

**PLACER COUNTY
CONSERVATION PROGRAM**

**WESTERN PLACER COUNTY
HABITAT CONSERVATION PLAN/
NATURAL COMMUNITY CONSERVATION PLAN**



Executive Summary

SEPTEMBER 2018

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PLACER COUNTY CONSERVATION PROGRAM

WESTERN PLACER COUNTY HABITAT CONSERVATION PLAN / NATURAL COMMUNITY CONSERVATION PLAN

EXECUTIVE SUMMARY SEPTEMBER 2018

The Placer County Conservation Program (PCCP) is a framework for conservation of certain special status species and natural communities in western Placer County and supports local agencies' application for state and federal regulatory permits. The PCCP comprises three planning documents published by the County of Placer:

- **Western Placer County Habitat Conservation Plan and Natural Community Conservation Plan**
- **Western Placer County Aquatic Resources Program**
- **Western Placer County In-Lieu Fee Program**

This Executive Summary offers an overview of the PCCP; the program is described in detail in the planning documents, in the Implementing Agreement, and in other supporting material. The executive summary covers:

- 1. Program:** Local Agency Permittees and Regulatory Agencies, Covered Activities, the Plan Area, Covered Communities and Covered Species, the PCCP Map, and the Stream System
- 2. Conservation Strategy:** Conservation Strategy, Reserve System, Stream Protection and Enhancement, Wetland Conservation and No Overall Net Loss of Wetland Values and Functions, and Avoidance, Minimization, and Mitigation
- 3. Cost and Funding:** Plan Cost, Plan Funding, and Development Fees
- 4. Permit:** Launching the Plan, The Plan in Action, Proceeding with Covered Activities, Changing the Plan
- 5. References**

Acronyms

PCCP The Placer County Conservation Program

PCA The Placer Conservation Authority, created to implement the Plan

RAA Reserve Acquisition Area, where the majority of reserve acquisition will occur

PFG Potential Future Growth area, where the majority of future growth will occur

EXR Existing reserves and protected areas, private mitigation banks and public lands

1. PROGRAM

1. THE PLACER COUNTY CONSERVATION PROGRAM

Local Agency Permittees and Regulatory Agencies

The goal of the Placer County Conservation Program (PCCP) is to provide an effective framework to protect, enhance, and restore the natural resources in specific areas of western Placer County, while streamlining environmental permitting for Covered Activities. Within this framework, the PCCP will achieve conservation goals for certain special status species and natural communities, comply with state and federal environmental regulations, accommodate anticipated urban and rural growth, and permit the construction and maintenance of needed infrastructure.

The PCCP was prepared by the local agencies that will become Permittees, in cooperation with state and federal regulatory agencies.

The PCCP includes three separate, but complementary, components that support two sets of state and federal permits:

- **Western Placer County Habitat Conservation Plan and Natural Community Conservation Plan** (HCP/ NCCP or "Plan") will protect fish and wildlife and their habitats and fulfill the requirements of the federal Endangered

Species Act (ESA), and the California Natural Community and Conservation Planning Act (NCCP Act).

- **Western Placer County Aquatic Resources Program** (CARP) will protect streams, wetlands, and other water resources and fulfill the requirements of the federal Clean Water Act and analogous state laws and regulations.
- **In-Lieu Fee Program** allows requirements under Section 404 of the Clean Water Act to be fulfilled by payment of a fee for compensatory mitigation of impacts on aquatic resources from activities covered under the HCP/NCCP and the CARP.

The state and federal endangered species laws prohibit "take" of protected species without a permit. Take is broadly defined to include harm and habitat loss, as well as killing individuals. The PCCP permits allow "incidental take" of species. The Plan does not provide compliance under the Clean Water Act, but permits issued by the U.S. Army Corps of Engineers will streamline future compliance under the Clean Water Act.

Covered Activities

The permits cover activities that will be undertaken by or approved by the Permittees. Most significant is the private development and public infrastructure for urban, suburban, and

Permittees are the local agencies that will implement the PCCP.

- Placer County
- City of Lincoln
- South Placer Regional Transportation Authority
- Placer County Water Agency
- Placer Conservation Authority (PCA), created to implement the HCP/NCCP and the CARP on behalf of the other Permittees
- Other parties may elect to seek coverage under the HCP/NCCP as "Participating Special Entities,"

Resource Agencies are state and federal regulatory agencies

- **Wildlife Agencies** are the permitting agencies under the federal Endangered Species Act and the California Natural Communities Conservation Planning Act:
 - California Department of Fish and Wildlife
 - U.S. Fish and Wildlife Service
 - National Marine Fisheries Service, National Oceanic and Atmospheric Administration
- **Water Resource Agencies** are the permitting or overseeing agencies under the state Porter-Cologne Water Quality Control Act and the federal Clean Water Act:
 - Central Valley Regional Water Quality Control Board
 - U.S. Army Corps of Engineers
 - U.S. Environmental Protection Agency

1. PROGRAM

rural residential development to accommodate population and employment growth in the City of Lincoln and in unincorporated western Placer County over the next 50 years. Other Permittees have specific public works projects that will be covered: South Placer Regional Transportation Authority for the Placer Parkway project running west from Highway 65 to Sacramento County, and the Placer County Water Agency for construction/operations of new and existing water transmission facilities in western Placer County.

