.
- k. A copy of all easements recorded during the reporting year. Reporting will include a map of all easements.
- I. An assessment of the progress toward all preserve acquisition requirements, including SSHCP land cover types, Covered Species colony or breeding sites, plant Covered Species occurrences, and wetland protection. This assessment will include evaluation of compliance with the preserve designs in the SSHCP Chapter 7 (e.g., minimizing edge).

- m. A summary and assessment of compliance with the Stay-Ahead provision to assure that mitigation requirements of the Conservation Strategy stay ahead of Covered Activity impacts.
- n. A summary of monitoring results, including species status and trends.
- o. A description of the adaptive management process utilized during the reporting period.
- p. A summary of the recommendations or advice provided by the Wildlife Agencies and TAC regarding adaptive management and monitoring.
- 7.4 <u>Five-Year Report</u>. The Five-Year Report will include a more detailed analysis of progress and effectiveness of the Conservation Strategy. The following information will be provided in the Five-Year Annual Report, in addition to the information required the Annual Reports (ITP Section 9.12):
 - a. A summary of all land and water management activities undertaken on and off the preserves and a discussion of the management issues facing the Implementing Entity.
 - b. An evaluation of the economic assumptions on which the SSHCP was based (e.g., SSHCP costs, revenue rates and grant funding projections).
 - c. An assessment of progress toward a complete funding strategy for implementation after the Permit Term (SSHCP Chapter 12).
 - d. An assessment of the efficacy of the SSHCP Preserve System Monitoring and Management Program, including lessons learned from Individual PMPs and recommended changes to the SSHCP Preserve System Monitoring and Management Program based on interpretation of monitoring results and research findings.
 - e. An assessment of the efficacy of habitat re-establishment and/or establishment methods in achieving performance objectives (if applicable) and recommended changes to improve the efficacy of the methods.
 - f. A description of all SSHCP special studies undertaken during the reporting period; a summary of study results; and a description of integration with monitoring, assessment, and compliance elements.
 - g. An assessment of the appropriateness of any performance indicators and objectives based on the results of effectiveness monitoring, and recommended changes to performance indicators and objectives.
 - h. A description of any actions taken or expected regarding changed circumstances, including remedial actions.
 - i. A description of any unforeseen circumstances that arose and responses taken.
 - j. A summary of any administrative changes, minor modifications, or major amendments proposed or approved during the reporting year.
- 7.5 <u>Final Mitigation Report</u>. No later than 60 days after completion of all mitigation measures, Permittees shall provide CDFW with a Final Mitigation Report. The

Designated Biologist shall prepare the Final Mitigation Report which shall include, at a minimum: (1) a copy of the table in the MMRP with notes showing when each of the mitigation measures was implemented; (2) all available information about Project-related incidental take of the Covered Species; (3) information about other Project impacts on the Covered Species; (4) beginning and ending dates of Covered Activities; (5) 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; (6) recommendations on how mitigation measures might be changed to more effectively minimize take and mitigate the impacts of future projects on the Covered Species; and (8) any other pertinent information.

8. Take Minimization Measures

The measures required in this section are consistent with ITP Attachment 10 and SSHCP Section 5.4, where all the SSHCP AMMs that will be implemented as part of the Covered Activities are detailed. These measures will avoid or minimize direct and indirect impacts to Covered Species and their habitats to the maximum extent. In addition to the SSHCP AMMs, this ITP details CDFW's additional specific Conditions of Approval, which are distinct from the SSHCP AMM's. Authorized Parties are responsible for incorporating all applicable SSHCP AMMs and ITP Conditions of Approval into their project design. The Permittees with authority over a Covered Activity is responsible for reviewing and ensuring that all applicable SSHCP AMMs and Conditions of Approval are appropriately incorporated into project design and is responsible for ensuring that the required measures are correctly applied by the Authorized Party during implementation of the Covered Activity.

- 8.1. General Covered Species Take Avoidance and Minimization Measures.

 The following requirements are intended to ensure the minimization of incidental take of Covered Species in the Area during Covered Activities. The Permittees shall implement and adhere to the following measures to minimize take of Covered Species:
 - 8.1.1. <u>AMM SPECIES-1, Litter Removal Program</u>. A litter control program will be instituted for the entire project site. All workers will ensure that their food scraps, paper wrappers, food containers, cans, bottles, and other trash are deposited in covered or closed trash containers. All garbage will be removed from the project site at the end of each workday, and construction personnel will not feed or otherwise attract wildlife to the area where construction activities are taking place.
 - 8.1.2. <u>AMM SPECIES-2</u>, No Pets in Construction Areas. To avoid harm and harassment of native species, workers and visitors will not bring pets onto a project site.

- 8.1.3. AMM SPECIES-3, Take Report. If accidental injury or death of any Covered Species occurs, workers will immediately inform the Approved Biologist or onsite monitor and site supervisor. The Approved Biologist or on-site monitor will phone the appropriate contact person at the Implementing Entity. The Implementing Entity will immediately contact the Wildlife Agencies by telephone. A memorandum will be provided to the Implementing Entity and Wildlife Agencies within 1 working day of the incident. The report will provide the date and location of the incident, number of individuals taken, the circumstances resulting in the take, and any corrective measures taken to prevent additional take.
- 8.1.4. AMM SPECIES-4, Post-Construction Compliance Report. A post-construction compliance report will be submitted to the SSHCP Implementing Entity within 30 calendar days of completion of construction activities or within 30 calendar days of any break in construction activity that lasts more than 30 days. The report will detail the construction start and completion dates, any information about meeting or failing to meet species take Avoidance and Minimization Measures, effectiveness of each AMM that was applied at the project site, and any known project effects to Covered Species.
- 8.1.5. AMM BMP-7 Biological Monitor. If a Covered Activity includes ground disturbance within Covered Species modeled habitat, an Approved Biologist will be on site during the period of ground disturbance and may need to be on site during other construction activities depending on the Covered Species affected. After ground-disturbing project activities are complete, the Approved Biologist will train an individual to act as the on-site construction monitor for the remainder of construction, with the concurrence of the Permitting Agencies. The on-site monitor will attend the training described in ITP Section 8.1.6 below. The Approved Biologist and the on-site monitor will have oversight over implementation of AMMs and will have the authority to stop activities if any of the requirements associated with those measures are not met. If the monitor requests that work be stopped, the Wildlife Agencies will be notified within one working day by email. The Approved Biologist and/or on-site monitor will record all observations of listed species on California Natural Diversity Database field sheets and submit them to the California Department of Fish and Wildlife. The Approved Biologist or on-site monitor will be the contact source for any employee or contractor who might inadvertently kill or injure a Covered Species or who finds a dead, injured or entrapped individual. The Approved Biologist and on-site monitor's names and telephone numbers will be provided to the Wildlife Agencies prior to the initiation of ground-disturbing activities. Refer to species-specific measures for details on requirements for biological monitors.
- 8.1.6. <u>AMM BMP-8 Training of Construction Staff</u>. A mandatory Worker Environmental Awareness Program will be conducted by an Approved Biologist for all

construction workers, including contractors, prior to the commencement of construction activities. The training will include how to identify Covered Species that might enter the construction site, relevant life history information and habitats, SSHCP and statutory requirements and the consequences of noncompliance, the boundaries of the construction area and permitted disturbance zones, litter control training (ITP Section 8.1.1), and appropriate protocols if a Covered Species is encountered. Supporting materials containing training information will be prepared and distributed by the Approved Biologist. When necessary, training and supporting materials will also be provided in Spanish. Upon completion of training, construction personnel will sign a form stating that they attended the training and understand all of the AMMs. Written documentation of the training must be submitted to the Implementing Entity within 30 days of completion of the training, and the Implementing Entity will provide this information to the Wildlife Agencies.

8.2. <u>Covered Species Take Avoidance and Minimization Measures and Conditions of Approval.</u>

To avoid direct and indirect effects of Covered Activities on Covered Species, the following SSHCP AMMs will be implemented. All additional AMMs that are not species specific are also in Table 8-2 of the SSHCP. In addition to the SSHCP AMMs, additional CDFW specific Conditions of Approval have been added below in some cases, which are separate from the SSHCP AMM's.

- 8.2.1. <u>California tiger salamander</u> (*Ambystoma californiense*). To avoid direct and indirect effects of Covered Activities on California tiger salamander (CTS), the following SSHCP AMMs and Conditions of Approval (collectively; measures) will be implemented. These SSHCP AMMs may have been modified from the original SSHCP language adopted on October 29, 2018 (SSHCP Chapter 5, pages 5-93 through 5-95). These modifications will be reflected in an erratum to the SSHCP.
- 8.2.1.1. AMM CTS-1 California Tiger Salamander Daily Construction Schedule.

 Ground-disturbing Covered Activities within California tiger salamander modeled habitat (ITP Attachment 3) will occur outside the breeding and dispersal season (occur after July 31 and before October 15), to the maximum extent practicable. If Covered Activities must be implemented in modeled habitat (ITP Attachment 3) during the breeding and dispersal season (after October 15 and before July 31), construction activities will not start until 30 minutes after sunrise and must be complete 30 minutes prior to sunset.
- 8.2.1.2. AMM CTS-2 California Tiger Salamander Exclusion Fencing. If a Covered Activity must be implemented in modeled habitat (ITP Attachment 3) during the breeding and dispersal season (after October 15 and before July 31),

exclusion fencing will be installed around the project footprint before October 15. Temporary high-visibility construction fencing will be installed along the edge of work areas, and exclusion fencing will be installed immediately outside of the temporary high-visibility construction fencing to exclude California tiger salamanders from entering the construction area or becoming entangled in the construction fencing. Exclusion fencing will be at least 1 foot tall and be buried at least 6 inches below the ground to prevent salamanders from going under the fencing. Fencing will remain in place until all construction activities within the construction area are complete. No project activities will occur outside the delineated project footprint! An Approved Biologist must inspect the exclusion fencing and project site every morning before 7:00 a.m. for integrity and for any entrapped California tiger salamanders. If a California tiger salamander is encountered, refer to CTS-5 (ITP Section 8.2.1.5). However, the Implementing Entity may, with approval of the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife determine that it is appropriate for a Covered Activity project to not implement CTS-2 for certain long and linear roadway Covered Activity projects if it appears that the exclusion fencing will likely trap individuals or cause more take of California tiger salamander than it would prevent.

- 8.2.1.3. AMM CTS-3 California Tiger Salamander Monitoring. If Covered Activities must be implemented in modeled habitat (ITP Attachment 3), an Approved Biologist experienced with California tiger salamander identification and behavior will monitor the project site, including the integrity of any exclusion fencing. The Approved Biologist will be on site daily while construction-related activities are taking place and will inspect the project site for California tiger salamander every morning before 7:00 a.m., or prior to construction activities. As required by BMP-8 (Training of Construction Staff), the Approved Biologist will also train construction personnel on the required California tiger salamander avoidance procedures, exclusion fencing, and correct protocols in the event that a California tiger salamander enters an active construction zone. If a California tiger salamander is encountered, refer to CTS-5 (ITP Section 8.2.1.5).
- 8.2.1.4. AMM CTS-4 Avoid California Tiger Salamander Entrapment. If Covered Activities must be implemented in modeled habitat, all excavated steep-walled holes or trenches more than 6 inches deep will be provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each workday or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes or trenches will be inspected by the Approved Biologist each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within California tiger salamander modeled habitat will be inspected

- for California tiger salamanders by the Approved Biologist prior to being moved. If a California tiger salamander is encountered (ITP Section 8.2.1.5).
- 8.2.1.5. AMM CTS-5 California Tiger Salamander Encounter Protocol. If a California tiger salamander is encountered during construction activities, the Approved Biologist will notify the Wildlife Agencies immediately (California Department of Fish and Wildlife and U.S. Fish and Wildlife Service). Construction activities will be suspended within a 100-foot radius of the animal until the animal is relocated (as described in the Relocation Plan, ITP Section 8.2.1.8) by an Approved Biologist with appropriate handling permits from the Wildlife Agencies. If the animal is handled, a report will be submitted, including date(s), location(s), habitat description, and any corrective measures taken to protect the salamander, within 1 business day to the Wildlife Agencies. The biologist will report any take of listed species to USFWS and CDFW immediately. Any worker who inadvertently injures or kills a California tiger salamander(s) must immediately report the incident to the Approved Biologist.
- 8.2.1.6. AMM CTS-6 Erosion Control Materials in California Tiger Salamander Habitat. If erosion control (BMP-2, ITP Attachment 10) is implemented within California tiger salamander modeled habitat (ITP Attachment 3), non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure that salamanders are not trapped (no monofilament). Coconut coir matting and fiber rolls with burlap are examples of acceptable erosion control materials. This limitation will be communicated to the contractor through use of special provisions included in the bid solicitation package.
- 8.2.1.7. AMM CTS-7 Rodent Control. This measure only applies to projects that are within California tiger salamander modeled habitat and on Covered Activities. Rodent control will be allowed only in developed portions of a Covered Activity project site. Where rodent control is allowed, the method of rodent control will comply with the methods of rodent control discussed in the 4(d) Rule published in the U.S. Fish and Wildlife Service's (2004) final listing rule for California tiger salamander.
- 8.2.1.8. CTS Relocation Plan. Permittees shall prepare a CTS Relocation Plan (Relocation Plan) for Covered Activities occurring in CTS modeled habitat. The Relocation Plan shall include the name(s) of the Approved Biologists(s) who will relocate CTS; pre-construction habitat assessment methodology; measures to minimize temporary impacts to CTS habitat outside the permanent impact area; capture, handling, and relocation methods; a map and description of the relocation area(s) for captured CTS, including relative location, quality of habitat, non-native species or the potential for CTS-barred

tiger salamander hybrids to be present, identified upland burrows determined to be suitable for CTS placement, distance to aquatic habitat, and potential barriers for movement; written permission from the landowner to use their land as a relocation site; and identification of a wildlife rehabilitation center or veterinary facility that routinely evaluates or treats amphibians. Permittees shall submit the Relocation Plan to CDFW for written approval at least 15 days prior to the beginning of any Covered Activities, including preconstruction surveys. If CTS is found within a construction site or 200 feet beyond the construction site (200-foot boundary). Project personnel shall notify the Approved Biologist(s) immediately. If CTS is encountered within a construction site, it is directly threatened by Covered Activities, and it is unable to move to a safe area on its own, the Approved Biologist(s) shall relocate CTS to a safe area in accordance with the Relocation Plan. Otherwise, CTS may only be captured and handled by the Approved Biologist(s). The Permittees or Authorized Party shall notify CDFW within 24 hours of each time CTS is relocated. Notification to CDFW shall be via telephone or email, followed by a written incident report. Notification shall include the date, time, location, and circumstances of the incident.

