

Final South Sacramento Habitat Conservation Plan

EXECUTIVE SUMMARY

ES.1 Overview

The South Sacramento Habitat Conservation Plan (SSHCP or Plan) is a regional effort that will provide development and infrastructure projects with streamlined, predictable federal and state permitting processes while creating a Preserve System to protect habitat, open space, and agricultural lands. An approved SSHCP allows project proponents within the Plan Area to simplify and expedite the state and federal Endangered Species Act (ESA) permitting process. In addition to streamlining the ESA permitting processes, a separate but parallel multi-tiered permitting program has been developed to streamline Clean Water Act Section 404 and 401 permitting process (see SSHCP Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) Appendix C) and a Master Streambed Alteration Agreement will be prepared to address Section 1602 of the California Fish and Game Code. The SSHCP will allow the Sacramento County (the County), the City of Rancho Cordova, City of Galt, Sacramento County Water Agency, and the Southeast Connector Joint Powers Authority (collectively referred to as the Plan Permittees) to receive an Incidental Take Permit (ITP) for activities and projects they conduct. In addition, the three local Land Use Authority Permittees (the County, Galt, and Rancho Cordova) have the ability to extend incidental take coverage provided by the SSHCP ITPs to activities and projects implemented by Third-Party Project Proponents that are under the jurisdiction of that Land Use Authority Permittee. This will allow Third-Party Project Proponents to avoid the extensive negotiation and processing currently required to obtain individual project permits under the California Endangered Species Act (CESA) from the California Department of Fish and Wildlife (CDFW) and project ESA compliance from the U.S. Fish and Wildlife Service (USFWS).

The Plan Permittees are requesting a 50-year permit that authorizes incidental take of listed species under the federal ESA and a 50-year permit issued under Fish and Game Code Section 2081. The USFWS will provide “no surprises” assurances to the Plan Permittees, where the USFWS will not require the commitment of additional land, water, or financial compensation (or additional restrictions on the use of land, water, or other natural resources) for impacts to Covered Species beyond the level agreed upon and described in the Plan—as long as the Plan Permittees are adequately implementing the Plan. Compliance with the Plan will also satisfy California Environmental Quality Act (CEQA) mitigation requirements for impacts to biological resources.

The SSHCP was developed in coordination with the five Plan Permittees mentioned previously, the USFWS, CDFW, U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, the Central Valley Regional Water Quality Control Board, a Steering Committee, and various other subcommittees that included a broad range of interests.

The SSHCP provides a more effective process for protecting natural resources as compared to the current process of project-by-project mitigation that often results in small and isolated

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preserves. The SSHCP will ensure the creation of large, interconnected preserves that are sustained in perpetuity by an adequately funded management program. The SSHCP also supports the continued success of working landscapes, including certain farming and ranching practices that are integral to implementation of the SSHCP.

ES.2 Geographic Scope

The Plan Area (317,655 acres) is located in the southern portion of Sacramento County. The Plan Area includes portions of unincorporated Sacramento County, Galt, and the southern half of Rancho Cordova (see Figure 1-1, SSHCP Plan Area). Parts of southern Sacramento County, including the community of Rancho Murieta, the sovereign lands of the Miwok Tribe, and a majority of the Delta are not included within the Plan Area. The Plan Area is defined as the area in which all conservation actions will be implemented and where all incidental take will occur. The boundary of the Plan Area was defined using political and ecological factors.

The Plan Area is divided into two components: inside and outside of an Urban Development Area (UDA) (see Figure 1-1). Inside the UDA is where all proposed urbanization will occur and there will also be some limited amount of habitat preservation focused mainly on the protection of vernal pools and streams. Geographically, the UDA is the portion of the Sacramento County Urban Services Boundary (USB), the incorporated Cities of Rancho Cordova and Galt, and Galt's Sphere of Influence that are also within the Plan Area. The area outside of the UDA is largely composed of rural communities and agricultural lands. Most of the habitat preservation proposed by the SSHCP will occur outside of the UDA.