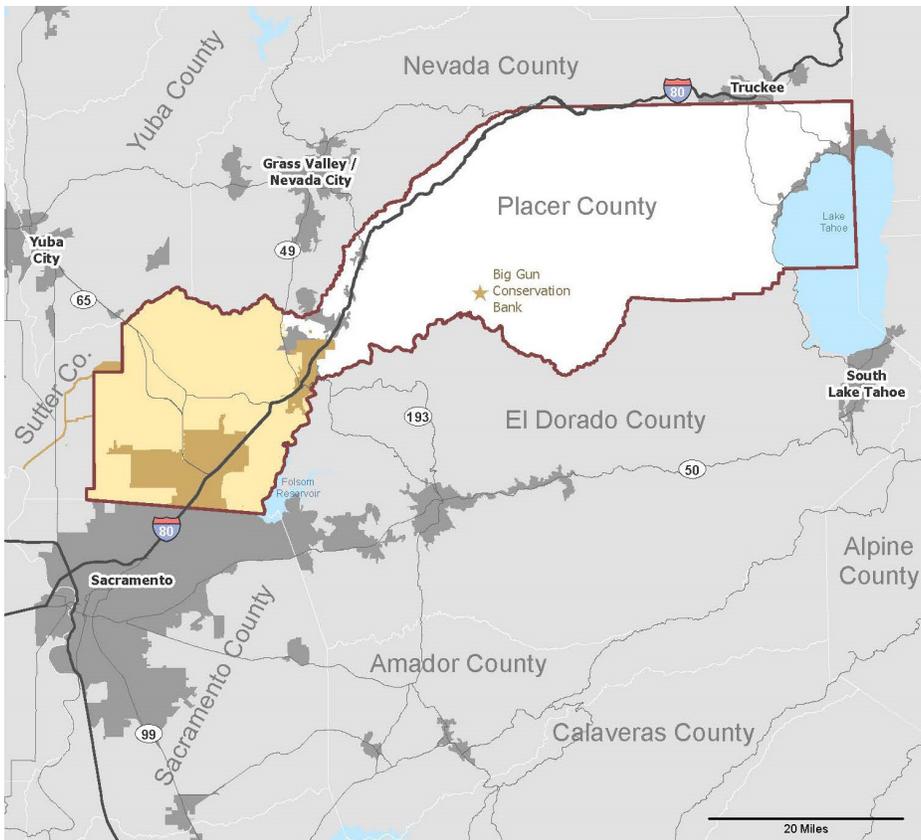
The strong growth of the past few decades is expected to continue and the population of western Placer as a whole is expected to roughly double by 2065. The estimate of 50-year covered growth is based on a scenario derived from City and County General Plans, regional demographic projections, and an analysis of existing patterns of built up and open land. In 2014, there were 109,000 people

living in 40,000 households and 33,000 jobs in Lincoln and unincorporated western Placer County; the growth scenario shows an increase of 93,000 housing units and 91,000 jobs on roughly 30,000 acres of land. The PCCP minimizes and mitigates the impacts of that growth on Covered Communities and Covered Species.

Activities not covered by this Plan are listed fully in HCP/NCCP Section 2.7 and include agriculture, quarrying, and minor activities on already developed land, on small existing parcels, of limited scope, or not requiring a permit.

The Plan Area

The PCCP Plan Area is western Placer County and specific conservation activity areas in neighboring Sutter County. The Plan Area is where the permits will apply. See Figure 1.



**Figure 1.
PCCP Location**

Placer County Conservation Program
Western Placer County HCP/NCCP

- Plan Area A
- Plan Area B

Western Placer County refers to roughly 261,000 acres, ranging from California State Route 49 westward to Sutter and Sacramento Counties. Plan Area A includes the City of Lincoln and unincorporated Placer County, which are the two general land use authorities permitted under the PCCP. The cities of Auburn, Loomis, Rocklin, and Roseville are not Permittees and are referred to as the Non-participating Cities, although County actions there are covered as Plan Area B along with a portion of adjoining Sutter County.

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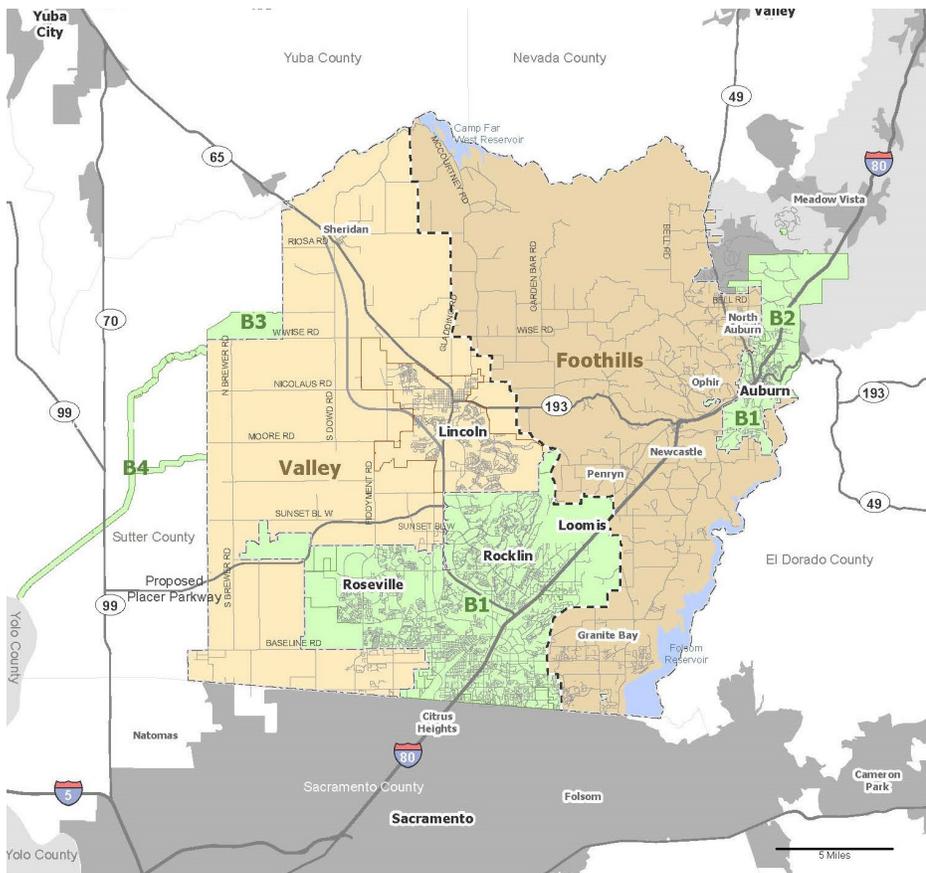


Figure 2.
Plan Area

- Plan Area A: Valley (100,700 acres)**
The Valley portion of Plan Area A comprises the city of Lincoln and unincorporated western Placer County below roughly 200 feet in elevation.
- Valley/Foothill Divide
- Plan Area A: Foothills (109,295 acres)**
The Foothills portion comprises unincorporated western Placer County.
- Plan Area B:**
 - B1: Permittee Activity carrying out public projects in Non-participating City Jurisdiction (50,600 acres)
 - B2: PCWA Zone 1 Operations and Maintenance (6,315 acres)
 - B3: Racoon Creek Floodplain Conservation (1,724 acres)
 - B4: Fish Passage Channel Improvement (559 acres, 32.9 miles of stream channel)
 - B5: Big Gun Conservation Bank (52 acres)

Plan Area A is the main focus of the HCP/ NCCP and where all future growth and most of the Covered Activities will take place. Plan Area A is the City of Lincoln, plus all unincorporated lands within western Placer County: approximately 209,800 acres, or roughly five-sixths of western Placer County.