- 8.2.1.9. CTS Pre-construction Surveys. The Approved Biologist(s) shall complete visual survey in each of the construction sites located within suitable upland habitat and within the 200-foot boundary, including access roads. The Approved Biologist(s) shall pay particular attention to suitable CTS habitat features and search beneath woody debris. If CTS is found within the construction site, access roads, or the 200 foot boundary, the Approved Biologist(s) shall delay installation of the exclusion barrier until the Approved Biologist(s) relocate(s) the CTS out of the Project Area and 75-foot boundary in accordance with Condition 8.2.1.8 above. The Approved Biologist(s) shall visually inspect all potential burrows within suitable upland habitat in the construction site, access roads, and 200-foot boundary, prior to installing exclusionary fencing.
- 8.3.1. Giant garter snake. To avoid direct and indirect effects of Covered Activities on giant garter snake (GGS), the following AMMs and Conditions of Approval (collectively; measures) will be implemented. These AMMs may have been modified from the original SSHCP language adopted on October 29, 2018 (Chapter 5, pages 5-97 through 5-99). These modifications will be reflected in an erratum to the SSHCP.
 - 8.3.1.1. AMM GGS-1 Giant Garter Snake Survey. If the SSHCP GGS modeled habitat maps (ITP Attachment 4) show that modeled habitat for GGS is present within a Covered Activity's project footprint or within 300 feet of a project footprint, then an Approved Biologist will conduct a field investigation to delineate GGS aquatic habitat within the project footprint

and adjacent areas within 300 feet of the project footprint. In addition to the SSHCP land cover types shown in ITP Attachment 4. GGS aquatic habitat includes, but is not limited to, low-gradient streams and creeks. open water, freshwater marsh, agricultural ditches, and rice fields. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. The Third-Party Project Proponent will map all existing or potential sites and provide these maps to the Local Land Use Permittees and the Implementing Entity, Locations of delineated GGS habitat must also be noted on plans that are submitted to a Local Land Use Permittee. The applicant will use this information to finalize project design. Covered Activities may occur throughout the year as long as GGS habitat is identified and fully avoided. Otherwise, Covered Activities must comply with GGS-2 (ITP Section 8.3.1.2) through GGS-8 (ITP Section 8.3.1.8), below. Chapter 10.4.2.3 of the SSHCP outlines the process to conduct and submit survey information.

- 8.3.1.2. AMM GGS-2 Giant Garter Snake Work Window. Activities that do not fully avoid GGS modeled habitat will be conducted during the snake's active season. Construction and ground-disturbing activities will be initiated after May 1 and will end prior to September 15. If it appears that construction activities may go beyond September 15, the Third-Party Project Proponent or Plan Permittee will contact the Local Land Use Permittee and the Implementing Entity as soon as possible, but not later than September 1. The Local Land Use Permittee and the Implementing Entity will discuss with the Wildlife Agencies additional measures necessary to minimize take. The additional measures would vary depending on where the work is occurring. For example, if the work outside the GGS active season is a continuation of work within a dewatered channel or within a disturbed area where no more than two days have passed without ground-disturbing activities, burrows are no longer expected to be occupied by GGS, therefore no additional measures may be necessary. However, if ground disturbing work will occur outside the GGS active season in an area that was not previously disturbed in the active season, or there has been no ground disturbance for more than two days, an Approved Biologist may be necessary on-site during earth moving activities, to monitor for GGS presence.
- 8.3.1.3. AMM GGS-3 Giant Garter Snake Monitoring. If a Covered Activity is occurring in GGS modeled habitat, an Approved Biologist experienced with GGS identification and behavior will monitor the Project site, including the integrity of any exclusion fencing. The Approved Biologist will be on-site daily while construction-related activities are taking place in aquatic habitat or within 300 feet of aquatic habitat and will inspect the

Project site daily for GGS prior to construction activities. If a GGS is encountered, refer to GGS-7 (ITP Section 8.3.1.7). The Approved Biologist will also train construction personnel on the required avoidance procedures, exclusion fencing, and protocols in the event that a GGS enters an active construction zone (i.e., outside the buffer zone).

- 8.3.1.4. AMM GGS-4 Giant Garter Snake Habitat Dewatering and Exclusion, If construction activities will occur in GGS aquatic habitat, aquatic habitat will be dewatered and then remain dry and absent of aquatic prey (e.g., fish and tadpoles) for 15 days prior to initiation of Covered Activities. If complete dewatering is not possible, the Implementing Entity will be contacted to determine what additional measures may be necessary to minimize effects to GGS. After aquatic habitat has been dewatered 15 days prior to Covered Activities, exclusion fencing will be installed extending a minimum of 300 feet into adjacent uplands to isolate both the aquatic and adjacent upland habitat. Exclusionary fencing will be erected 36 inches above ground and buried at least 6 inches below the ground to prevent snakes from attempting to move under the fence into the construction area. In addition, high-visibility fencing will be erected to identify the construction limits and to protect adjacent habitat from encroachment of personnel and equipment. GGS habitat outside construction fencing will be avoided by all construction personnel. The fencing and the work area will be inspected by the Approved Biologist to ensure that the fencing is intact and that no snakes have entered the work area before the start of each workday. The fencing will be maintained by the contractor until completion of the project. If GGS is encountered, refer to GGS-7 (ITP Section 8.3.1.7).
- 8.3.1.5. AMM GGS-5 Avoid Giant Garter Snake Entrapment. If a Covered Activity occurs in GGS modeled habitat (ITP Attachment 4), all excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) and/or provided with one or more escape ramps at an angle of ≤ 30 degree, constructed of earth fill or wooden planks at the end of each work day or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected by the Approved Biologist each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within GGS modeled habitat will be inspected for GGS by the Approved Biologist prior to being moved. If a GGS is encountered, refer to GGS-7 (ITP Section 8.3.1.7).
- 8.3.1.6. AMM GGS-6 Erosion Control Materials in Giant Garter Snake Habitat. If erosion control (BMP-2) is implemented within GGS modeled habitat (ITP

Attachment 4), non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure snakes are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.

- 8.3.1.7. AMM GGS-7. Giant Garter Snake Encounter Protocol. If a GGS is encountered during construction activities, the Approved Biologist will notify the Wildlife Agencies immediately and follow the methods in the CDFW approved Relocation Plan described in Section 8.3.1.9. Construction activities will be suspended in a 100-foot radius of the animal until the animal leaves the project site on its own volition. If necessary, the Approved Biologist will notify the Wildlife Agencies to determine the appropriate procedures related to relocation. If the animal is handled, a report will be submitted, including date(s), location(s). habitat description, and any corrective measures taken to protect the GGS within 1 business day to the Wildlife Agencies. The biologist will report any take of listed species to the USFWS and CDFW immediately. Any worker who inadvertently injures or kills a GGS or who finds one dead, injured, or entrapped must immediately report the incident to the Approved Biologist. Any GGS observed during Covered Activities will be allowed to move away from danger on its own or be moved by the Designated Biologist with CDFW and USFWS approval to handle the snake and in accordance with the CDFW approved GGS Relocation Plan detailed in ITP Section 8.3.1.9.
- 8.3.1.8. AMM GSS-8 Giant Garter Snake Post-Construction Restoration. After completion of ground-disturbing Covered Activities, the applicant will remove any temporary fill and construction debris and will restore temporarily disturbed areas to pre-Project conditions. Restoration work includes such activities as re-vegetating the banks and active channels with an appropriate native seed mix. Appropriate methods and plant species used to re-vegetate such areas will be determined on a site-specific basis in consultation with the Implementing Entity. Restoration work may include replanting emergent aquatic vegetation. Refer to the U.S. Fish and Wildlife Service's Guidelines for the Restoration and/or Replacement of Giant Gartersnake Habitat (USFWS 1997), or the most current USFWS guidelines at the time of the activity. A photo documentation report showing pre- and post-Project conditions will be submitted to the Implementing Entity 1 month after implementation of the restoration.
- 8.3.1.9. <u>GGS Relocation Plan</u>. The Authorized Party shall develop a GGS Relocation Plan and submit it to the Wildlife Agencies for written approval,

no less than 30 days prior to initiating Covered Activities. Authorized Party shall include in the Relocation Plan, at a minimum, the proposed GGS capture and handling technique; a quantification of the amount, relative location, and quality of suitable habitat (aquatic and upland) including invasive and non-native species present, available upland burrows for aestivation and high-water refugia, suitable prey items, and potential barriers for movement, within proposed relocation site(s); written permission from the landowner to use their land as a relocation site; and identification of a wildlife rehabilitation center or veterinary facility that routinely evaluates or treats snakes and is permitted to handle GGS.

- 8.3.1.10. GGS Pre-construction Surveys. The Approved Biologist(s) shall conduct one pre-construction survey within 200 feet of suitable aquatic habitat, within 24 hours prior to beginning earth moving activities. The Approved Biologist(s) shall investigate all small mammal burrows within suitable upland habitat. The Project Area will be resurveyed whenever there is a lapse in construction activity of two weeks or more.
- 8.4.1. <u>Tricolored blackbird (Agelaius tricolor)</u>. To avoid direct and indirect effects of Covered Activities on tricolored blackbird, the following AMMs and Conditions of Approval will be implemented. These AMMs may have been modified from the original SSHCP language adopted on October 29, 2018 (SSHCP Chapter 5, pages 5-102 through 5-104). These modifications will be reflected in an erratum to the SSHCP.
 - 8.4.1.1. AMM TCB-1 Tricolored Blackbird Surveys. If modeled habitat (ITP Attachment 5) for tricolored blackbird is present within a Covered Activity's project footprint or within 500 feet of a project footprint, then an Approved Biologist will conduct a field investigation to determine if existing or potential nesting or foraging sites are present within the project footprint and adjacent areas within 500 feet of the project footprint. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. Within the Plan Area. potential tricolored blackbird nest sites are often associated with freshwater marsh and seasonal wetlands, or in thickets of willow. blackberry, wild rose, thistle, and other thorny vegetation. Tricolored blackbirds are also known to nest in crops associated with dairy farms. Foraging habitat is associated with annual grasslands, wet and dry vernal pools and other seasonal wetlands, agricultural fields (such as large tracts of alfalfa and pastures with continuous having schedules and recently tilled fields), cattle feedlots, and dairies. The Authorized Party Project Proponent will map all existing or potential nesting or foraging sites and provide these maps to the Local Land Use Permittees and Implementing Entity. Nesting sites must also be noted on plans that are submitted to a Local Land Use

- Permittee. See SSHCP Chapter 10 for the process to conduct and submit survey information.
- 8.4.1.2. AMM TCB-2 Tricolored Blackbird Pre-construction Surveys. Preconstruction surveys will be required to determine if active nests are present within a project footprint or within 500 feet of a project footprint if existing or potential nest sites were found during design surveys and construction activities will occur during the breeding season (March 1 through September 15). An Approved Biologist will conduct preconstruction surveys within approximately 30 days and again within 3 days of ground-disturbing activities, and within the proposed project footprint and 500 feet of the proposed project footprint to determine the presence of nesting tricolored blackbird. The surveys should be separated by at least three weeks. Pre-construction surveys will be conducted during the breeding season (March 1 through August 31). Surveys conducted in February (to meet pre-construction survey requirements for work starting in March) must be conducted within 14 days and 3 days in advance of ground-disturbing activities. If a nest is present, then TCB-3 and TCB-4 (ITP Sections 8.4.1.3 and 8.4.1.4) will be implemented. The Approved Biologist will inform the Land Use Authority Permittee (which consist of the County of Sacramento, the City of Galt, and the City of Rancho Cordova) and the Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.
- 8.4.1.3. <u>AMM TCB-3 Tricolored Blackbird Nest Buffer</u>. If active nests are found within the Project footprint or within 500 feet of any Project-related Covered Activities, the Third-Party Project Proponent will establish a 500-foot temporary buffer around the active nest until the young have fledged.
- 8.4.1.4. AMM TCB-4 Tricolored Blackbird Nest Buffer Monitoring. If nesting tricolored blackbirds are present within the Project footprint or within 500 feet of any Project-related Covered Activity, then an Approved Biologist experienced with tricolored blackbird behavior will be retained by the Third-Party Project Proponent to monitor the nest throughout the nesting season and to determine when the young have fledged. The Approved Biologist will be on site daily while construction-related activities are taking place near the disturbance buffer. Work within the nest disturbance buffer will not be permitted. If the Approved Biologist determines that tricolored blackbirds are exhibiting agitated behavior, construction will cease until the buffer size is increased to a distance necessary to result in no harm or harassment to the nesting tricolored blackbirds. If the biologist determines that the colonies are at risk, a meeting with the Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies will be held to determine the best course of action to avoid nest abandonment or take of

individuals. The Approved Biologist will also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a tricolored blackbird flies into an active construction zone (i.e., outside the buffer zone).

- 8.4.1.5. AMM TCB-5 Timing of Pesticide Use and Harvest Timing on Agricultural Preserves. On SSHCP Agricultural Preserves, pesticides (including herbicides) will not be applied from January 1 through July 15.
- 8.4.1.6. <u>Tricolored Blackbird Preserve System Criteria</u>. The TAC shall prioritize land for the preservation and/or establishment of nesting and foraging habitat by considering the following prior to approval:
 - a. Nesting and foraging habitat preservation and establishment shall be the same quality habitat or better than the impact site.
 - b. Foraging habitat shall be within 1 mile from documented breeding colonies whenever feasible.
 - c. In order for breeding colonies to be successful, preserved foraging habitat shall total at least 100 acres in size or larger, whenever feasible, to ensure the success of a breeding colony. Preserved habitat patch size shall be at least 20 acres if the land is contributing to a larger foraging habitat component such as connecting two parcels to create a larger foraging habitat unit, or adjacent to crop land.
 - d. The TAC shall prioritize the preservation and establishment of lands within areas where the large tricolored blackbird colonies have success in large numbers such as areas within the Northern UDA.
 - e. Preserved nesting substrate shall include those breeding colonies that may be less than 2 acres in size. Many of the extant and successful Himalayan blackberry nest sites occupy less than 1 acre.
 - f. Active breeding colonies shall be defined as a colony that has been occupied by tricolored blackbird within the last ten years. Any active breeding colony lost will be mitigated by preserving 3 active breeding colonies.
- 8.4.1.7. <u>Mixed Riparian Scrub</u>. If Project impacts include the Mixed Riparian Scrub land cover type, Permittees shall conduct a survey for tricolored blackbird breeding colonies. If the habitat contains evidence of nesting habitat for tricolored blackbird, the Permittees shall mitigate for the loss of nesting habitat as described in the Conservation Strategy (ITP Attachment 12).
- 8.5.1 <u>Swainson's hawk (Buteo swainsoni)</u>. To avoid direct and indirect effects of Covered Activities on Swainson's hawk, the following AMMs and Conditions of Approval will be implemented. These AMMs may have been modified from the original SSHCP

language adopted on October 29, 2018 (SSHCP Chapter 5, pages 5-104 through 5-105). These modifications will be reflected in an erratum to the SSHCP.