ES.3 Permit Term

The Permit Term defines the length of time in which ITPs issued by the Wildlife Agencies (USFWS and CDFW) can be used by the Plan Permittees and the timeframe in which all conservation actions outlined in the SSHCP Conservation Strategy must be completed. The Plan Implementing Entity and the Plan Permittees are seeking ITPs that are valid for a term of 50 years. A 50-year Permit Term is needed to provide enough time to implement Covered Activities, the Conservation Strategy, the monitoring and adaptive management program, and the funding strategy. Each permit will be issued to all Permittees collectively.

ES.4 Covered Activities

Covered Activities are projects or activities that are allowable under the Plan's ITPs and thus can use the Plan to mitigate for impacts that result from implementation of the Covered Activity. Covered Activities within the UDA include activities and projects related to urban development and associated infrastructure. In-stream maintenance occurring within the UDA is also a Covered Activity. Covered Activities outside of the UDA are limited to specific infrastructure projects

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related to roadway improvements and recycled water delivery. Covered Activities also include actions within the proposed SSHCP Preserve System that are required to manage, monitor, enhance, and re-establish or establish habitat.

The SSHCP Covered Activities fall into eight general categories:

- Urban development in the UDA
- Mining in the UDA
- Rural transportation projects
- Recycled water projects
- Covered Activities in Preserve Setbacks in the UDA
- Covered Activities in Stream Setbacks in the UDA
- SSHCP Preserve System Covered Activities
- Covered Activities in the Laguna Creek Wildlife Corridor of the Preserve System.

ES.5 Covered Species

The Plan provides take authorization for 28 Covered Species, of which, 11 are currently listed as threatened or endangered under the California ESA or the federal ESA (Table ES-1). The 28 species were identified through an evaluation process that began with a list of 90 species. Species were selected for coverage based on their potential to occur within the Plan Area, their potential to be adversely affected by Covered Activities in the Plan Area, the availability of information to adequately evaluate impacts to the species, and the ability to adequately protect the species. The Plan includes conservation actions to protect all 28 Covered Species whether or not they are currently listed. As SSHCP Covered Species, any currently non-listed species that is covered under the Plan will not require additional conservation within the Plan Area should the species become listed under the federal ESA during the Plan’s Permit Term.

Table ES-1
SSHCP Covered Species and Current Listing Status

Scientific Name Common Name	Status		
	<i>Federal</i>	<i>State</i>	<i>CRPR</i>
<i>Invertebrates</i>			
<i>Lepidurus packardii</i> Vernal pool tadpole shrimp	E*	—	—
<i>Branchinecta lynchi</i> Vernal pool fairy shrimp	T*	—	—

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**Table ES-1
SSHCP Covered Species and Current Listing Status**

Scientific Name Common Name	Status		
	Federal	State	CRPR
<i>Branchinecta mesovallensis</i> Mid-valley fairy shrimp	—	—	—
<i>Desmocerus californicus dimorphus</i> Valley elderberry longhorn beetle	T	—	—
<i>Hydrochara rickseckeri</i> Ricksecker's water scavenger beetle	—	—	—
<i>Amphibians</i>			
<i>Ambystoma californiense</i> California tiger salamander, (Central Valley population)	T*	T	—
<i>Spea hammondi</i> Western spadefoot	—	CSC	—
<i>Reptiles</i>			
<i>Actinemys marmorata</i> Western pond turtle	—	CSC	—
<i>Thamnophis gigas</i> Giant gartersnake	T	T	—
<i>Birds</i>			
<i>Accipiter cooperii</i> Cooper's hawk	—	WL	—
<i>Agelaius tricolor</i> Tricolored blackbird	BCC	T (Emergency Listed)	—
<i>Athene cunicularia hypugaea</i> Western burrowing owl	BCC	CSC	—
<i>Buteo regalis</i> Ferruginous hawk	BCC	—	—
<i>Buteo swainsoni</i> Swainson's hawk	BCC	T	—
<i>Circus cyaneus</i> Northern harrier	—	CSC	—
<i>Elanus leucurus</i> White-tailed kite	—	CFP	—
<i>Grus canadensis tabida</i> Greater sandhill crane	—	T; CFP	—
<i>Lanius ludovicianus</i> Loggerhead shrike	BCC	CSC	—
<i>Mammals</i>			
<i>Lasiurus blossevillii</i> Western red bat	—	CSC	—
<i>Taxidea taxus</i> American badger	—	CSC	—
<i>Plants</i>			
<i>Downingia pusilla</i> Dwarf downingia	—	—	2.2
<i>Gratiola heterosepala</i> Boggs Lake hedge-hyssop	—	E	1B.2
<i>Juncus leiospermus</i> var. <i>ahartii</i> Ahart's dwarf rush	—	—	1B.2