Plan Area B comprises several additional areas in Placer County and adjacent Sutter County where only specific public agency or conservation Covered Activities may occur.

The changing landscape of agriculture, urban development, and woodland across Western Placer County marks the transition from the Sacramento Valley on the west to the Sierra Nevada foothills on the east. The PCCP uses the natural break roughly along the 200 foot

contour to demark the Valley and the Foothills as a way of organizing the Plan, as shown in Figure 2.

Covered Communities

The Plan uses the terms land-cover type, community, and constituent habitat to classify and describe the biological and land use setting of the Plan Area.

Land-cover type is the dominant feature of the land surface discernible from aerial photographs and defined by vegetation, water, or human uses and serves as the basic mapping unit. Land-cover types are modeled after the California Wildlife Habitat Relationship system adapted to better describe the mosaic of agricultural and urban uses in the Plan Area.

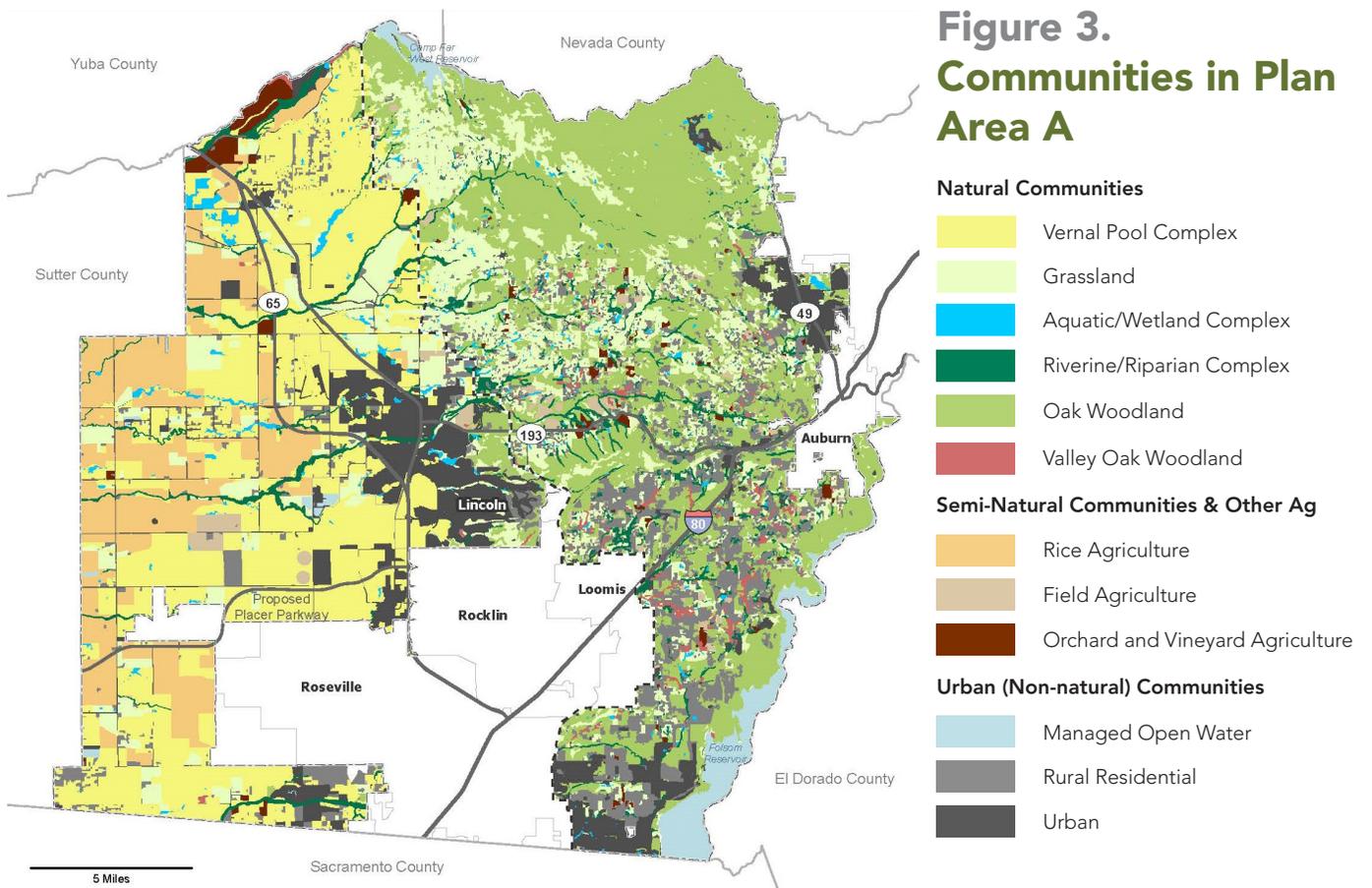
Community in the context of the PCCP means land-cover types that are grouped together because of similarity in vegetation type, vegetation structure, ecological function, and current land use. This plan recognizes four types of communities: natural communities, semi-natural communities (e.g., rice, field crop), other agriculture (e.g., orchards and vineyards), and urban (non-natural) communities.

Constituent habitats are wetlands or other patches of habitat that are not directly mapped and their presence is inferred by association with land-cover types.

Figure 3 shows the existing distribution of communities in Plan Area A, where all covered future growth would occur. The mapping reflects the environmental setting

prevailing during the PCCP planning period and accordingly, the Wildlife Agencies have set 2011 as the baseline year for evaluating covered effects. The mapping is a compilation of Placer County data and air photo interpretation, offering sufficient accuracy for regional scale planning. Table 1 provides a description of the natural communities found in Figure 3. Application of the PCCP to future projects will be based on detailed vegetation mapping, wetland delineation, and selective species surveys where applicable.

The PCCP conservation strategy addresses certain covered natural communities which serve as habitat for Covered Species or contribute to sustaining the biological resources of the region.