- 8.5.1.1 AMM SWHA-1 Swainson's Hawk Surveys. If modeled habitat for Swainson's hawk (ITP Attachment 6) is present within a Covered Activity's project footprint or within 0.25 mile of a project footprint, then an Approved Biologist will conduct a survey to determine if existing or potential nesting sites are present within the project footprint and adjacent areas within 0.25 mile of the project footprint. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. Nest sites are often associated with Riparian land cover, but also include lone trees in fields, trees along roadways, and trees around structures. Nest trees may include, but are not limited to, Fremont's cottonwood (Populus fremontii), oaks (Quercus spp.), willows (Salix spp.), walnuts (Juglans spp.), eucalyptus (Eucalyptus spp.), pines (Pinus spp.), and Deodar cedar (Cedrus deodara). The Third-Party Project Proponent will map all existing and potential nesting sites and provide these maps to the Local Land Use Permittees and Implementing Entity. Nesting sites must also be noted on plans that are submitted to a Local Land Use Permittee. See SSHCP Chapter 10 for the process to conduct and submit survey information.
- 8.5.1.2 AMM SWHA-2 Swainson's Hawk Pre-Construction Surveys. Pre-construction surveys will be required to determine if active nests are present within a project footprint or within 0.25 mile of a project footprint if existing or potential nest sites were found during initial surveys and construction activities will occur during the breeding season (March 1 through September 15). An Approved Biologist will conduct pre-construction surveys within 30 days and 3 days of ground-disturbing activities to determine presence of nesting Swainson's hawk. Pre-construction surveys will be conducted during the breeding season (March 1 through September 15). If a nest is present, then SWHA-3 and SWHA-4 (ITP Section 8.5.1.3/8.5.1.4) will be implemented. The Approved Biologist will inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.
- 8.5.1.3 AMM SWHA-3 Swainson's Hawk Nest Buffer. If active nests are found within the project footprint or within 0.25 mile of any project-related Covered Activity, the Third-Party Project Proponent will establish a 0.25 mile disturbance buffer around the active nest until the young have fledged, with concurrence from the Wildlife Agencies.
- 8.5.1.4 AMM SWHA-4 Swainson's Hawk Nest Buffer Monitoring. If nesting Swainson's hawks are present within the project footprint or within 0.25 mile

of any project-related Covered Activity, then an Approved Biologist experienced with Swainson's hawk behavior will be retained by the Third-Party Project Proponent to monitor the nest throughout the nesting season and to determine when the young have fledged. The Approved Biologist will be on site daily while construction-related activities are taking place within the buffer. Work within the temporary nest disturbance buffer can occur with the written permission of the Implementing Entity and Wildlife Agencies. If nesting Swainson's hawks begin to exhibit agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, the Approved Biologist will have the authority to shut down construction activities. If agitated behavior is exhibited, the biologist, Third-Party Project Proponent Implementing Entity, and Wildlife Agencies will meet to determine the best course of action to avoid nest abandonment or take of individuals. The Approved Biologist will also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a Swainson's hawk flies into an active construction zone (i.e., outside the buffer zone).

- 8.5.1.5 SWHA Nest Tree Avoidance. Permittees shall avoid removal of SWHA nest trees active in the last 5 years, to the maximum extent practicable. Permittees shall time occupied nest tree removal outside of the SWHA nest season, typically from October 1 to February 1, and shall not remove any occupied nest trees until the last young have fledged, as verified by the Approved Biologist. Permittees shall provide the number of SWHA nest trees removed each year, along with the nest locations, in each Annual Report submitted to the CDFW.
- 8.6.1 <u>Slender Orcutt Grass (*Orcuttia tenuis*)</u>. To avoid direct and indirect effects of Covered Activities on slender Orcutt grass, the following Conditions of Approval and AMMs will be implemented. These AMMs may have been modified from the original SSHCP language adopted on October 29, 2018 (SSHCP Chapter 5, pages 5-92 through 5-93). These modifications will be reflected in an erratum to the SSHCP.
- 8.6.1.1 AMM ORCUTT-1, Slender Orcutt Grass Surveys. If a Covered Activity project site is located within 1 mile of the Mather Core Recovery Area and contains the Vernal Pool land cover type, the project site will be surveyed for slender Orcutt grass by an Approved Biologist following California Department of Fish and Wildlife (CDFW) rare plant survey protocols (*Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* dated March 20, 2018) or most recent CDFW guidelines to determine if Sacramento Orcutt grass is present. or most recent CDFW guidelines to determine if slender Orcutt grass is present. An Approved Biologist will conduct the field investigation to identify and map

- occurrences. See SSHCP Chapter 10.4.2.3 for the process to conduct and submit survey information.
- 8.6.1.2 AMM ORCUTT-2, Slender Orcutt Grass Protection. Where known or new slender Orcutt grass occurrences are found, they will be protected within an SSHCP Preserve that is at least 50 acres. The occurrence will be located interior to the Preserve at a distance of no less than 300 feet from the edge of the Preserve boundary. If a Third-Party Project Proponent encounters a previously undiscovered occurrence of slender Orcutt grass on a Covered Activity project site, the Third-Party Project Proponent () will contact the Implementing Entity or Land Use Authority Permittee with authority over the project, who will coordinate with the Wildlife Agencies for written concurrence of avoidance to ensure that the project does not cause take of the species.
- 8.7.1 <u>Sacramento Orcutt Grass (Orcuttia viscida)</u>. To avoid direct and indirect effects of Covered Activities on Sacramento Orcutt grass, the following Conditions of Approval and AMMs will be implemented. These AMMs may have been modified from the original SSHCP language adopted on October 29, 2018 (SSHCP Chapter 5, pages 5-92 through 5-93). These modifications will be reflected in an erratum to the SSHCP.
- 8.7.1.1 AMM ORCUTT-1, Sacramento Orcutt Grass Surveys. If a Covered Activity project site is located within 1 mile of the Mather Core Recovery Area and contains the Vernal Pool land cover type, the project site will be surveyed for Sacramento Orcutt grass by an Approved Biologist following CDFW rare plant survey protocols (*Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* dated March 20, 2018) or most recent CDFW guidelines to determine if Sacramento Orcutt grass is present. An Approved Biologist will conduct the field investigation to identify and map occurrences. See SSHCP Chapter 10 for the process to submit survey information to the Permittees and the Permitting Agencies.
- 8.7.1.2 AMM ORCUTT-2, Sacramento Orcutt Grass Protection. Where known or new Sacramento Orcutt grass occurrences are found, they will be protected within an SSHCP Preserve that is at least 50 acres. The occurrence will be located interior to the Preserve at a distance of no less than 300 feet from the edge of the Preserve boundary. If a Third-Party Project Proponent encounters a previously undiscovered occurrence of Sacramento Orcutt grass on a Covered Activity project site, the Third-Party Project Proponent will contact the Implementing Entity or Land Use Authority Permittee with authority over the project, who will coordinate with the Wildlife Agencies for written concurrence of avoidance to ensure that the project does not cause take of the species.

- 8.8.1 Bogg's Lake hedge-hyssop (*Gratiola heterosepala*). To avoid direct and indirect effects of Covered Activities on Bogg's Lake hedge-hyssop, the following Conditions of Approval and SSHCP AMMs will be implemented. These AMMs may have been modified from the original SSHCP language adopted on October 29, 2018 (SSHCP Chapter 5, pages 5-92 through 5-93). These modifications will be reflected in an erratum to the SSHCP.
- 8.8.1.1 AMM PLANT-1, Rare Plant Surveys. If a Covered Activity project site contains modeled habitat for Bogg's Lake hedge-hyssop (*Gratiola heterosepala*), the Covered Activity project site will be surveyed for the rare plant by an Approved Biologist and following CDFW rare plant survey protocols (*Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* dated March 20, 2018) or the most recent CDFW rare plant survey protocols. An Approved Biologist will conduct the field surveys and will identify and map plant species occurrences according to the protocols. See SSHCP Chapter 10 for the process to submit survey information to the Permittees and the Permitting Agencies.
- 8.8.1.2 AMM PLANT-2, Rare Plant Protection. If a Bogg's Lake hedge-hyssop listed in AMM PLANT-1 is detected within an area proposed to be disturbed by a Covered Activity or is detected within 250 feet of the area proposed to be disturbed by a Covered Activity, the Implementing Entity will assure one unprotected occurrence of the species is protected within a SSHCP Preserve before any ground disturbance occurs at the project site.
- 8.8.1.3 Annual Plant Surveys. For those plant species covered in this ITP that are annual plants with seed banks which may not germinate every year, prior to beginning Covered Activities in Covered Species modeled habitat, the Permittees may be required to survey a project site for more than one year to substantiate negative findings if the previous year was either extremely dry or extremely wet (which may be found in the Department of Water Resources Water Supply Index Bulletin (http://cdec.water.ca.gov/cgi-progs/iodir/wsi). However, if local reference populations of the species are detectable at the time of survey and none of the species are observed on a project site, a negative finding will be made.

9. Preserve Land Acquisition, and Monitoring

As shown in Table 4 above, development of the Project will result in the permanent loss of 33,497 acres of modeled habitat for the Covered Species and take of the Covered Species as defined by Fish and Game Code is expected (Fish & G. Code, § 86.). CDFW has determined that permanent protection and perpetual management of compensatory habitat is necessary and required pursuant to CESA to fully mitigate project-related

impacts of the taking on the Covered Species that will result with implementation of the Covered Activities. This determination is based on factors including an assessment of the importance of the habitat in the Project Area, the extent to which the Covered Activities will impact the habitat, and the estimate of the acreage required to provide for adequate compensation.

- 9.1. <u>Preserve System</u>. To meet the permanent protection and perpetual management of compensatory habitat requirement, the Permittee shall develop the SSHCP Preserve System (Preserve System). The Plan Permittees shall use the key conservation biology principles and the Biological Goals and Measurable Objectives found in ITP Section 9.4 and Attachment 12, to develop the preserve system (Preserve System). Each Preserve in the Preserve System will be established by one of two processes described below:
 - a. Hardline Process. This process is termed "hardline" because the exact locations and Preserve boundaries are known at the time of ITP issuance. Inside the UDA, some Preserves have already been proposed by willing landowners. These nine "hardline" Preserve locations are all within the UDA, and total approximately 1,800 acres.
 - b. Criteria-based Process. These Preserves are "criteria-based," meaning the exact Preserve boundaries and locations are not known at the time of ITP issuance. Criteria-based Preserves will be located within the UDA and outside the UDA.

The combined criteria-based and hardline preserve process shall create an interconnected SSHCP Preserve System totaling 36,282 acres. The Permittee shall preserve at least 34,495 acres of existing habitat and re-establish or establish at least 1,787 acres of habitat for a total Preserve System of 36,282 acres and provide for both the permanent protection and management of the 36,282 acres Covered Species habitat lands. All Preserves will be preserved in perpetuity and will be acquired either as fee title or as conservation easements. The Implementing Entity shall document the existing conditions of each land parcel proposed for inclusion in the SSHCP Preserve System in a pre-acquisition assessment and site inventory report (SSHCP Chapter 9.4.2). All habitat re-establishment or establishment shall be on lands included in the SSHCP Preserve System, shall be monitored and managed as described in ITP Section 9.10 and 9.11 and will be consistent with the requirements of the SSHCP and this ITP.

9.2. Process for Acquisition of Preserve Land. Permittees will set up preserve systems by a number of different land acquisitions allowable under the SSHCP, including gifts of land, private conservation or mitigation banks. The Implementing Entity will acquire properties within the Plan Area by fee title or by conservation easement to preserve species habitat consistent with the requirements in the SSHCP Conservation Strategy, detailed in ITP Attachment 12. Prior to the acceptance or purchase of Preserve land, the Implementing Entity will determine the land's suitability for

meeting the Biological Goals and Objectives described in section 9.4 of this ITP and for advancing the Conservation Strategy. Lands acquired must do the following:

- a. Contribute to meeting one or more Biological Goals and Measurable Objectives of the SSHCP Conservation Strategy.
- b. Contain biological functions and values that will contribute to meeting the SSHCP Conservation Strategy. Permanent protection must be ensured through a conservation easement consistent with the requirements of SSHCP Section 9.4.3 or by some other permanent dedication of land to the Preserve System.
- c. Be managed in perpetuity according to a Preserve Management Plan as described in ITP Section 9.3 and further detailed in SSHCP Chapter 8. Land acquisitions may be counted toward meeting the obligations of the Plan before a Preserve Management Plan has been completed if the Implementing Entity owns the land, or if the property owner is bound by a conservation easement or other agreement that requires preparation of a land management plan consistent with the requirements described in Chapter 8 of the SSHCP, adopted on October 29, 2018. Management in perpetuity will be ensured through the conservation easement or title record.
- d. Shall not be below sea level.
- e. Shall not be an existing preservation site already being used for mitigation.
- 9.3. Conservation Strategy. The SSHCP Conservation Strategy is based on the guiding principles of conservation biology and landscape ecology and the nature, quality, and geographical distribution of the resources in the Plan Area. To achieve these principals, the Conservation Strategy includes the Biological Goals and Measurable Objectives (described in ITP Section 9.4), Monitoring and Management Programs and monitoring of land management actions and adaptive management of each Preserve (ITP Section 9.10). The key principles of conservation biology that guide the Conservation Strategy include: minimizing habitat fragmentation, forming large preserves, maintaining habitat linkages between preserves, protecting watersheds and their ecosystem functions, preserving irreplaceable and threatened resources, minimizing edge effects, utilizing setbacks, maintaining plan area land cover heterogeneity within preserves, maintaining or increasing population size, and maintaining species distribution in the Plan Area.
- 9.4. <u>Biological Goals and Objectives</u>. The SSHCP describes establishes five broad Biological Goals for the Plan Area:
 - Biological Goal 1: Preserve and link intact landscapes that include the highestquality habitat for Covered Species within the Plan Area.
 - Biological Goal 2: Maintain or improve physical, chemical, and biological functions of aquatic resources within the Plan Area.
 - Biological Goal 3: Preserve, re-establish, and establish natural land covers (including cropland and irrigated pasture-grassland) that provide habitat for Covered Species.