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**Table ES-1
SSHCP Covered Species and Current Listing Status**

Scientific Name Common Name	Status		
	<i>Federal</i>	<i>State</i>	<i>CRPR</i>
<i>Legenere limosa</i> Legenere	—	—	1B.1
<i>Navarretia myersii</i> Pincushion navarretia	—	—	1B.1
<i>Orcuttia tenuis</i> Slender Orcutt grass	T*	E	1B.1
<i>Orcuttia viscida</i> Sacramento Orcutt grass	E*	E	1B.1
<i>Sagittaria sanfordii</i> Sanford's arrowhead	—	—	1B.2

Status Definitions

Federal:

- E = Listed as endangered under the federal ESA
- T = Listed as threatened under the federal ESA
- * = Species has designated Critical Habitat located within the Plan Area.
- = No federal ESA listing
- BCC = Bird of Conservation Concern, USFWS 2008.

State:

- E = Listed as endangered under CESA
- T = Listed as threatened under CESA
- CFP = Fully protected under the California Fish and Game Code
- CSC = Species of special concern in California
- WL = Watch List
- = No state status

California Native Plant Society California Rare Plant Rank (CRPR)

- 1B = Rare, threatened, or endangered in California and elsewhere
- 2 = Rare, threatened, or endangered in California but more common elsewhere

CRPR Threat Ranks

- 0.1 = Seriously threatened in California (high degree/immediacy of threat)
- 0.2 = Fairly threatened in California (moderate degree/immediacy of threat)
- 0.3 = Not very threatened in California (low degree/immediacy of threat)

ES.6 Conservation Strategy

The SSHCP Conservation Strategy mitigates to the maximum extent practicable the impacts of Covered Activities, including all direct and indirect impacts on Covered Species and their habitats. The SSHCP Conservation Strategy provides for conservation of 28 Covered Species and 17 land cover types, avoids or minimizes impacts of Covered Activities, mitigates for the impacts of Covered Activities on the Covered Species and their habitats on the basis of species and habitat needs, provides a regional approach to the mitigation of impacts and the conservation of species and their habitats, protects wetlands and waters of the Plan Area, and conserves natural communities in the Plan Area.

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The Conservation Strategy is based on a set of Biological Goals and Measurable Objectives developed specifically for the Plan. Conservation actions were then identified to achieve these goals and objectives. The SSHCP Conservation Strategy is focused on the following major components:

- Create an integrated Preserve System that conserves natural land covers, certain Cropland cover types, and Irrigated Pasture–Grassland in the Plan Area. The Preserve System will 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. The Preserve System was developed for the benefit of SSHCP Covered Species, natural communities, biological diversity, and ecosystem functions of the Plan Area.
- Provide for the continued persistence of Covered Species in the Plan Area.
- Protect remaining natural segments of Elder Creek, Frye Creek, Gerber Creek, Morrison Creek, Paseo Central, Sun Creek, and their first- and second-order tributaries within the UDA portion of the Plan Area.
- Protect all of the Laguna Creek (North) Corridor within the Plan Area.
- Manage preserved lands to enhance populations of Covered Species and maintain biological diversity within the Preserve System.
- Maintain existing watershed functions in the Plan Area to benefit wetlands (aquatic land cover types) and to support aquatic Covered Species and their habitats.
- Re-establish or establish Vernal Pool land cover to ensure the Plan meets County, state, and federal requirements for “no-net-loss” of waters and wetlands and to offset impacts to vernal pool Covered Species.
- Re-establish or establish riparian and other aquatic land cover to ensure the Plan meets County, state, and federal requirements for “no-net-loss” of waters and wetlands and to offset impacts to riparian and aquatic Covered Species.