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Table 1. Communities

NATURAL COMMUNITIES



Vernal Pool Complex

Vernal pools form in seasonally flooded depressions in annual grasslands under certain climatic, soil, hydrologic, and topographic conditions. The vernal pool wetlands and the surrounding upland areas upon which they depend constitute the vernal pool complex. Vernal pool complex lands are also grasslands, but the PCCP defines them as a separate community to focus on those Covered Species which must carry out their entire life cycle in one of three types of wetland constituent habitats.

Photo: Placer County



VERNAL POOL WETLAND

Vernal pools are seasonal wetlands found in depressions with an impervious soil layer that prevents percolation; water loss from vernal pools occurs only through evaporation. Vernal pools provide habitat for specialized plants that are able to tolerate several months of inundation and anaerobic conditions, followed by months of hot, dry weather.

Photo: Mariner Mitigation Bank, Placer County



SEASONAL WETLAND IN VERNAL POOL COMPLEX

Seasonal wetland is a general term for wetlands formed in depressions or behind berms that remain saturated until spring but become dry before emergent marsh species can become established. Seasonal wetlands serve as vernal pool complex constituent habitat within the vernal pool/grassland matrix but do not support full vernal pool flora often due to degradation from past activities such as agricultural disking.

Photo: Jeff Glazner



SEASONAL SWALES

Seasonal swales are natural features that drain gently sloped topography. Water flow during rainy periods lacks the intensity or duration needed to create the bed-and-bank morphology that is characteristic of riverine systems. Seasonal swales are usually dominated by species that can occur in either wetlands or uplands. Seasonal swales in a vernal pool complex are those that convey water within the vernal pool/grassland matrix.

Photo: Loren Clark



Aquatic/Wetland Complex

The aquatic/wetland complex community consists of aquatic vegetation and wildlife that is not primarily riverine or riparian, and not primarily associated with vernal pools. The different types of wetlands and open water that comprise aquatic/wetland complex change during the year and from year-to-year as rainfall and water levels change, but the overall complex is a persistent community.

Photo: Placer County



FRESH EMERGENT MARSH

Fresh emergent marsh occurs at a range of elevations throughout both Valley and Foothills. Fresh emergent marsh is distinguished from deepwater aquatic habitats and wet meadows or grassland habitats by the presence of tall, perennial grass-like plants that are rooted in soils and permanently or seasonally flooded or inundated.

Photo: Miners Ravine, Placer Land Trust



LACUSTRINE

Lacustrine ecosystems are natural ponds and lakes as well as artificial features such as stock ponds or small reservoirs which have similar habitat based on ecological function and association with other habitats in the complex. The relatively calm waters of lakes and ponds contrast with flowing water in riverine ecosystems. The oxygen content of lakes is low due to a combination of decomposition occurring at the bottom of lakes and the lower proportion of the water in direct contact with air at the surface.

Photo: Jeff Glazner



NON-VERNAL POOL SEASONAL WETLAND

Seasonal wetlands not associated with vernal pool complex occur as isolated wetlands and swales that pond water or have saturated soil during the rainy season in a variety of topography throughout western Placer County. These are typically small, and most occur within grazed annual grassland and irrigated pasture ecosystems. Larger areas occur adjacent to fresh emergent marshes in agricultural settings in the Valley.

Photo: Jeff Glazner

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NATURAL COMMUNITIES



Riverine/Riparian Complex

Riverine and associated riparian ecosystems are present in a diverse mosaic around the streams and rivers in the Plan Area, which is mapped as a single riverine/riparian complex. Closely associated land-cover types and constituent habitats interspersed within the riverine/riparian complex include grasslands, valley oak woodland, fresh emergent marsh, and seasonal wetlands.

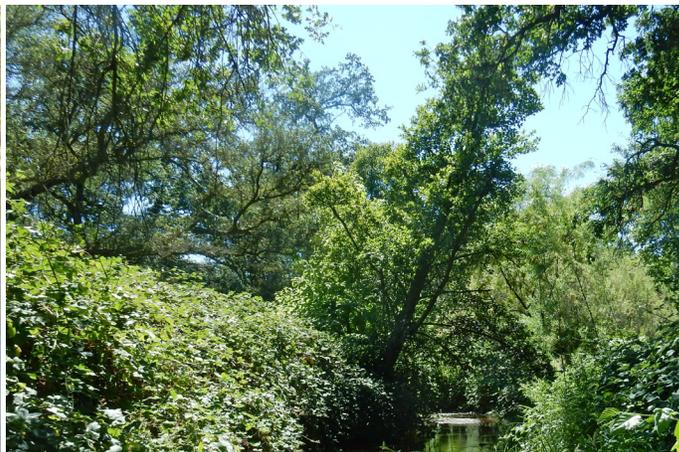
Photo: Doty Ravine, Placer County



RIVERINE

The riverine constituent habitat is the stream channel actively flowing year round in perennial streams, or seasonally and occasionally flowing in intermittent and ephemeral streams. Riverine systems in western Placer County receive some input from groundwater, irrigation, municipal discharge, as well as precipitation runoff and seasonal flow. The flow regime in a stream profoundly affects its ecology; in particular, its ability to support fish and other aquatic organisms. The riverine constituent habitat nominally represents the entire stream ecosystem for aquatic species, including the covered salmonids.

Photo: Harvego Bear River Preserve, Placer Land Trust



RIPARIAN

These water-dependent woody and woodland ecosystems include widely distributed riparian habitats in western Placer County. Riparian ecosystems are recognized throughout California as important natural communities because of their limited extent compared to historical distributions, their importance to dependent plant and wildlife species, and the threats facing remaining stands. Significant riparian stands are generally restricted to low-gradient depositional reaches with some floodplain development along larger rivers and as narrow and generally discontinuous bands of trees on disturbed and intermittent streams.

Photo: Jeff Glazner



Oak Woodland

The oak woodland community occurs mainly in the Foothills and comprises a diversity of dominant tree species, which are represented by five woodland land-cover types: blue oak woodland, interior live oak woodland, mixed oak woodland, oak-foothill pine woodland, and oak savanna. Foothill chaparral and rock outcrop have minor extent and are mapped with the oak woodland community.

Photo: Garden Bar, Placer Land Trust



Valley Oak Woodland

Valley oak woodland is treated as a separate community because of its conservation importance where it occurs in larger stands. Valley oak also occurs in the oak woodland and riverine/riparian communities.