- Biological Goal 4: Maintain or improve habitat value of natural land covers (including cropland and irrigated pasture-grassland) that are preserved within the Plan Area.
- Biological Goal 5: Maintain or expand the existing distribution of each Covered Species within the Plan Area.

To achieve the Biological Goals and Measurable Objectives of the SSHCP Conservation Strategy, Permittees will focus on achieving the goals and objectives described in Attachment 12 of this ITP.

- 9.5. <u>Compensatory Mitigation</u>. To meet the permanent protection and perpetual management of compensatory habitat requirement for the Covered Species, Permittees shall ensure preservation, establishment, or re-establishment of Covered Species habitat for each Covered Species. Mitigation per Covered Species is listed below:
 - a. <u>California Tiger Salamander</u>. Preservation of 17,062 acres of CTS modeled habitat, including 885 acres of modeled aquatic habitat (Vernal Pool and Seasonal Wetland) and 16,177 acres of modeled upland habitat (Blue Oak Savanna and Valley Grassland), shown in ITP Table 7. Of the preserved habitat, 1,872 acres will be in Critical Habitat in PPU 7, including 61 acres of modeled aquatic habitat and 1,811 acres of modeled upland habitat. The ITP will also re-establish and/or establish 79 acres of modeled aquatic habitat within the Plan Area. All preservation, re-establishment, and/or establishment will be consistent with the Biological Goals and Measurable Objectives for this species (ITP Attachment 12). Conservation Strategy objectives include the preservation of at least five occupied California tiger salamander breeding ponds and minimum preservation of 141 acres of aquatic habitat and 1,677 acres of upland habitat (ITP Attachment 12).
 - b. Giant Garter Snake. Preservation of 5,524 acres of GGS modeled habitat within the Plan Area, including 406 acres of modeled aquatic habitat and 5,118 acres of modeled upland habitat, shown in ITP Table 8. Most of this preservation will occur outside the UDA in PPU 7. Of the preserved habitat, 996 acres will be in high-value habitat, including 325 acres of modeled aquatic habitat and 671 acres of modeled upland habitat. The SSHCP will also reestablish and/or establish 303 acres of modeled habitat within the Plan Area, including 169 acres of modeled aquatic habitat and 134 acres of modeled upland habitat. Approximately 232 acres of the 303 acres to be re-established and/or established will be in high-value habitat. All preservation, reestablishment, and/or establishment will be consistent with the Biological Goals and Measurable Objectives for this species (ITP Attachment 12).

- c. <u>Tricolored Blackbird</u>. Preservation of 33,297 acres of TRBL modeled habitat, including 29,193 acres of modeled nesting/foraging habitat and 4,104 acres of modeled foraging habitat throughout the Plan Area, shown in ITP Table 9. Additionally, the SSHCP will re-establish or establish approximately 1,010 acres of modeled habitat, including 232 acres of modeled nesting/foraging habitat and 778 acres of modeled foraging habitat. All preservation, reestablishment, and/or establishment will be consistent with the Biological Goals and Measurable Objectives for this species.
- d. Swainson's Hawk. Preservation of 33,805 acres of SWHA modeled nesting and foraging habitat that includes 8,158 acres of modeled high-value habitat. Additionally, the SSHCP will re-establish or establish 1,101 acres of modeled nesting and foraging habitat, including 118 acres of modeled high-value habitat, shown in ITP Table 10. All preservation, re-establishment, and/or establishment will be consistent with the Biological Goals and Measurable Objectives for this species. All preservation, re-establishment, and/or establishment will be consistent with the Biological Goals and Measurable Objectives for this species.
- e. Slender Orcutt Grass. Preservation of 9,710 acres of Vernal Pool Ecosystem, including 378 acres of Vernal Pool and 9,332 acres of Valley Grassland. The 9,710 acres of preserved Vernal Pool Ecosystem includes 287 acres of preservation of Vernal Pool Ecosystem within slender Orcutt grass critical habitat. Additionally, the SSHCP will re-establish and/or establish approximately 148 acres of slender Orcutt grass modeled aquatic habitat in the Plan Area, shown in ITP Table 11. All preservation, re-establishment, and/or establishment will be consistent with the Biological Goals and Measurable Objectives for this species.
- f. Sacramento Orcutt Grass. Preservation of 14,459 acres of Vernal Pool Ecosystem, including 514 acres of Vernal Pool and 13,945 acres of Valley Grassland. The approximately 14,459 acres of preserved Vernal Pool Ecosystem includes 4,001 acres of preservation of Vernal Pool Ecosystem within Sacramento Orcutt grass Critical Habitat. The SSHCP will also reestablish and/or establish approximately 148 acres of Sacramento Orcutt grass modeled aquatic habitat in the Plan Area, shown in ITP Table 12. All preservation, re-establishment, and/or establishment will be consistent with the Biological Goals and Measurable Objectives for this species.
- g. <u>Bogg's Lake Hedge-Hyssop</u>. Preservation of 9,074 acres of modeled habitat, including 9,039 acres of Vernal Pool Ecosystem (i.e., 382 acres of Vernal Pool and 8,657 acres of Valley Grassland) and 35 acres of Seasonal Wetland. Additionally, the SSHCP will also re-establish and/or establish approximately 252 acres of Boggs Lake hedge-hyssop modeled aquatic habitat in the Plan

Area, shown in ITP Table 13. All preservation, re-establishment, and/or establishment will be consistent with the Biological Goals and Measurable Objectives for this species.

9.6. <u>Conservation Easement</u>. Conservation easements (CE) will be negotiated individually between willing sellers and the Implementing Entity. The terms of the easement and prices paid for easements will be variable depending on the purpose of the easement and the degree to which the easement restricts land uses. The Implementing Entity will hold in perpetuity all conservation easements it purchases or accepts from a landowner. In addition, all conservation easements will include CDFW as third-party enforcement beneficiaries. Conservation easements will contain provisions that allow the Implementing Entity to manage the encumbered property if it becomes necessary, such as if a property is abandoned by the owner (SSHCP Section 9.4.3).

All conservation easements acquired by the SSHCP Implementing Entity will be in accordance with California Civil Code Sections 815 et seq. All conservation easements will follow the most current CDFW CE template, which may be found on CDFW's website https://www.wildlife.ca.gov/Conservation/Planning/Banking/Templates. CDFW, along

https://www.wildlife.ca.gov/Conservation/Planning/Banking/Templates. CDFW, along with the Implementing Entity, must review and approve any modifications to the CE template language.

- 9.7. Fee Title. The Implementing Entity may purchase some lands in fee title. Fee title ownership allows more intensive habitat management than would otherwise be possible on lands held under a conservation easement. According to the SSHCP, Chapter 7, fee title acquisition is preferred for Preserves within the Urban Development Area (UDA) to allow for more intensive management of those Preserves, given their proximity to threats from existing and planned future development. All interests in land owned in fee title by the Implementing Entity and all conservation easements will be protected in perpetuity.
- 9.8. Jump Start and Stay-Ahead Provisions. The SSHCP's Jump-Start and the Stay-Ahead provisions require that implementation of the SSHCP Conservation Strategy and progress toward assembling and managing the 36,282-acre SSHCP Preserve System will always stay ahead of Covered Activity effects. The Jump-Start and Stay-Ahead provisions place the 17 SSHCP "natural" land cover types into seven groups (Table 5 below). By grouping SSHCP land cover types, the Implementing Entity is afforded the flexibility to meet the Stay-Ahead provision based on the best easement and land acquisition opportunities available, rather than being limited by separate acreage goals for each of the 17 land cover types. Land cover types were grouped based on species habitat needs. The Jump-Start and Stay-Ahead provisions of the SSHCP Conservation Strategy can be achieved in whole or in part by the dedication

of land or acquisition of fee title or easements, or the acquisition of credits from a Permitting Agency–approved conservation bank or mitigation bank.

The status of the Stay-Ahead requirements for each land cover grouping will be addressed in each Annual Report. All of the mitigation acres identified in ITP Section 7.4 (a through g above), will be obtained by the Implementing Entity before the end of the Permit Term regardless of the Stay-Ahead provisions or use of these land cover groups to measure compliance with the SSHCP Jump-Start and Stay-Ahead provisions. On an ongoing basis, the Implementing Entity will determine if at least 2% of the remaining mitigation requirements for each of the seven habitat categories is preserved ahead of impacts

Table 5
Land Cover Grouping by Land Cover Category

Land Cover Grouping	Land Cover Types in the Grouping	Land Cover Types Acceptable for Acquisition to Meet Jump-Start/Stay-Ahead Provision
Valley Grassland	Valley Grassland	Valley Grassland Valley Grassland (Vernal Pool Ecosystem)
Vernal Pool	Vernal Pool	Vernal Pool
Other Vernal Pool Invertebrate Habitat	Swale Stream/Creek (Vernal Pool Invertebrate Habitat)	Swale Stream/Creek (Vernal Pool Invertebrate Habitat)
Other Wetland	Seasonal Wetland Freshwater Marsh Stream/Creek Open Water	Seasonal Wetland Freshwater Marsh Stream/Creek Open Water
Riparian	Mixed Riparian Woodland Mixed Riparian Scrub Mine Tailing Riparian Woodland	Mixed Riparian Woodland Mixed Riparian Scrub
Agricultural	Cropland Irrigated Pasture-Grassland Orchard Vineyard	Cropland Irrigated Pasture-Grassland
Oak Woodland	Blue Oak Woodland Blue Oak Savanna	Blue Oak Woodland Blue Oak Savanna

9.8.1. <u>Jump Start</u>. The Jump-Start provision will ensure that there is enough preserve area and habitat benefits to fully offset the initial habitat loss and species take expected when the plan is first implemented. The Jump-Start provision will apply to all SSHCP land cover types for each Covered Species. The SSHCP Permittees shall protect at least 4% of the Covered Species Land Cover Groupings, for each Covered Species shown in Table 5 above, before incidental take coverage is extended by CDFW (ITP Attachment 13, Jump-Start Table).

9.8.2. Stay-Ahead. Under the Stay-Ahead provision, the Permittees will ensure that each Covered Species has at least 2% more Covered Species habitat in advance of the Covered Species impacts. Before the Permittee approves or authorizes a Development Project within Covered Species Modeled Habitat, each SSHCP Permittee will verify that the acres of mitigation required to offset the effects of the project would not exceed the Stay-Ahead provision (SSHCP Chapter 9.4.6.3). In this manner, the Permittee will ensure preservation of habitat for each Covered Species, in advance of Covered Species impacts.

The SSHCP Implementing Entity will maintain the Stay-Ahead provision before additional Covered Activity effects are allowed. The Implementing Entity is responsible for monitoring compliance with the Stay-Ahead provision on an ongoing basis as take coverage is extended to Covered Activities. If the Implementing Entity determines that the amount of impact that is anticipated to occur will exceed the Stay-Ahead provision's 2% threshold for any land cover group, then the Implementing Entity will notify the Permittees that they shall not approve of any Development Projects within Covered Species Modeled Habitat if the 2% Stay-Ahead provision has not been met. The Permittees will immediately notify the Permitting Agencies and the Implementing Entity. The Implementing Entity will then convene a meeting with Permittees and Permitting Agencies to discuss strategies to stay in compliance with the Stay-Ahead provision, including the acquisition of additional Preserve land. Permittees can only proceed with the Covered Activities or Covered Activity Authorization approval process, when the Implementing Entity and the Permitting Agencies agree that the SSHCP is no longer at risk of non-compliance within the Stay-Ahead provision.

9.9. Monitoring and Management. Permittees shall develop an ITP Compliance and Monitoring Program and a Preserve System Monitoring and Management Program. The Preserve System Monitoring and Management Program will integrate monitoring and adaptive management into one cohesive program where monitoring will inform and change management actions to continually improve outcomes for Covered Species and natural land cover types. The Permittees will track; (1) are the Biological Goals and Measurable Objectives being implemented as required in this ITP; (2) are the SSHCP AMMs and ITP Conditions of Approval being implemented as required in this ITP; and (3) are the SSHCP AMMs and ITP Conditions of Approval fully effective in reducing the effects of environmental stressors described in the SSHCP Conservation Strategy (ITP Attachment 12).

The technical details of the ITP Compliance and Monitoring Program and the Preserve System Monitoring and Management Program will be finalized by the Implementing Entity in the first 18 months after ITP issuance, and two separate documents will be prepared for each of these programs based on the frameworks presented in the SSHCP Chapter 8 and will involve coordination by the

Implementing Entity, Permittees, the Permitting Agencies, and the SSHCP Technical Advisory Committee.

The ITP Compliance and AMM Monitoring Program and the Preserve System Monitoring and Management Program outlines the monitoring and management protocols and standards that the Implementing Entity will use to prepare Individual Preserve Management Plans (PMPs) and the Annual Reports.