ES.7 Preserve System

The SSHCP Conservation Strategy will result in an interconnected Preserve System totaling 36,282 acres. All SSHCP Preserves will be preserved in perpetuity and would be acquired either as fee title or as conservation easements, although most of the Preserve System will be acquired using conservation easements. As the SSHCP is implemented over the 50-Year Permit Term, the new 36,282-acre SSHCP Preserve System will be established in a manner that supplements, complements, and links together many of the existing preserves within the Plan Area.

The SSHCP will preserve approximately 27,554 acres outside of the UDA, including a large 10,500-acre Vernal Pool Grassland Preserve that will be connected to already existing Preserves.

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Several smaller Vernal Pool Grassland Preserves and Preserves established to protect other wetland land cover types will also be established outside of the UDA. Preserves that mainly comprise agricultural land will be preserved outside of the UDA in a matrix of open space, agricultural landscapes, and agricultural residential communities. Finally, several Linkage Preserves will be established outside of the UDA, mainly along riparian and stream corridors, to provide connectivity between Preserves.

The SSHCP will preserve approximately 6,941 acres within the UDA. Preserves that are established within the UDA will focus on preserving the Vernal Pool Ecosystem within the Mather Core Recovery Area. These Preserves will be established next to adjacent Preserves when possible and will be connected to one another and to Preserves outside of the UDA via the establishment of Linkage Preserves.

ES.8 Habitat Re-Establishment/Establishment

The SSHCP will re-establish/establish a total of approximately 1,787 acres of aquatic, riparian, and blue oak woodland habitat. Re-establishment/establishment projects will be strategically located within preserved areas where they would provide maximum functional gain. The SSHCP emphasizes re-establishment over establishment; however, limitations to the amount of acreage that can be re-established will necessitate that habitat is established to meet the SSHCP's minimum 1:1 compensatory mitigation ratio requirements.

The SSHCP provides guidelines for re-establishing and establishing aquatic resources within the Plan Area. These guidelines provide the outline (consistent with the U.S. Army Corps of Engineers, South Pacific Division's 2015 Regional Compensatory Mitigation and Monitoring Guidelines) for how compensatory mitigation projects would be planned, designed, implemented, and managed such that the projects would be viable into perpetuity and would adequately compensate for unavoidable impacts to aquatic resources. Construction of all habitat re-establishment/establishment projects will be completed by Year 45 of the Permit Term.

ES.9 Monitoring and Management Programs

The frameworks for two monitoring programs have been developed. The first framework is the "South Sacramento Habitat Conservation Plan (SSHCP) Compliance and Avoidance and Minimization Measure (AMM) Monitoring Program Framework." This monitoring program framework was developed to monitor compliance with the Plan requirements, the Implementing Agreement, and the permits. A second monitoring program framework, the "SSHCP Preserve System Monitoring and Management Program" was developed to monitor the effectiveness of the Plan in terms of protecting Covered Species, natural communities, and ecosystem processes within the SSHCP Preserve System and to evaluate the effects of preserve management actions.

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The SSHCP 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 SSHCP 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 SSHCP Annual Reports.

The technical details of the SSHCP Compliance and AMM Monitoring Program and the SSHCP Preserve System Monitoring and Management Program will be finalized by the Implementing Entity in the first 18 months after permit issuance.