Photo: Aitken Ranch, Loren Clark



Grassland

The grassland community in the Plan is defined as annual grassland and pasture land-cover types. In western Placer County, annual grasslands occur naturally at the lower elevations below 300 feet. Annual grasslands in the Valley are dominated by non-native grasses and forbs, with few trees. There are still a few remnant examples of native grasslands, which are often found around the edges of wetlands or moist bottomlands in the Valley. Taken together with vernal pool complex lands, nearly half of the Valley landscape is in some form of annual grassland.

Photo: Hidden Falls, Loren Clark

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SEMI-NATURAL COMMUNITIES and AGRICULTURE



RICE

Rice is mapped as a community because of its large extent, its relationship to historic vernal pool complex lands, and potential for wetland restoration. Mapped rice includes fields that are under current cultivation and fallow fields with water control structures in place. Fields are flooded in spring for seeding and often again after the fall harvest to control pests and to provide waterfowl habitat. Wetland vegetation can occur in surrounding ditches and canals.

Photo: Tom Reid



FIELD AGRICULTURE

Field agriculture is mainly row crops; only small amounts of alfalfa are grown in western Placer County as a hay crop in irrigated fields. Apart from the cultivated area, vegetation remaining on field margins may include a variety of introduced grasses and legumes as well as noxious weeds and other non-native invasive plants.

Photo: Loren Clark



ORCHARD AND VINEYARD

Orchards and vineyards are considered together as an agriculture community separate from other agricultural lands that have some value for Covered Species. Orchards in western Placer County are planted with walnuts and citrus, usually by conversion of vernal pool complex, grassland, or oak woodland communities and often adjacent to streams or irrigation canals.

Photo: Walnut Orchard, Placer County

URBAN and OTHER NON-NATURAL COMMUNITIES



MANAGED OPEN WATER

The managed open water community was created to differentiate the highly artificial open water found in canal, reservoir, and the urban landscape from ponds that would have lacustrine ecological function as a constituent habitat in the aquatic/wetland community.

Photo: Wise Canal Forebay, Google



RURAL RESIDENTIAL

The rural residential community maps very low-density (1 to 10 acres per dwelling unit) residential development. Because of the low density, rural residential can retain some natural habitat: grassland or vernal pool complex land in the Valley and woodland in the Foothills.

Photo: Placer County



URBAN

The urban community represents a variety of developed land-cover types, generally based on the Placer County Planning Services Division land use categories where urban and suburban is defined as greater than one dwelling unit per acre. This includes land use categories: urban/suburban, urban golf course, urban parks, urban riparian, urban wetland, and urban woodland.

Photo: Placer County

Covered Species

The PCCP and permits name 14 special status species as Covered Species. A description of the federal status, state status, and associated habitats for these species in Placer County is included in Table 2.

PCCP Map

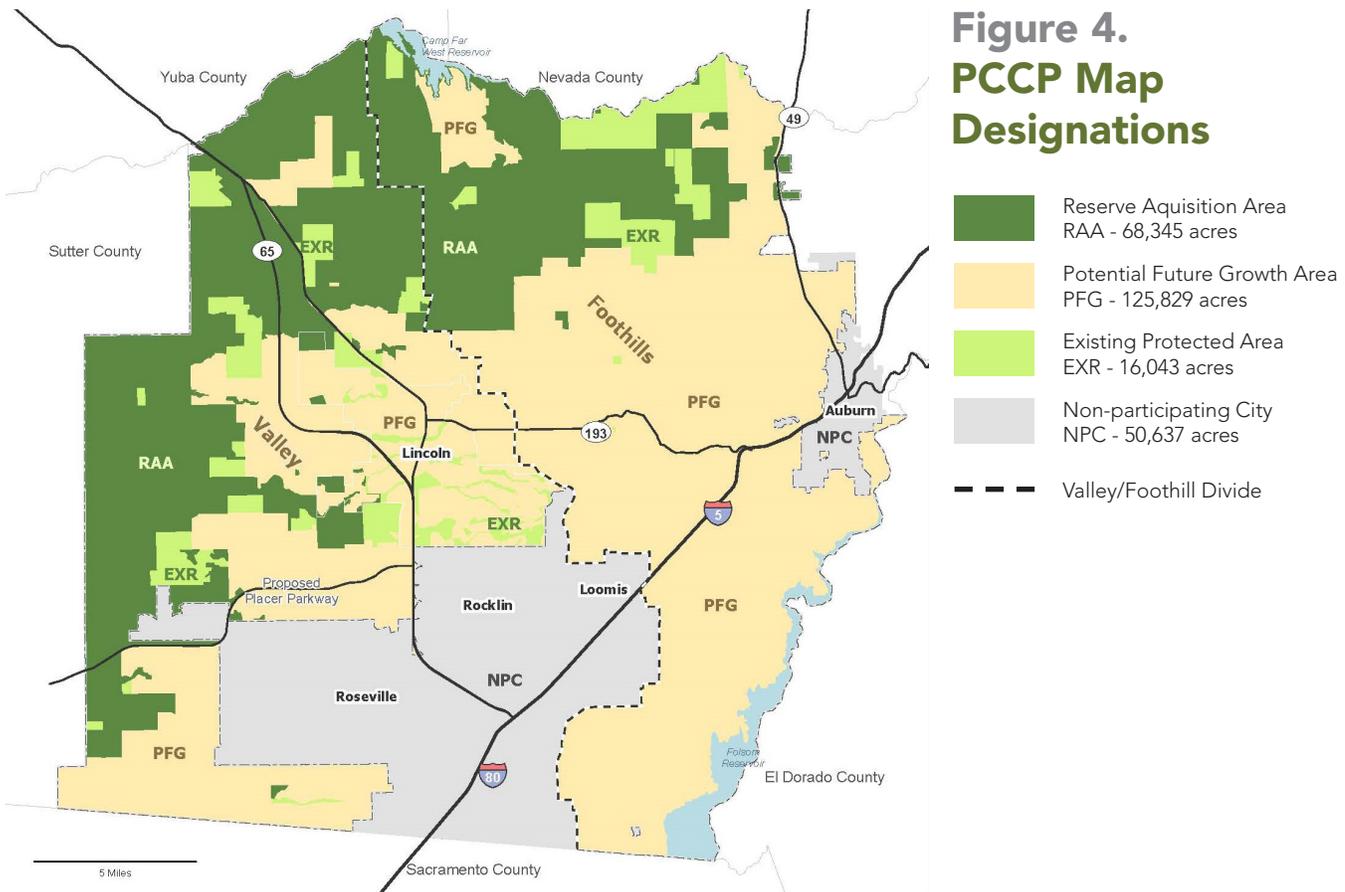
The PCCP uses a map shown in Figure 4 to designate:

RAA: Reserve Acquisition Area, where the majority of reserve acquisition will occur. Covered Activities in the RAA include some public projects such as the Placer Parkway, and private projects allowed under the mainly agricultural or rural development designation of the existing City and County general plans.