The AMM Monitoring Programs and the Preserve System Monitoring and Management Program will:

- a. Track the type, number, and location of each Covered Activity implemented that year, along with the acres of ground disturbance for each Covered Activity implemented that year.
- b. Track acres of permanent and temporary impacts to each SSHCP land cover type that year, track the total SSHCP permanent and temporary impacts to each land cover type (total since permit issuance), and compare to SSHCP impact analysis.
- c. Track the number and locations of each AMM and ITP Condition of Approval applied at each Covered Activity implemented that year, track total number of each AMM implemented (total since permit issuance), and report on the effectiveness of each AMM in avoiding effects to Covered Species, as compared to assumptions made during SSHCP development.
- d. Track locations and quantify acres of direct impacts to each Covered Species modeled habitat and Critical Habitat that year and track the total SSHCP direct impacts to each Covered Species modeled habitat and Critical Habitat (total since permit issuance).
- e. Track the locations and quantify acres of indirect impacts to Vernal Pool, Swale, and Stream/Creek (VPIH) land cover types and track the total SSHCP indirect impacts to Vernal Pool, Swale, and Stream/Creek (VPIH) land cover types (total since permit issuance).
- f. Track the number and acres of direct and indirect impacts to occurrences of plant Covered Species that year and track the total SSHCP impacts to occurrences of plant Covered Species (total since permit issuance).
- g. Track the location and the acres of each SSHCP land cover type permanently preserved that year (by fee-title and by conservation easement) and track the total SSHCP preservation of that land cover type (total since permit issuance).
- h. Track location and acres of each Covered Species modeled habitat on the lands preserved that year (including breakdowns for Critical Habitat preserved and modeled habitat preserved in a Recovery Area or within 1 mile of Recovery Areas), and track the total SSHCP preservation of each Covered Species modeled habitat (total since permit issuance).

- i. Track location and acres of each SSHCP land cover type or Covered Species habitat that is re-established or established that year, including breakdowns within 1 mile of Recovery Areas, and track the total SSHCP acres of each re-established or established (total since permit issuance).
- j. Track the location and acres of direct and indirect impacts within each Critical Habitat Unit located in the Plan Area and track the total since permit issuance of direct and indirect impacts to each Critical Habitat Unit located in the Plan Area.
- k. Track, describe, and provide copies of recorded conservation easements, titles of lands acquired in fee title, interagency memorandums of agreement, or any other agreements entered into by the Implementing Entity or other Permittees for the purposes of protecting, establishing or re-establishing Covered Species habitat.
- I. The Implementing Entity will be responsible for collecting and compiling required compliance monitoring information for inclusion in the Annual Report.
- 9.10. Adaptive Management. The Preserve System Monitoring and Management Program will integrate monitoring and adaptive management into one cohesive program where monitoring will inform and change management actions to continually improve outcomes for Covered Species and natural land cover types. SSHCP Table 8-4, and Appendix G-3 provides a framework of indicators, protocols, and sampling design for monitoring the effectiveness of the Preserve System and Monitoring and Management Program.

Proposed changes to preserve monitoring and success criteria will not be implemented by the Implementing Entity until approved by the Permitting Agencies. Each individual PMP will be re-evaluated every five years. Compliance monitoring will include the following components listed below:

- a. Incorporate hypothesis testing and experimental land-management to address key uncertainties about response of natural resources to management methods, and to improve monitoring methods;
- b. Evaluate monitoring protocols;
- c. Incorporate new and best available scientific information into the Preserve System Monitoring and Management Program;
- d. Refine existing maps of each Covered Species modeled habitat locations in the Plan Area. As more Preserve monitoring data becomes available (e.g., annual bird surveys) and as new scientific information results in changed assumptions, the maps should reflect new information to continue to provide guidance for prioritization of Preserve land acquisitions;
- e. The Implementing Entity will review results of all preserve monitoring and directed studies, examine unexpected results to understand the reason and if

- necessary, adjust preserve management actions and monitor the results of those adjustments;
- f. Refine success criteria for re-established and established land cover types during Phase 1 of monitoring. Minimum success criteria will be developed by the TAC and approved by the Permitting Agencies as part of the Preserve System Monitoring and Management Program. As part of adaptive management, these minimum success criteria for re-established species habitat may be adjusted if monitoring demonstrates they are inappropriate indicators of functional habitat.

10. Funding

The Plan Permittees must provide assurances that the conditions of the ITP and SSHCP will be adequately funded over the proposed 50-year Permit Term. Attaining the Biological Goals and Measurable Objectives of the ITP and SSHCP requires adequate funding. The Permittees are responsible for fully funding all aspects of the mitigation requirements as stated in this ITP and the SSHCP. All funding requirements are subject to all terms and conditions and obligations of this ITP.

- 10.1. Economic Analysis and Associated Cost Estimates. The SSHCP economic analysis and associated cost estimates were based on the best information available at that time. Information used in the cost analysis includes, but is not limited to, the estimated acres of impact of future Covered Activities, estimated costs of the SSHCP habitat preservation and implementing re-establishment/ establishment requirements, costs of land by location of the proposed SSHCP Preserve System, estimated costs of anticipated Preserve System management and monitoring activities, the staffing and overhead costs of the proposed SSHCP implementation structure, and estimated costs of addressing any future changed circumstances. The Permittees are responsible for funding all costs associated with implementing the ITP and SSHCP. Estimated costs associated with operating the ITP and SSHCP are organized into the following eight categories include:
 - a. <u>Land Easement and Acquisition Costs</u>. Land or Easement Acquisition for the Preserve System Meeting the Plan's Biological Goals and Measurable Objectives for preservation of SSHCP land cover types requires acquisition of land or conservation easements on properties with suitable ecological characteristics. Costs associated with the acquisition of land or conservation easements include the cost of the land itself, costs associated with a preliminary biological assessment of the land's habitat values, transaction-related expenses such as title and escrow fees and commissions, and initial site improvements.

The total cost of land to be acquired by fee tile and conservation easement under the SSHCP is estimated to be \$487 million over the 50-year Permit Term, including the actual cost of the land or the easement as well as the

transaction costs, Preserve Documentation Report (PDR) costs, and initial site improvement costs, as well as an overall 10% contingency, as discussed below. This estimate relies on the assumption that 31% of newly acquired lands will be acquired in fee title (as opposed to conservation easement), and that the cost of a conservation easement ranges from 70% to 80% of the cost of a fee title acquisition. Furthermore, it is assumed that 43% of fee title acquisitions will occur within the Urban Development Area (UDA) where land is more expensive.

b. Habitat Re-Establishment/Establishment Activities in the Preserve System. Habitat re-establishment/establishment costs are estimated to be approximately \$183 million over the 50-year Permit Term. Estimates of re-establishment/establishment costs were developed for each of the land cover types that require re-establishment/establishment (i.e., Vernal Pool, Seasonal Wetland, Freshwater Marsh, Swale, Stream/Creek, Stream/Creek (Vernal Pool Invertebrate Habitat [VPIH]), Open Water, Riparian (including Mixed Riparian Woodland and Mixed Riparian Scrub), Mine Tailing Riparian Woodland, Blue Oak Woodland, and Blue Oak Savanna).

Costs associated with habitat re-establishment/establishment include, but are not limited to, site reconnaissance, soil testing and other site feasibility studies as necessary, engineering design and preparation of construction drawings and specifications, land acquisition, staking, earthwork, plant and seed procurement, planting/seeding, and installation of irrigation system. Additionally, re-establishment/establishment projects are subject to additional costs associated with intensive short-term monitoring and maintenance activities for the first 5 years after re-establishment/ establishment is complete. Estimates of habitat re-establishment/ establishment costs assume that some portion of habitat re-establishment/ establishment projects may not be successful. In addition, a 10% contingency is applied to guard against shortfalls in planning and design costs, construction costs, and short-term monitoring and maintenance costs. Contingency funds can also be used to remediate re-establishment/establishment sites if the site is not functioning properly.

c. Habitat Management, Monitoring, and Adaptive Management in the Preserve System. All land that is part of the Preserve System must be managed according to the Preserve System Monitoring and Management Program and Conservation Strategy. All Preserve lands acquired in fee title will be subject to active land management by the Implementing Entity. Preserve lands acquired by conservation easement will primarily be managed by individual landowners according to a Preserve Management Plan prepared by the Implementing Entity. Habitat management costs are estimated to be approximately \$15 million over the 50-year Permit Term.

Costs associated with management of the Preserve System include upfront capital expenditures on equipment, materials, and infrastructure improvements; construction of field facilities; and installation of water wells and pumping equipment. Ongoing management costs include invasive species control and other maintenance activities during the Permit Term. An overall average cost per acre of \$500 was applied for the upfront management costs, while \$15 per acre per year is assumed for ongoing management activities. All of the land that makes up the Preserve System will be managed, and property that is encumbered by an easement will primarily be managed by the landowner, however up to 5% of properties encumbered by an easement will require specialized management (such as unconventional crop rotations or fallowing fields) that will be conducted and paid for by the Implementing Entity.

The cost to manage the Preserve System is largely based on the size of the Preserve System. Costs are expected to increase as the Preserve System grows. However, costs will not increase in proportion to the size of the Preserve System because per acre management costs are expected to eventually decrease due to efficiencies of scale. Post-permit management costs are expected to stabilize at a lower cost level. At the end of the 50-year Permit Term, management costs are expected to decline to about 50% of the annual cost in year 50, since the Preserve System will be fully assembled, and re-establishment/establishment will be at or near completion.

In addition to basic management activities described above, the Preserve System Monitoring and Management Program shall include direction on how each land cover type will be managed to ensure that its biological value as habitat is maintained and/or re-established. The Preserve System Monitoring and Management Program will address topics such as agricultural production, grazing regimes, weed control, prescribed fire measures, and wetland management issues. The Preserve System Monitoring and Management Program will be updated periodically, and the costs associated with those updates have also been included in the cost analysis. Focused property-specific or Preserve-specific Preserve Management Plans will be developed from the Preserve System Monitoring and Management Program. It is estimated that about 3% (\$400,000 before contingency) of the overall cost of habitat management can be attributed to the preparation of Preserve Management Plans.

In addition to basic management activities, as part of the proposed Conservation Strategy, the SSHCP includes Measurable Biological Objectives that will benefit target species, rather than the more general species benefits provided by the Preserve System as a whole. These include planting hedgerows to benefit Swainson's hawk (*Buteo swainsoni*)

and greater sandhill crane (*Grus canadensis*), preparation of targeted species mobility studies for California tiger salamander (*Ambystoma californiense*), and others. Cost estimates were developed for each measure and distributed across land cover types. It is estimated that about 12% (\$1.7 million before contingency) of the overall cost of habitat management can be attributed to Species Enhancement Measures.

Adaptive Management Costs are included in the Habitat Monitoring Costs and are estimated to be about \$45 million over the 50-year Permit Term. At the end of the 50-year Permit Term, monitoring costs are expected to decline to about 50% relative to the annual cost in year 50. Adaptive management activities within the Preserve System include any change in the management of the Preserve System necessary to meet the Biological Goals and Measurable Objectives.

d. <u>Changed Circumstances</u>. If changed circumstances that are provided for in the SSHCP Chapter 11.2.1 occur during the Permit Term, implementation of their remedial measures is required. If additional conservation and mitigation measures are deemed necessary to respond to changed circumstances and were provided for in the Plan's operating conservation program, the Permittees will implement the measures specified in the SSHCP. The Implementing Entity will maintain sufficient financial reserves to fund all remedial actions as they arise. Permittees shall account for costs associated with the SSHCP's defined changed circumstances. Costs of remediating changed circumstances are estimated to be about \$8 million over the 50-year Permit Term.

The Implementing Entity will annually assess its funding reserves and supplement those reserves if necessary, to fund implementation of the most expensive remedial actions that might occur. Funds used to supplement these financial reserves could come from outside the Implementing Entity or from within the Implementing Entity budget (i.e., funds shifted from other SSHCP uses). This approach will ensure that adequate funds are available immediately in the event of a changed circumstance occurring.

The Implementing Entity shall implement remedial action if any of the changed circumstances occur. The Implementing Entity will maintain sufficient financial reserves to fund remedial actions when they arise. Contingency funds can also be used to remediate changed circumstances if necessary.

e. <u>Agricultural Enhancement in the Preserve System</u>. Landowners who sell easements on lands that become part of the Preserve System and who engage in farming activities are eligible for monetary payments for the purpose of agricultural enhancement. These payments shall only be used

to improve the property that is under conservation easement. Examples of what the payments can be used for, include the installation or repair of wells, fences, barns, drainage/irrigation systems; demolition of structures, and clearing and leveling of land that does not impact wetland or riparian resources. The Implementing Entity must approve all expenditures. The SSHCP economic analysis assumes that payments under the agricultural enhancement program will be \$10 per acre per year. Agricultural enhancement costs are estimated to be approximately \$6 million over the 50-year Permit Term. Agricultural enhancement activities that are included in the conservation easement agreement are assumed to occur in perpetuity.

Plan Administration. Plan administration costs represent operating costs f. that will be incurred by the Implementing Entity, including staffing, supplies. facilities, equipment, outside professional services, and other miscellaneous expenses. Based on descriptions the Implementing Entity provided in the SSHCP Chapter 9, staffing costs are needed for 3.0 fulltime equivalent (FTE) positions (and associated salary and benefit and tax costs). Office expenses include, but are not limited to, computers, other IT equipment and software, office furniture, supplies, communications, copying and printing, and postage. Office space is assumed to be provided by Sacramento County for \$8,000 per FTE. General office costs including utilities, office equipment including copy and fax machines, an office telephone system, printers, scanners, publications, and digital cameras are included in the office charge. Additional costs included in the economic model include liability insurance, accounting, legal review, travel, and public outreach.

Including a 10% contingency, the SSHCP administration costs are estimated at an average of about \$840,000 per year or \$42 million over the 50-year Permit Term. At the end of the Permit Term, the Implementing Entity will continue to manage the Preserve System, though the level of annual cost is assumed to decrease by about 50% given the loss of certain needs/functions (e.g., land acquisitions).

In addition, administrative costs incurred by Permittees other than the Implementing Entity to fulfill their own responsibilities under the Plan are not included in the cost estimates. For example, each Permittee will incur costs when reviewing applications for take authorization from various project proponents (SSHCP Chapter 10). The participating cities and the County might recover these costs from applicants according to the policies in place at each local jurisdiction. The development fee amounts specified in the Plan do not reflect the costs of application review by the local jurisdictions, and revenues from the Mitigation Fees will not be used to cover these costs. Similarly, the cost of all conditions on Covered Activities described in

Chapter 5 will be borne by the project proponents, either public agencies or private developers.

The Implementing Entity (IE) will employ an executive director dedicated to Plan implementation that directs all the activities of the Implementing Entity; a program manager who directs all-natural resource aspects of Plan implementation; and an administrative assistant who handles day-to-day administrative tasks (some staff are part-time). It is assumed that data management and analysis (including geographic information system (GIS)), accounting, legal and real-estate services will be contracted to one of the Plan Partners or will be provided by consultants. Staff-specific costs include employee salaries and benefits (estimated using a salary multiplier of 50% to include the costs such as health insurance, payroll taxes, retirement plan payments, worker's compensation, disability, and life insurance).