ES.10 Conditions on Covered Activities

The SSHCP includes AMMs as conditions on Covered Activities. Each condition contains several AMMs that are intended to eliminate or reduce direct or indirect effects to species that could result from implementation of a Covered Activity. In addition, the SSHCP provides species-specific take and avoidance measures to avoid or minimize effects of Covered Activities on specific SSHCP Covered Species. Species-specific AMMs include species surveys, pre-construction surveys, and construction monitoring.

Conditions on Covered Activities are included that:

- Avoid and minimize urban development impacts to watershed hydrology and water quality
- Avoid and minimize urban development direct and indirect impacts to existing Preserves and SSHCP Preserves
- Require implementation of construction best management practices
- Avoid and minimize impacts that may result from implementation of transportation-related Covered Activities
- Avoid and minimize impacts that result from public use of low-impact nature trails in Preserves
- Avoid and minimize impacts to existing vernal pools when re-establishing or establishing vernal pool wetlands
- Avoid and minimize impacts to streams and creeks
- Avoid and minimize impacts to Covered Species from utility and utility maintenance Covered Activities
- Avoid and minimize impacts that might result from removing or breaching levees to establish or re-establish riparian habitat

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- Avoid and minimize impacts that might result from potential residual contamination of Preserves and related exposure of people to such hazardous materials.

ES.11 Implementation

A new Joint Powers Authority called the South Sacramento Conservation Agency (SSCA) will be created to implement the SSHCP. The SSCA is responsible for ensuring compliance with the terms of the Plan, the Implementing Agreement, and the Permits. The SSCA will be governed by a Governing Board of elected officials from the County, Rancho Cordova, and Galt. An Implementing Commission consisting of a single representative from each of the Land Use Authority Permittees and Plan Partner Permittees will be formed to implement duties that the SSCA Board sees fit to assign to it. An Executive Director and staff will be hired to implement the day-to-day operations of the Plan. Staff for these positions may be hired by the Implementing Entity, or their functions can be contracted out to existing local agencies, nonprofit organizations, or private consultants. Staff or qualified consultants will be retained on an as-needed basis. The Implementing Entity will be advised by representatives of USFWS and CDFW and a technical advisory committee.

The Plan also includes a detailed process for land and easement acquisitions from willing sellers; a process for providing land dedications in lieu of fees; and provisions that prohibit the Plan from falling behind in its mitigation obligations.

ES.12 Cost and Funding

The federal ESA requires that the Plan Permittees provide assurances that the SSHCP will be adequately funded over the proposed 50-year Permit Term. The Biological Goals and Measurable Objectives of the SSHCP cannot be attained without adequate funding. The SSHCP funding program is critical to the successful development, implementation, and viability of the SSHCP. Estimating the full costs of the operating SSHCP is an essential step to demonstrate adequate funding to meet regulatory requirements.

The economic analysis evaluates the many costs associated with implementation of the SSHCP and identifies the funding mechanism(s) that will be used to pay for the SSHCP. In order to ensure enough funding, all costs associated with the Conservation Actions necessary to implement the SSHCP had to be identified. Because of the geographic scale of the Plan, the complexity of the Conservation Actions, and long-time frame over which these actions will occur, the cost-estimating process involves many assumptions. The costs are identified for planning purposes only to estimate funding levels needed to implement the Plan.

The total cost of implementing the SSHCP during the 50-year Permit Term is estimated at \$766.95 million for an average of approximately \$15.4 million annually. This includes the cost

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of land and easement acquisition; Plan administration; habitat management, monitoring, and adaptive management; addressing changed circumstances; habitat re-establishment/establishment; recovery of plan development costs; funding for an agricultural enhancement program; and an endowment. Contingency costs and costs for remedial measures are included in some of the cost categories mentioned above.

Plan costs were estimated from a detailed model of all expected cost components based on actual costs of tasks. Funding for this Plan is derived entirely from fees on private development and public infrastructure. This includes developer mitigation fees or developer land dedications in lieu of fees. A summary of the Plan costs is presented in Table ES-2.

**Table ES-2
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	\$61,730,000	\$1,235,000	7.8%
Changed Circumstances	\$8,404,000	\$168,000	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%