PFG: Potential Future Growth area, where the majority of future growth will occur. Lands with high conservation value and lands along the Stream System in the PFG may be included in the reserve system.

EXR: Existing reserves and protected areas, private mitigation banks, and public lands used primarily for biological resource conservation.

The Reserve Acquisition Area is the principal conservation focus of the PCCP. The Existing reserves and protected areas are not expected to change over the permit term, and PCCP implementation combines them with the Reserve Acquisition Area for the purpose of limiting take and administering Covered Activities as a Plan Area component termed "Conservation and Rural Development" (CRD).



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Table 2. Covered Species

BIRDS		<p>Burrowing Owl <i>Athene cunicularia</i></p> <p>FEDERAL STATUS Bird Species of Conservation Concern, Migratory Bird Treaty Act</p> <p>STATE STATUS Species of Special Concern</p>	<p>HABITAT IN PLACER COUNTY Nests and forages in grassland habitats. Also found in agricultural and rangelands. Potentially nests and overwinters in oak woodland and vernal pool complexes.</p> <p>Photo: Cornell Lab of Ornithology</p>
		<p>Tricolored Blackbird <i>Agelaius tricolor</i></p> <p>FEDERAL STATUS Bird Species of Conservation Concern, Migratory Bird Treaty Act</p> <p>STATE STATUS Species of Special Concern</p>	<p>HABITAT IN PLACER COUNTY Nesting habitat is marsh complexes and in large stands of Himalayan blackberry in the valley and foothills where there is open accessible water; protected nesting areas such as flooded, thorny, or spiny vegetation; and suitable foraging habitat. Foraging habitats in all seasons include annual grasslands; wet and dry vernal pools and other seasonal wetlands; agricultural fields; cattle feedlots; dairies; and occasionally in riparian scrub and marsh borders.</p> <p>Photo: Audubon</p>
		<p>California Black Rail <i>Laterallus jamaicensis coturniculus</i></p> <p>FEDERAL STATUS Bird Species of Conservation Concern, Migratory Bird Treaty Act</p> <p>STATE STATUS Threatened, Fully Protected</p>	<p>HABITAT IN PLACER COUNTY Nesting habitat is perennial wetlands with standing or flowing water dominated by dense vegetation.</p> <p>Photo: Phil Robertson</p>
REPTILES		<p>Swainson's Hawk <i>Buteo swainsoni</i></p> <p>FEDERAL STATUS Bird Species of Conservation Concern, Migratory Bird Treaty Act</p> <p>STATE STATUS Threatened</p>	<p>HABITAT IN PLACER COUNTY Nests and forages in the Valley in mature trees such as valley oaks, cottonwoods, and eucalyptus. Swainson's hawks nest in trees within open landscapes with suitable foraging habitat such as grasslands, vernal pool complexes, and agricultural lands such as fallow fields, pasture, and alfalfa. Swainson's hawks also nest in riverine/riparian and valley oak woodland adjacent to suitable foraging habitat.</p> <p>Photo: Cornell Lab of Ornithology</p>
		<p>Giant Garter Snake <i>Thamnophis gigas</i></p> <p>FEDERAL STATUS Threatened</p> <p>STATE STATUS Threatened</p>	<p>HABITAT IN PLACER COUNTY Aquatic habitat is found in marshes and agricultural wetlands, particularly rice lands and associated slow-moving waterways, including irrigation and drainage canals, sloughs, ponds, small lakes, and low-gradient streams. Adjacent upland habitat is used for basking, seeking cover from predators, and refuge from floodwaters during the inactive season from mid-fall through early spring.</p> <p>Photo: Gary Nafis, Californiaherps.com</p>

REPTILES



Western Pond Turtle

Emys marmorata

FEDERAL STATUS
N/A

STATE STATUS
Species of Special Concern

HABITAT IN PLACER COUNTY

Aquatic habitat includes fresh emergent wetlands, seasonal wetland, riverine/riparian, and ponds. Upland habitat includes grasslands and oak woodlands within 150 feet of aquatic habitat.

Photo: Yathis Krishnappa, Hilltromper Santa Cruz

AMPHIBIANS



California Red-Legged Frog

Rana draytonii

FEDERAL STATUS
Threatened

STATE STATUS
Species of Special Concern

HABITAT IN PLACER COUNTY

Aquatic habitat includes ponds, wetlands, riverine, riparian, and marsh habitats in the Foothills above 200 foot elevation. Upland habitat includes grasslands and oak woodlands within a mile of aquatic habitat.

Photo: Big Gun Preserve, Placer Land Trust



Foothill Yellow-Legged Frog

Rana boylei

FEDERAL STATUS
N/A

STATE STATUS
Species of Special Concern

HABITAT IN PLACER COUNTY

Year-round habitat is riverine and riparian habitats in rocky perennial streams in the Foothills above 500 foot elevation.