Up to three positions (2.5 FTE) to staff the Implementing Entity are identified in the cost model for year 1. Three FTEs are identified in the cost model after year 1 of implementation. Staffing levels at the Implementing Entity will increase slowly over time as the Preserve System grows and responsibilities increase.

Costs to staff the Implementing Entity are estimated to be about \$23 million over the 50-year Permit Term.

Implementation of the ITP and SSHCP is overseen by a Governing Board composed of members from the County of Sacramento, City of Galt and City of Rancho Cordova. For purposes of the economic analysis it is assumed that there will be a total of six board members each receiving a stipend of \$100 per meeting. It is anticipated that the board will meet up to twice a year. Board stipends are estimated to total \$60,000 over the 50-year Permit Term.

Insurance costs were included for professional insurance for the Governing Board members (often known as "directors' and officers' insurance"), general liability insurance to cover public recreational use within Preserves, and professional liability insurance for Implementing Entity staff. Insurance is estimated to be \$1 million over the 50-year Permit Term.

g. Endowment. Mitigation Fees shall include a contribution to an endowment fund designed to generate sufficient interest to cover the ongoing annual costs beyond the 50-year permit term. The endowment needs are based on estimates of the long-term average real interest rate. There will be periodic audits of the funding program to review the accrual of the endowment and the long-term interest rates and determine if any adjustments are required. An endowment of about \$52 million is required at the end of the Permit Term. This includes the additional cost of approximately \$3.6 million, as a legal endowment. Assuming an even distribution of development and

Mitigation Fee payment over the 50-year Permit Term, interest revenues accruing to the endowment during the Permit Term are estimated to cover about 42 percent of the endowment need. The values presented represent the best available cost estimates based on the information currently available to the Plan Permittees. All costs are presented in 2015 dollars and further described in Section 10.2 above. If actual costs of Plan implementation are inconsistent with the economic analysis, Mitigation fees will be adjusted to bring the Mitigation fees in line with the observed cost of implementing the ITP and SSHCP. The Permittees are responsible for fully funding this endowment.

The Endowment shall be held by the Endowment Manager, which shall be an entity qualified pursuant to Government Code sections 65965-65968, as amended. Permittees shall submit to CDFW a written proposal that includes: (i) the name of the proposed Endowment Manager; (ii) whether the proposed Endowment Manager is a governmental entity, special district, nonprofit organization, community foundation, or congressionally chartered foundation; (iii) whether the proposed Endowment Manager holds the property or an interest in the property for conservation purposes as required by Government Code section 65968(b)(1) or, in the alternative, the basis for finding that the Project qualifies for an exception pursuant to Government Code section 65968(b)(2); and (iv) a copy of the proposed Endowment Manager's certification pursuant to Government Code section 65968(e).

- h. SSHCP Plan Development. Plan Permittees estimate that their direct contributions total about \$6 million for the development and preparation of the SSHCP. These are contributions that were paid using City and County General Funds and from contributions provided by the Sacramento County Water Agency, Sacramento Regional County Sanitation District, and the Southeast Connector Joint Powers Authority. These contributions do not include grant awards. The costs of Plan development have already been incurred. In addition, the Plan Partners will fund the Implementing Entity operations, including the executive director, program manager. administrative assistant, and other staff, as well as legal, real estate. accounting, and other functions for the first 2 years of implementation. This is necessary as the Plan will not have collected enough development fees within the first 2 years to be self-sustaining. Recovery of plan development costs are spread over the 50-year Permit Term, which with interest brings total plan development cost to about \$10 million.
- 10.2. <u>Cost Estimates</u>. The cost estimates rely on a detailed financial spreadsheet model to track costs and funding requirements associated with SSHCP implementation, including ITP Implementation. The Economic Model (ITP Attachment 14, SSHCP

Appendix I) assessed SSHCP conservation requirements and generates a set of cost estimates, organized by SSHCP land cover type categories. Based on the anticipated cost to acquire necessary land and to implement the Plan, the model estimates funding requirements and the required level of the Mitigation Fees that will be imposed on Covered Activities to meet these funding requirements. The SSHCP cost analysis relies on many data sources. Key steps taken were as follows:

- a. The analysis of SSHCP costs considered a hypothetical "Preferred SSHCP Preserve System" that indicated the approximate location and SSHCP land cover type that could be acquired by the SSHCP.
- b. A land valuation exercise identified estimated per-acre land costs based on the location and SSHCP land cover type anticipated for acquisition.
- c. A review of cost assumptions for habitat re-establishment/establishment, management, monitoring, and other costs yielded additional cost estimates by modeled habitat type.
- d. Costs were aggregated to identify the total funding needed for implementation of the Preserve System.
- e. Mitigation fees were derived by determining the total cost of mitigation per acre impacted by Covered Activities for each SSHCP land cover type.

The values presented in ITP Attachment 14 represented the best available cost estimates based on the information currently available to the Permittees, in 2015 dollars. As described in a Memorandum dated April 3, 2019, the South Sacramento Conservation Agency Board of Directors adopted a mitigation fee schedule to fund implementation of the SSHCP and found in ITP Attachment 15. Once the Plan implementation begins and actual cost data are available, the Implementing Entity shall compare the cost assumptions made in this economic analysis with the cost of implementing the SSHCP. If actual costs of implementation are inconsistent with the economic analysis, Mitigation Fees shall be adjusted to bring the Mitigation fees in line with the observed cost of implementing the SSHCP.

10.3. Mitigation Fee. The Mitigation Fees (also referred to as Development Fees in the SSHCP) used in the SSHCP Economic Model were based on cost data from 2015, as shown in ITP Attachment 14. Mitigation fees are shown by land cover, with the preservation component of the fee distinguished from the re-establishment/ establishment fee. The SSHCP Economic Model includes additional detail concerning the cost components that comprise the fee. During the ITP term, Permittees shall collect a Mitigation Fee from the Authorized Party, prior to the issuance or approval of any Development Authorization in the Plan Area. If no Development Authorization is required for a Covered Activity (such as for Permittees' projects), the Fee shall be paid prior to initiation of vegetation- or ground-disturbing activities for said project.

10.4. Mitigation Fee Annual Update. The JPA/ Implementing Entity shall establish and update the Mitigation Fee, on a gross acre basis, required to implement the mitigation program. The Mitigation Fees will be automatically adjusted annually for inflation using two separate indices. The index to adjust the land acquisition cost portion of Development Fee will be the annual Home Price Index for the Sacramento-Arden-Arcade-Roseville Metropolitan Statistical Area. This will be based on the change in the annual average Home Price Index (Quarter 1 through Quarter 4) for the prior calendar year. All other costs of implementing the SSHCP, including management and monitoring of the preserves and the endowment will be adjusted using the California Construction Cost Index (CCCI) which tracks labor and material costs associated with other SSHCP cost categories.

In addition to these annual adjustments, the Permittees will conduct periodic comprehensive reviews of the overall funding program and development fees to ensure they adequately cover plan implementation costs. A comprehensive Mitigation Fee audit will be completed at least every three years for the first 15 years of the plan, and then every five years thereafter.

- 10.5. Land Dedication In-lieu of Mitigation Fees. Project proponents may dedicate land towards satisfying their mitigation requirements and thereby reduce their Mitigation Fees. When the dedication of land (or a re-establishment/establishment site) is accepted into the Preserve System, Mitigation fees will be adjusted by reducing the appropriate portion(s) of the Mitigation Fee (e.g., the "land" component of the SSHCP Mitigation fee) at a 1:1 ratio. If an applicant proposes to dedicate land or an easement in lieu of paying part of the required Mitigation Fees, then the Implementing Entity must review the proposed land dedication or the easement to ensure that it is consistent with the SSHCP Conservation Strategy dedication in lieu of paying the land purchase component of the SSHCP Mitigation Fee is only awarded after the Implementing Entity has approved the land dedication and recordation of a conservation easement or transfer of fee title to the Implementing Entity has occurred (SSHCP Chapter 9).
- 10.6. Mitigation Fee Disposition. The Permittees shall distribute to the Implementing Entity all fees collected within 30 days of their receipt. These fees will be held by the Implementing Entity in a separate trust account for payment of land acquisition costs as well as the associated enhancement and endowment costs, in addition to the administration costs, as identified in the SSHCP Implementation Agreement. Such costs include land acquisition, preserve monitoring and management, adaptive management, agricultural enhancement, changed circumstances, plan administration and the endowment.
- 10.7. <u>Summary of Plan Costs</u>. A summary of SSHCP implementation costs is presented in Table 6 below. The costs presented in this table also represent the total funding requirements for implementation of the SSHCP. The cost estimates include all costs

associated with SSHCP implementation, including ITP implementation, during the Permit Term, as well as establishing the non-wasting endowment (including legal endowment) required at the end of the Permit Term to cover costs that extend beyond the Permit Term in perpetuity.

Table 6
Summary of Plan Costs

Cost Category	Cost Estimate	Average Annual Cost	Distribution of Costs
Land and Easement Acquisition Costs	\$427,854,000	\$8,557,000	55.8%
Habitat Re-establishment/Establishment	\$183,098,000	\$3,662,000	23.9%
Habitat Management, Monitoring, and Adaptive Management	\$59,995,000	\$1,200,000	7.8%
Changed Circumstances	\$8,231,000	\$165,000	1.1%
Agricultural Enhancement	\$6,015,000	\$120,000	0.8%
Plan Administration	\$42,171,000	\$843,000	5.5%
Endowment	\$30,039,000	\$601,000	3.9%
SSHCP Development	\$9,547,000	\$191,000	1.2%
Total	\$766,948,000	\$15,339,000	100.0%

10.8. Contingency Costs. To account for uncertainties in costs, contingencies have been added to the costs to help protect against short-term cost overruns. A general contingency of 10% is included in the cost model for land and easement acquisition, habitat re-establishment/establishment, habitat management, and plan administration. The contingency for monitoring activities is set at 15% to account for easement enforcement actions. Contingency costs are reported in the total cost estimate for each SSHCP cost element. A contingency fund will be used to offset any program costs that are higher than predicted by this Plan. In total, about 8% of the total plan cost (\$64 million) is a direct contingency cost (SSHCP 12.3.9.1). Permittees are responsible for funding all contingency costs.

Amendment:

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

This ITP refers to and incorporates the SSHCP in existence on the date the ITP is issued. An ITP amendment shall be required to incorporate into this ITP any subsequent changes, updates, or amendments to the SSHCP.

Incidental Take Permit No. 2081-2018-016-02

COUNTY OF SACRAMENTO, CITY OF RANCHO CORDOVA, CITY OF GALT, SACRAMENTO COUNTY WATER AGENCY,
CAPITOL SOUTHEAST CONNECTOR JPA, AND SOUTH SACRAMENTO CONSERVATION AGENCY
SOUTH SACRAMENTO HABITAT CONSERVATION PLAN

Stop-Work Order:

CDFW may issue Permittees a written stop-work order requiring Permittees to suspend any Covered Activity for an initial period of up to 25 days to prevent or remedy a violation of this ITP, including but not limited to the failure to comply with reporting or monitoring obligations, or to prevent the unauthorized take of any CESA endangered, threatened, or candidate species. Permittees shall stop work immediately as directed by CDFW upon receipt of any such stop-work order. Upon written notice to Permittees, CDFW may extend any stop-work order issued to Permittees for a period not to exceed 25 additional days. Suspension and revocation of this ITP shall be governed by California Code of Regulations, Title 14, section 783.7, and any other applicable law. Neither the Approved Biologist nor CDFW shall be liable for any costs incurred in complying with stop-work orders.

Compliance with Other Laws:

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

Notices:

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

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

Written notices, reports and other communications relating to this ITP shall be delivered to CDFW by registered first class mail at the following address, or at addresses CDFW may subsequently provide the Permittees. Notices, reports, and other communications shall reference the Project name, Permittees, and ITP Number (2081-2018-016-02) in a cover letter and on any other associated documents.

Original cover with attachment(s) to:

Kevin Thomas, Regional Manager c/o CESA Desk California Department of Fish and Wildlife 1701 Nimbus Road Rancho Cordova, CA 95670 Telephone (916) 358-2898 Fax (916) 358-2912

and a copy to:

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

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

CESA Desk California Department of Fish and Wildlife 1701 Nimbus Road Rancho Cordova, CA 95670 Telephone (916) 358-2930 Fax (916) 358-2912

Compliance with CEQA:

CDFW's issuance of this ITP is subject to CEQA. CDFW is a responsible agency pursuant to CEQA with respect to this ITP because of prior environmental review of the Project by the lead agency, County of Sacramento. (See generally Pub. Resources Code, §§ 21067, 21069.) The lead agency's prior environmental review of the Project is set forth in the final Environmental Impact Report (EIR) for the South Sacramento Habitat Conservation Plan, (SCH No.: 2008062030) approved on September 12, 2018, that the County of Sacramento adopted for the South Sacramento Habitat Conservation Plan. At the time the lead agency adopted the EIR and approved the Project it also adopted various mitigation measures for the Covered Species as conditions of Project approval.

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

Findings Pursuant to CESA:

These findings are intended to document CDFW's compliance with the specific finding

Incidental Take Permit No. 2081-2018-016-02

COUNTY OF SACRAMENTO, CITY OF RANCHO CORDOVA, CITY OF GALT, SACRAMENTO COUNTY WATER AGENCY,
CAPITOL SOUTHEAST CONNECTOR JPA, AND SOUTH SACRAMENTO CONSERVATION AGENCY
SOUTH SACRAMENTO HABITAT CONSERVATION PLAN

requirements set forth in CESA and related regulations. (Fish & G. Code § 2081, subs. (b)-(c); Cal. Code Regs., tit. 14, §§ 783.4, subds, (a)-(b), 783.5, subd. (c)(2).)

CDFW finds based on substantial evidence in the ITP application, the final Environmental Impact Report (EIR) for the South Sacramento Habitat Conservation Plan, the results of consultations, and the administrative record of proceedings, that issuance of this ITP complies and is consistent with the criteria governing the issuance of ITPs pursuant to CESA:

- (1) Take of Covered Species as defined in this ITP will be incidental to the otherwise lawful activities covered under this ITP.
- (2) Impacts of the taking on Covered Species will be minimized and fully mitigated through the implementation of measures required by this ITP and as described in the MMRP, and as further detailed for each species below. Measures include: 1) permanent habitat protection and enhancement; 2) a 2% stay-ahead provision, as described in ITP Measure 9.8.2 which will ensure at least 2% of each Covered Species habitat is preserved prior to any Development Authorization with impacts for that Covered Species; (3) collection of a Mitigation Fee from the Authorized Party prior to the issuance or approval of any Development Authorization in the Plan Area; (4) submittal of Annual Reports, as well as 5 and 10 year Compliance Reports.
- (3) CDFW evaluated factors including an assessment of the importance of the habitat in the Plan Area, the extent to which the Covered Activities will impact the habitat, and CDFW's estimate of the acreage required to provide for adequate compensation for each species, as shown in Tables 7 through 12 below. Impacts per Covered Species, within their modeled habitat types, as well as the proposed mitigation, are as follows:
 - California Tiger Salamander. CDFW evaluated various factors in considering whether take of CTS would be fully mitigated under this ITP. These factors included an assessment of the importance of CTS modeled habitat in the Plan Area, the extent to which the Covered Activities will impact CTS as shown in Table 7 below, CDFW's estimate of the acreage required to provide for adequate compensation, avoidance, minimization, monitoring and reporting measures identified in ITP Section 8.2.1.1 through 8.2.1.9, protection and management in perpetuity of an interconnected Preserve System as described in this ITP Section 9.5 (a), which includes higher quality habitat for California tiger salamander than the habitat being impacted by the Project, and funding requirements as described in Section 10 of this ITP.

As shown in Table 7 below, CDFW determined that there would be 1,677 acres of impacts to Valley Grassland CTS upland modeled habitat, which would be mitigated under the ITP by the preservation of 16,144 acres of Valley Grassland CTS upland modeled habitat. Additionally, there will be 33 acres of preservation of Blue Oak Savanna or Blue Oak Woodland CTS upland modeled habitat.

There would be 21 acres of impacts to Seasonal Wetland CTS aquatic modeled

habitat, which would be mitigated under the ITP by the preservation of 123 acres of Seasonal Wetland CTS modeled aquatic and the re-establishment and/or establishment of 21 acres of Seasonal Wetland CTS aquatic modeled habitat. There would be 57 acres of impacts to Vernal Pool CTS upland modeled habitat, which would be mitigated under the ITP by the preservation of 762 acres of Vernal Pool CTS upland modeled habitat and the establishment/re-establishment of 58 acres of Seasonal Wetland CTS modeled aquatic habitat.

The permanent protection and management of at least 17,062 acres of existing CTS upland and aquatic modeled habitat and re-establishment or establishment of at least 79 acres of CTS Aquatic modeled habitat for a total Preserve System of 17,141 acres of modeled habitat lands specific to CTS and the ITP Conditions of Approval minimize and fully mitigate the impacts of the taking caused by the Project on California tiger salamander.

Table 7
Permanent Effects and Conservation for California Tiger Salamander

Land Cover Types	Direct Effects (acres)	Indirect Effects (acres)	Total/Effects (acres)	Total Habitat Preservation (acres)	Total Habitat Re- establishment and/or Establishment (acres)
	•	Upland	Habitat		
Blue Oak Savanna	0	Qualitative	0	334	0
Valley Grassland	1,677	Qualitative	1,677b	16,144	0
Total Upland Habitat	1,677	Qualitative	1,677	16,177	0
		Aquatic	Habitat		_
Vernal Pool	57	2	59	762	58
Seasonal Wetland	21	Qualitative	21	123	21
Total Aquatic Habitat	78	2	80	885	79
Total Plan-Wide Habitat	1,755	2	1,757	17,062	79

Impacts to Blue Oak Savanna can be mitigated by preserving any combination of Blue Oak Savanna and Blue Oak Woodland.

Giant Garter Snake. CDFW evaluated various factors in considering whether
take of GGS would be fully mitigated under this ITP. These factors included an
assessment of the importance of GGS modeled habitat in the Plan Area, the
extent to which the Covered Activities will impact GGS as shown in Table 8
below. CDFW's estimate of the acreage required to provide for adequate
compensation, avoidance, minimization, monitoring and reporting measures
identified in ITP Section 8.3.1.1 through 8.3.1.10, protection and management
in perpetuity of an interconnected Preserve System as described in this ITP
Section 9.5 (b), which includes higher quality habitat for GGS than the habitat
being impacted by the Project, and funding requirements as described in

Total impacts to Valley Grassland include an unknown but small amount of impact that was analyzed qualitatively in SSHCP Chapter 6.

Section 10 of this ITP.

As shown in Table 8 below, CDFW determined that there would be 39 acres of impacts to Seasonal Wetland GGS modeled aquatic habitat, which would be mitigated under the ITP by the preservation of 100 acres of Seasonal Wetland GGS modeled aquatic habitat and the establishment/re-establishment of 39 acres of Seasonal Wetland GGS modeled aquatic habitat. There would be 71 acres of impacts to Freshwater Marsh GGS modeled aquatic habitat, which would be mitigated under the ITP by the preservation of 127 acres of Seasonal Wetland GGS modeled aquatic habitat and the establishment/re-establishment of 71 acres of Freshwater Marsh modeled aquatic habitat. There would be 25 acres of impacts to Open Water GGS aquatic modeled habitat, which would be mitigated under the ITP by the preservation of 62 acres of Open Water GGS aquatic modeled habitat and the re-establishment and/or establishment of 25 acres of Open Water GGS aquatic modeled habitat. There would be 34 acres of impacts to Streams/Creeks GGS modeled aquatic habitat, which would be mitigated under the ITP by the preservation of 117 acres of Streams/Creeks GGS aquatic modeled habitat and the establishment/re-establishment of 34 acres of Streams/Creeks GGS modeled aquatic habitat.

There would be 135 acres of impacts to Mixed Riparian Scrub GGS modeled habitat, which would be mitigated under the ITP by the preservation of 105 acres of mixed riparian scrub GGS modeled habitat, and the re-establishment and/or establishment of 135 acres of GGS mixed riparian scrub GGS modeled upland habitat.

There would be 2,054 acres of impacts to Valley Grassland GGS modeled upland habitat, which would be mitigated under the ITP by the preservation of 5,013 acres of Valley Grassland GGS modeled upland habitat.

The permanent protection and management of at least 5,524 acres of existing GGS upland and aquatic modeled habitat and re-establishment or establishment of at least 303 acres for a total Preserve System of 5,827 acres of GGS upland and aquatic modeled habitat lands specific to GGS, and the ITP Conditions of Approval minimize and fully mitigate the impacts of the taking caused by the Project on GGS.

Table 8
Permanent Effects and Conservation for Giant Gartersnake

GGS Modeled Habitat Types	Direct Effects (acres)	Indirect Effects (Acres)	Total Effects (Acres)	Total Habitat Preservation (acres)	Total Habitat Re- establishment and/or Establishment (acres)
	Plan-Wid	le Habitat (include	es High-Value Habita	ato)	
Seasonal Wetland	39	Qualitative	39	100	39
Freshwater Marsh	71	Qualitative	71	127	71
Open Water	25	Qualitative	25	62 ^b	25°
Streams/Creeks	34	Qualitative	34	117	34
Total Aquatic Habitat	169	Qualitative	169	406	169
Mixed Riparian Scrub	135	Qualitative	135	1054	134•
Valley Grassland	2,054	Qualitative	2,054	5,0131	0
Total Upland Habitat	2,189	Qualitative	2,189	5,118	134
Total Plan-Wide Habitat	2,358	Qualitative	2,358	5,524	303

- High-value habitat is specifically limited to the Badger Creek and Stone Lakes NWR areas where there are known subpopulations of giant garter snake. High-value habitat for giant garter snake includes Freshwater Marsh, Stream/Creek, Open Water (excluding ski lakes), Seasonal Wetland, Mixed Riparian Scrub, and Valley Grassland land cover types in these areas.
- Preservation of Open Water can be achieved by preserving any aquatic land cover type that provides equivalent or better habitat value for Covered Species affected by the loss of Open Water, as determined by the TAC.
- Re-establishment and/or establishment of Open Water can be achieved by re-establishing and/or establishing any aquatic land cover type that provides equivalent or better habitat value for Covered Species affected by the loss of Open Water, as determined by the TAC.
- Impacts to Mixed Riparian Scrub can be mitigated by preserving any combination of Mixed Riparian Woodland and Mixed Riparian Scrub.
- Impacts to Mixed Riparian Scrub can be mitigated by re-establishing or establishing any combination of Mixed Riparian Woodland and Mixed Riparian Scrub or any combination of the two.
- Total impacts to Valley Grassland include an unknown but small amount of impact that was analyzed qualitatively in SSHCP Chapter 6.
 - Tricolored Blackbird. CDFW evaluated various factors in considering whether take of TRBL would be fully mitigated under this ITP. These factors included an assessment of the importance of TRBL modeled habitat in the Plan Area, the extent to which the Covered Activities will impact TRBL as shown in Table 9 below. CDFW's estimate of the acreage required to provide for adequate compensation, avoidance, minimization, monitoring and reporting measures identified in ITP Section 8.4.1.1 through Section 8.4.1.7, protection and management in perpetuity of an interconnected Preserve System as described in this ITP Section 9.5 (c), which includes higher quality habitat for GGS than the habitat being impacted by the Project, and funding requirements as described in Section 10 of this ITP.

As shown in Table 9 below, CDFW determined that there would be 5,285 acres of impacts to Cropland TRBL modeled nesting and foraging habitat, which would be mitigated under the ITP by the preservation of 6,947 acres of

Cropland TRBL modeled nesting and foraging habitat. There would be 22,014 acres of impacts to Valley Grassland TRBL modeled nesting and foraging habitat, which would be mitigated under the ITP by the preservation of 22,014 acres of Valley Grassland TRBL modeled nesting and foraging habitat. There would be 105 acres of impacts to Seasonal Wetland TRBL modeled nesting and foraging habitat, which would be mitigated under the ITP by the preservation of 105 acres of Seasonal Wetland TRBL modeled nesting and foraging habitat and the establishment/re-establishment of 105 acres of Seasonal Wetland TRBL modeled nesting and foraging habitat. There would be 127 acres of impacts to Freshwater Marsh TRBL modeled nesting and foraging habitat, which would be mitigated under the ITP by the preservation of 127 acres of Freshwater Marsh TRBL modeled nesting and foraging habitat and the establishment/re-establishment of 127 acres of Freshwater Marsh TRBL modeled nesting and foraging habitat and the establishment/re-establishment of 127 acres of Freshwater Marsh TRBL modeled nesting and foraging habitat.

There would be 2,749 acres of impacts to Irrigated Pasture-Grassland TRBL modeled foraging habitat, which would be mitigated under the ITP by the preservation of 2,749 acres of Irrigated Pasture-Grassland TRBL foraging habitat. There would be 389 acres of impacts to Vernal Pool TRBL modeled foraging habitat, which would be mitigated under the ITP by the preservation of 966 acres of Vernal Pool TRBL foraging habitat and the establishment/re-establishment of 389 acres of Vernal Pool TRBL modeled foraging habitat. There would be 234 acres of impacts to Swale TRBL modeled foraging habitat, which would be mitigated under the ITP by the preservation of 278 acres of Swale TRBL modeled foraging habitat. There would be 155 acres of impacts to Open Water TRBL modeled foraging habitat, which would be mitigated under the ITP by the preservation of 155 acres of Open Water TRBL modeled foraging habitat and the establishment/re-establishment of 155 acres of Open Water TRBL modeled foraging habitat and the establishment/re-establishment of 155 acres of Open Water TRBL modeled foraging habitat and the establishment/re-establishment of 155 acres of Open Water foraging habitat.

The permanent protection and management of at least 33,341 acres of existing TRBL Nesting/Foraging modeled habitat and re-establishment or establishment of at least 1,010 acres for a total Preserve System of 34,351 acres of Nesting/Foraging modeled habitat lands specific to TRBL, and the ITP Conditions of Approval minimize and fully mitigate the impacts of the taking caused by the Project on TRBL.

Table 9
Permanent Effects and Conservation for Tricolored Blackbird

TRBL Modeled Habitat Types	Direct Effects (acres)	Indirect Effects (acres)	Total Effects (Acres)	Total Habitat Preservation (acres)	Total Habitat Establishment and/or Re-Establishment (acres)
		Nestin	g/Foraging Habitat		
Cropland	5,285	Qualitative	5,285	6,947*	0
Vailey Grassland	22,014	Qualitative	22,014	22,014	0
Seasonal Wetland	105	Qualitative	105	105	105
Freshwater Marsh	127	Qualitative	127	127	127
Total Nesting/ Foraging Habitat	27,531	Qualitative	27,531	29,193	232
		Fo	oraging Habitat		
Irrigated Pasture-Grassland	2,749	Qualitative	2,749	2,749a	0
Vernal Pool	389	0	389	966	389
Swale	234	0	234	278	234
Open Water	155	Qualitative	155	155°	155⁴
Total Foraging Habitat	3,527	0	3,527	4,148	778
Grand Total	31,058	0	31,058	33,341	1,010

- Impacts to Cropland or Irrigated Pasture-Grassland can be mitigated by preserving a combination of Cropland and Irrigated Pasture-Grassland.
- Total impacts to Valley Grassland include an unknown but small amount of impact that was analyzed qualitatively in Chapter 6.
- Preservation of Open Water can be achieved by preserving any aquatic land cover type that provides equivalent or better habitat value for Covered Species affected by the loss of Open Water, as determined by the TAC.
- Re-establishment and/or establishment of Open Water can be achieved by re-establishing and/or establishing any aquatic land cover type that provides equivalent or better habitat value for Covered Species affected by the loss of Open Water, as determined by the TAC.
 - Swainson's Hawk. CDFW evaluated various factors in considering whether take of SWHA would be fully mitigated under this ITP. These factors included an assessment of the importance of SWHA modeled habitat in the Plan Area, the extent to which the Covered Activities will impact SWHA as shown in Table 10 below, CDFW's estimate of the acreage required to provide for adequate compensation, avoidance, minimization, monitoring and reporting measures identified in ITP Section 8.5.1.1 through 8.5.1.5, protection and management in perpetuity of an interconnected Preserve System as described in this ITP Section 9.5(d), which includes higher quality habitat for SWHA than the habitat being impacted by the Project, and funding requirements as described in Section 10 of this ITP.