Photo: Gary Nafis, Californiaherps.com

FISH



Central Valley Steelhead

Oncorhynchus mykiss irideus

FEDERAL STATUS
Threatened

STATE STATUS
N/A

HABITAT IN PLACER COUNTY

Streams connected to the Pacific Ocean, below major barriers to movement such as dams. Water temperature and stream substrate are important spawning and incubation habitat indicators. Spawning and incubation require correct velocity, temperature (30–52°F), and substrate (e.g., gravel without too much silt) to be successful. Instream and overhead cover (e.g., undercut banks, overhanging tree branches, etc.) is important for juveniles. Photo: Underwater-fish.blogspot.com

Chinook Salmon

(Central Valley Fall/Late Fall-Run)
Oncorhynchus tshawytscha

FEDERAL STATUS
Species of Concern, Magnuson-Stevens Act Managed Species

STATE STATUS
Species of Special Concern

HABITAT IN PLACER COUNTY

Streams connected to the Pacific Ocean, below major barriers to movement such as dams. Water temperature and stream substrate are important spawning and incubation habitat indicators. Spawning and incubation require correct water velocity, temperature (<53–60°F), depth, and substrate to be successful. Instream and overhead cover (e.g., undercut banks, overhanging tree branches, etc.) are important for juveniles. Photo: Oregon State University

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Table 2. (continued)

INVERTEBRATES		<p>Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i></p> <p>FEDERAL STATUS Endangered</p> <p>STATE STATUS N/A</p>	<p>HABITAT IN PLACER COUNTY Rain-filled vernal pools, seasonal wetlands, and seasonal swales situated within grasslands in the Valley. Pools occupied by vernal pool tadpole shrimp typically have turbid waters or aquatic vegetation that may provide shelter from predators.</p> <p>Photo: Doug Wirtz, Arkive.org</p>
		<p>Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i></p> <p>FEDERAL STATUS Threatened</p> <p>STATE STATUS N/A</p>	<p>HABITAT IN PLACER COUNTY Rain-filled vernal pools, seasonal wetlands, and seasonal swales, often with grass or mud bottoms, situated within grasslands in the Valley.</p> <p>Photo: Earth.com</p>
		<p>Conservancy Fairy Shrimp <i>Branchinecta conservatio</i></p> <p>FEDERAL STATUS Endangered</p> <p>STATE STATUS N/A</p>	<p>HABITAT IN PLACER COUNTY A single known vernal pool at the Mariner Conservation Bank within the Southeastern Sacramento Valley vernal pool region.</p> <p>Photo: USFWS</p>
		<p>Valley Elderberry Longhorn Beetle <i>Desmocerus californicus dimorphus</i></p> <p>FEDERAL STATUS Threatened</p> <p>STATE STATUS N/A</p>	<p>HABITAT IN PLACER COUNTY Elderberry shrubs occurring in valley oak woodland or elderberry savannas adjacent to riparian vegetation. Primarily found in wet or riverine areas that support significant riparian zones.</p> <p>Photo: Brian Hansen, USFWS</p>

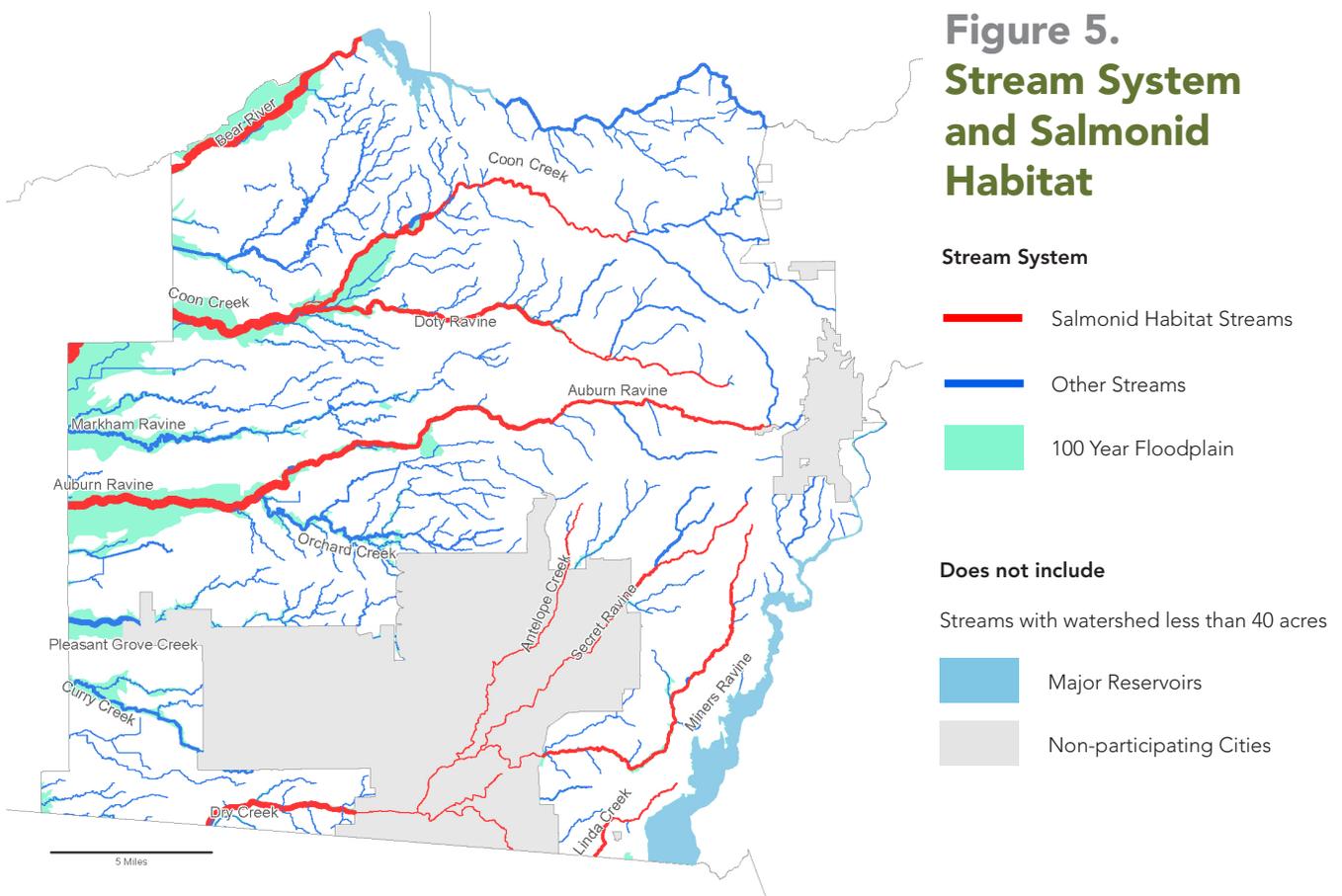
Stream System

The PCCP defines the Stream System around major streams and creeks as a way to focus conservation on this important resource. The Stream System and salmonid habitat are shown in Figure 5.

The Stream System is established by the outermost line of:

1. The 100-year floodplain, or
2. The boundary width distance for certain named stream reaches measured outward from the Ordinary High Water Mark, or
3. The area within 50 feet of the Ordinary High Water Mark for other “blueline” streams located on the National Hydrography Dataset.