As shown in Table 10 below, CDFW determined that there would be 184 acres of impacts to Mixed Riparian Woodland SWHA modeled nesting habitat, which would be mitigated under the ITP by the preservation of 368 acres of Mixed Riparian Woodland SWHA modeled nesting habitat and establishment/reestablishment of 184 acres of Mixed Riparian Woodland SWHA modeled

nesting habitat. There would be 189 acres of impacts to Mixed Riparian Scrub SWHA modeled nesting habitat which would be mitigated under the ITP by the preservation of 378 acres of Mixed Riparian Scrub SWHA modeled nesting habitat, and the establishment/re-establishment of 189 acres of Mixed Riparian Scrub SWHA modeled nesting habitat.

There would be 5,285 acres of impacts to Cropland SWHA modeled foraging habitat, which would be mitigated under the ITP by the preservation of 6.947 acres of Cropland SWHA modeled foraging habitat. There would be 2.749 acres of impacts to Irrigated Pasture-Grassland SWHA modeled foraging habitat. which would be mitigated under the ITP by the preservation of 2,749 acres of Irrigated Pasture-Grassland SWHA modeled foraging habitat. There would be 21,977 acres of impacts to Valley Grassland SWHA modeled foraging habitat, which would be mitigated under the ITP by the preservation of 22.014 acres Irrigated Pasture-Grassland SWHA modeled foraging habitat. There would be 389 acres of impacts to Vernal Pool SWHA modeled foraging habitat, which would be mitigated under the ITP by the preservation of 966 acres of Vernal Pool SWHA modeled foraging habitat and the establishment/reestablishment of 389 acres of Vernal Pool SWHA modeled foraging habitat. There would be 105 acres of impacts to Seasonal Wetland SWHA modeled foraging habitat, which would be mitigated under the ITP by the preservation of 105 acres of Seasonal Wetland SWHA modeled foraging habitat and the establishment/re-establishment of 105 acres of Seasonal Wetland SWHA modeled foraging habitat. There would be 234 acres of impacts to Swale SWHA modeled foraging habitat, which would be mitigated under the ITP by the preservation of 278 acres of Swale SWHA modeled foraging habitat and the establishment/re-establishment of 234 acres of Swale SWHA modeled foraging habitat.

The permanent protection and management of at least 33,805 acres of existing SWHA Nesting/Foraging modeled habitat and re-establishment or establishment of at least 1,101 acres for a total Preserve System of 34,906 acres of Nesting/Foraging modeled habitat lands specific to SWHA, and the ITP Conditions of Approval minimize and fully mitigate the impacts of the taking caused by the Project on SWHA.

Table 10
Permanent Effects and Conservation for Swainson's Hawk

Land Cover Types	Direct Effects (acres)	Indirect Effects (acres)	Total Effects (Acres)	Total Habitat Preservation (acres)	Total Habitat Re- Establishment and/or Establishment (acres)
		Nesting Habitat	}		·
Mixed Riparian Woodland	184	Qualitative	184	368*	1846

Land Cover Types	Direct Effects (acres)	Indirect Effects (acres)	Total Effects (Acres)	Total Habitat Preservation (acres)	Total Habitat Re- Establishment and/or Establishment (acres)
Mixed Riparian Scrub	189	Qualitative	189	378ª	189⁵
Total Nesting Habitat	373	Qualitative	373	746	373
		Foraging Habitat		_	
Cropland	5,285	Qualitative	5,285	6,947c	0
Irrigated Pasture-Grassland	2,749	Qualitative	2,749	2,749⁵	0
Valley Grassland	21,977	Qualitative	21,9774	22,014	0
Vernal Pool	389	0	389	966	389
Seasonal Wetland	105	Qualitative	105	105	105
Swale	234	0	234	278	234
Total Foraging Habitat	30,739	0	30,739	33,059	728
Total Plan Habitat	31,112	0	31,112	33,805	1,101

Impacts to Mixed Riparian Woodland or Mixed Riparian Scrub can be mitigated by preserving any combination of Mixed Riparian Woodland and Mixed Riparian Scrub.

Slender Orcutt Grass. CDFW evaluated various factors in considering whether take of slender Orcutt grass would be fully mitigated under this ITP. These factors included an assessment of the importance of slender Orcutt grass modeled habitat in the Plan Area, the extent to which the Covered Activities will impact slender Orcutt grass as shown in Table 11 below, CDFW's estimate of the acreage required to provide for adequate compensation, avoidance, minimization, monitoring and reporting measures identified in ITP Section 8.6.1.1 through 8.6.1.2, protection and management in perpetuity of an interconnected Preserve System as described in this ITP Section 9.5 (e), which includes higher quality habitat for slender Orcutt grass than the habitat being impacted by the Project, and funding requirements as described in Section 10 of this ITP.

As shown in Table 11 below, CDFW determined that there would be 6,991 acres of impacts to Valley Grassland slender Orcutt grass modeled habitat, which would be mitigated under the ITP by the preservation of 9,332 acres of Valley Grassland slender Orcutt grass modeled habitat. There would be 148 acres of impacts to Vernal Pool slender Orcutt grass modeled habitat, which would be mitigated under the ITP by the preservation of 378 acres of Vernal Pool slender Orcutt grass modeled habitat and the establishment/reestablishment of 148 acres of Vernal Pool slender Orcutt grass modeled habitat.

The permanent protection and management of at least 9,710 acres of existing

Impacts to Mixed Riparian Woodland or Mixed Riparian Scrub can be mitigated by re-establishing or establishing any combination of Mixed Riparian Woodland and Mixed Riparian Scrub.

Impacts to Cropland or Imgated Pasture-Grassland can be mitigated by preserving any combination of Cropland and Imgated Pasture-Grassland.

Total impacts to Valley Grassland include an unknown but small amount of impact that was analyzed qualitatively in Chapter 6.

slender Orcutt grass modeled habitat and re-establishment or establishment of at least 148 acres for a total Preserve System of 9,858 acres of modeled habitat lands specific to slender Orcutt grass, and the ITP Conditions of Approval minimize and fully mitigate the impacts of the taking caused by the Project on slender Orcutt grass.

Table 11
Permanent Effects and Conservation for Slender Orcutt Grass

Land Cover Types	Direct Effects (acres)	Indirect Effects (acres)	Total Effects (acres)	Total Habitat Preservation (acres)	Total Habitat Re- establishment and/or Establishment (acres)
Valley Grassland	6,991	Qualitative	6,991a	9,332	0
Vernal Pool	148	48	196	378	148
Vernal Pool Ecosystem	7,139	48	7,187	9,710	148

Total impacts to Valley Grassland include an unknown but small amount of impact that was analyzed qualitatively in Chapter 6.

Sacramento Orcutt Grass. CDFW evaluated various factors in considering whether take of Sacramento Orcutt grass would be fully mitigated under this ITP. These factors included an assessment of the importance of Sacramento Orcutt grass modeled habitat in the Plan Area, the extent to which the Covered Activities will impact Sacramento Orcutt grass as shown in Table 12 below, CDFW's estimate of the acreage required to provide for adequate compensation, avoidance, minimization, monitoring and reporting measures identified in ITP Section 8.7.1.1 through 8.7.1.2, protection and management in perpetuity of an interconnected Preserve System as described in this ITP Section 9.5 (f), which includes higher quality habitat for Sacramento Orcutt grass than the habitat being impacted by the Project, and funding requirements as described in Section 10 of this ITP.

As shown in Table 12 below, CDFW determined that there would be 6,991 acres of impacts to Valley Grassland Sacramento Orcutt grass modeled habitat, which would be mitigated under the ITP by the preservation of 13,945 acres of Valley Grassland Sacramento Orcutt grass modeled habitat. There would be 148 acres of impacts to Vernal Pool Sacramento Orcutt grass modeled habitat, which would be mitigated under the ITP by the preservation of 514 acres of Vernal Pool Sacramento Orcutt grass modeled habitat and the establishment/re-establishment of 148 acres of Vernal Pool Sacramento Orcutt grass modeled habitat.

The permanent protection and management of at least 14,459 acres of existing Sacramento Orcutt grass modeled habitat and re-establishment or establishment of at least 148 acres for a total Preserve System of 14,607 acres of modeled habitat lands specific to Sacramento Orcutt grass, and the ITP

Conditions of Approval minimize and fully mitigate the impacts of the taking caused by the Project on slender Orcutt grass.

Table 12
Permanent Effects and Conservation for Sacramento Orcutt Grass

Land Cover Types	Direct Effects (acres)	Indirect Effects (acres)	Total Effects (acres)	Total Habitat Preservation (acres)	Total Habitat Re- establishment and/or Establishment (acres)
Valley Grassland	6,991	Qualitative	6,991ª	13,945	0
Vernal Pool	148	48	196	514	148
Vernal Pool Ecosystem	7,139	48	7,187	14,459	148

Total impacts to Valley Grassland include an unknown but small amount of impact that was analyzed qualitatively in Chapter 6.

• Bogg's Lake Hedge-Hyssop. CDFW evaluated various factors in considering whether take of Bogg's Lake hedge-hyssop would be fully mitigated under this ITP. These factors included an assessment of the importance of Sacramento Orcutt grass modeled habitat in the Plan Area, the extent to which the Covered Activities will impact Sacramento Orcutt grass as shown in Table 13 below, CDFW's estimate of the acreage required to provide for adequate compensation, avoidance, minimization, monitoring and reporting measures identified in ITP Section 8.8.1.1 through 8.8.1.3, protection and management in perpetuity of an interconnected Preserve System as described in this ITP Section 9.5 (g), which includes higher quality habitat for Bogg's Lake hedge-hyssop than the habitat being impacted by the Project, and funding requirements as described in Section 10 of this ITP.

As shown in Table 13 below, CDFW determined there will be 8,419 acres of Valley Grassland Bogg's Lake hedge-hyssop modeled habitat, which would be mitigated under the ITP by the preservation of 8,657 acres of Valley Grassland Bogg's Lake hedge-hyssop modeled habitat. There would be 240 acres of impacts to Vernal Pool Bogg's Lake hedge-hyssop modeled habitat, which would be mitigated under the ITP by the preservation of 382 acres of Vernal Pool Bogg's Lake hedge-hyssop modeled habitat and the establishment/reestablishment of 239 acres of Vernal Pool Bogg's Lake hedge-hyssop modeled habitat. There would be impacts to 13 acres of Seasonal Wetland Bogg's Lake hedge-hyssop modeled habitat, which would be mitigated under the ITP by the preservation of 35 acres of Seasonal Wetland Bogg's Lake hedge-hyssop modeled habitat, and the establishment/re-establishment of 13 acres of Seasonal Wetland habitat.

The permanent protection and management of at least 9,074 acres of existing Bogg's Lake hedge-hyssop modeled habitat and re-establishment or establishment of at least 252 acres for a total Preserve System of 9,326 acres

of modeled habitat lands specific to Bogg's Lake hedge-hyssop, and the ITP Conditions of Approval minimize and fully mitigate the impacts of the taking caused by the Project on slender Orcutt grass.

Table 13
Permanent Effects and Conservation for Boggs Lake Hedge-Hyssop

Land Cover Types	Direct Effects (acres)	Indirect Effects (acres)	Total Effects (acres)	Total Habitat Preservation (acres)	Total Habitat Re- establishment and/or Establishment (acres)
Valley Grassland	8,419	Qualitative	8,419³	8,657	0
Vernal Pool	240	52	292	382	239
Subtotal Vernal Pool Ecosystem	8,659	52	8,711	9,039	239
Seasonal Wetland	13	Qualitative	13ª	35	13
GRAND TOTAL	8,672	52	8,724	9,074	252

^a Total impacts to Valley Grassland and Seasonal Wetland include an unknown but small amount of impact that was analyzed qualitatively in Chapter 6.

- (4) 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;
- (5) The measures required by this ITP maintain Permittee's objectives to the greatest extent possible;
- (6) All required measures are capable of successful implementation;
- (7) This ITP is consistent with any regulations adopted pursuant to Fish and Game Code sections 2112 and 2114;
- (8) Permittees have provided adequate assurances to implement the measures required by this ITP, including a 4% Jump-Start and a 2% Stay-Ahead of Covered Species habitat (ITP Section 9.8), the SSHCP Biological Goals and Measurable Objectives (ITP Section 9.4 and Attachment 12), Preserve System land acquisition, monitoring, management, and adaptive management (ITP Section 9), and SSHCP administration, mitigation fees and updates, and the long-term management endowment funds (ITP Section 10.1 through 10.8); and
- (9) Issuance of this ITP will not jeopardize the continued existence of the Covered Species based on the best scientific and other information reasonably available, and this finding includes consideration of the species' capability to survive and reproduce, and any adverse impacts of the taking on those abilities in light of (1) known population trends; (2) known threats to the species; and (3) reasonably foreseeable impacts on the species from other related Projects and activities. Moreover, CDFW's finding is based, in part, on CDFW's express authority to amend the terms and conditions of this ITP without concurrence of the Permittees as necessary to avoid jeopardy and as required by law.

Attachments:

ATTACHMENT 1	Map of Project
ATTACHMENT 2	Mitigation Monitoring and Reporting Program
ATTACHMENT 3	CTS Occurrences and Modeled Habitat Map
ATTACHMENT 4	GGS Occurrences and Modeled Habitat Map
ATTACHMENT 5	TRBL Occurrences and Modeled Habitat Map
ATTACHMENT 6	SWHA Occurrences and Nesting Map
ATTACHMENT 7	Slender Orcutt Occurrences Map
ATTACHMENT 8	Sacramento Orcutt Occurrences Map
ATTACHMENT 9	Bogg's Lake hedge-hyssop Occurrences Map
ATTACHMENT 10	SSHCP AMMs
ATTACHMENT 11	Covered Activity Authorization Form
ATTACHMENT 12	SSHCP Conservation Strategy
ATTACHMENT 13	Jump Start Table
ATTACHMENT 14	SSHCP Economic Model
ATTACHMENT 15	Memorandum on SSHCP Mitigation Fee Schedule Inflation
	and SSHCP Nexus Study

ISSUED BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

on 8/19/	2019
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Kevin Thomas, Regional Manager NORTH CENTRAL REGION