The PCA map will identify which reaches are included in the Stream System, but the actual location of the stream banks and the 100-year floodplain will be determined based on a site survey. The PCA will add sections of streams, where needed, to provide hydraulic continuity throughout the watershed. Canals or artificial water courses are included only if they serve to convey natural runoff through the watershed in lieu of a natural stream and they are not completely lined with impervious material. Minor drainages at the headwaters of watersheds where the watershed falls below 40 acres in extent are not included in the Stream System; any riverine or riparian vegetation present will be addressed by the separate requirements for constituent habitats.



2. CONSERVATION

2. CONSERVATION

Conservation Strategy

The PCCP conservation strategy has four main components:

- 1. Reserve System.** The Plan proposes to progressively establish a large system of interconnected blocks of land. The reserve system will provide a means for protecting, managing, enhancing, and restoring or creating the natural and semi-natural communities and habitats that support the Covered Species.
- 2. Stream Protection, Enhancement, and Avoidance.** The Plan designates the Stream System to protect and enhance Covered Species' habitats, water quality, and maintain connectivity in the reserve system. In-stream enhancement actions include removal or modification of barriers to fish passage, screening water diversions, improvement of in-channel features, and non-native fish control.
- 3. Wetland Conservation and No Overall Net Loss of Wetland Values and Functions.** The Plan provides for protection, enhancement, restoration, and creation of the aquatic/wetland complex natural community including the surrounding upland necessary to sustain the wetlands' hydrological function. The Plan anticipates loss of wetlands, including vernal pool wetlands. Restoration and creation of wetlands will provide in-kind compensatory habitat.

- 4. Avoidance and Minimization.** Covered Activities will avoid and minimize take by complying with specific conditions that apply to certain communities and species including take limits that apply cumulatively to all activities covered under the permit. Conservation measures on the reserve lands and implementation of the conservation strategy will accomplish avoidance and minimization on a regional scale; project site-specific avoidance and minimization will be focused only on specific resources.

Biological Goals and Objectives

In the HCP/NCCP, the strategy is expressed as:

- Biological goals are guiding principles for conservation of the Covered Species and natural communities,
- Biological objectives are measurable targets for reaching goals, and
- Conservation measures are actions taken to achieve the biological goals and objectives.

The Biological Goals and Objectives are summarized here; the reader is referred to the HCP/NCCP Chapter 5 and Table 5-8 Biological Goals, Objectives, and Conservation Measures for specific language and the detailed conservation measures.

Regional Approach to Conservation

The Covered Species, natural communities and Stream System addressed in the Plan represent nearly all of the present biological values in western Placer County. The conservation strategy maps out a path to protecting and

Summary of Landscape Level Biological Goals and Objectives

Reserve System. Include representative natural communities along a range of environmental gradients large enough to support ecosystem function, sustain populations of Covered Species, maintain or increase biological diversity of native species, and accommodate changing environmental conditions.

Establish a large, interconnected reserve system of at least 47,300 acres of natural communities, agricultural habitat, and Covered Species' habitat.

Connectivity. Sustain the effective movement and genetic interchange of organisms between natural communities in a manner that maintains the ecological integrity of the natural communities within the Plan Area.

Summary of Landscape Level Biological Goals and Objectives (cont.)

Remove barriers and protect habitat linkages that allow covered and other native species to move between protected natural communities using east-west corridors along the Stream System and north-south connectivity throughout the Valley and to adjacent counties. Protect upland natural communities surrounding wetlands.

Ecological processes Maintain conditions that sustain and reestablish natural communities and native species.

Implement low impact development standards. Reduce invasive non-native species and increase native species. Manage fire.

restoring these values on a large land area, consistent with foreseen continuing urban growth and thus serving to mitigate the impact of growth on biological resources at a regional scale. Accordingly, biological objectives are expressed as quantitative commitments for land acquisition, protection, and natural and semi-natural community restoration. Some commitments are independent of effects and are not directly tied to the impacts of Covered Activities; some commitments are dependent on effects and provide for

additional restoration and creation to mitigate specific Covered Activities. To illustrate this distinction: the Plan commits to protecting a certain acreage of vernal pool complex lands independent of effects because those resources need to be protected to meet the regional scale conservation objective, regardless of impact on that resource; the Plan also commits to restoring or creating additional vernal pool wetland acreage dependent on effect, in a prescribed 1.5:1 ratio to the amount of wetlands actually lost to

Summary of Natural Community Goals and Objectives

Vernal Pool Complex and Grassland: protect and restore.

Protect 17,000 acres of existing vernal pool complex, including 790 wetted acres of vernal pool habitat. Restore/create 3,000 acres of vernal pool complex and up to 900 wetted acres of vernal pool constituent habitat dependent on effect.

Protect 2,740 and restore 1,000 acres of grassland natural community other than vernal pool complex grassland. Promote regeneration and recruitment of Covered Species and support native biodiversity.

Enhance vegetation and hydrology of degraded vernal pool constituent habitat. Increase the population of ground squirrels to enhance prey populations and habitat for burrowing owls.

Aquatic/Wetlands Complex: protect and restore. Protect 600 acres of aquatic/wetlands complex natural community with particular emphasis on fresh emergent marsh. Restore at least 20 acres of fresh emergent marsh plus wetlands at 1.5:1 ratio of restored/created to affected aquatic/wetland constituent habitat. Maintain and enhance hydrological functions, native biodiversity, and habitats for populations of Covered Species.

Riverine and Riparian Complex: protect and restore. Protect 2,200 acres of riverine/riparian natural community including at least 88.6 linear miles of stream, (riverine). Restore a minimum of 32 acres of riparian plus riverine/riparian constituent habitat at 1.52:1 ratio of restored/

created to affected. Impacts to the Stream System not otherwise mitigated will be offset by restoration of riverine and riparian constituent habitat at 1.52:1 ratio. Enhance the cover, structural diversity, and native species diversity of riparian vegetation.

Remove or modify fish barriers and unscreened water diversions. Enhance stream reaches to promote habitat complexity and function. Effects on Salmonid habitat will be mitigated in-kind; improve in-channel features at a 1.5:1 enhanced to affected ratio in the same watershed and salmonid habitat type, including Plan Area B3, Coon Creek Floodplain Conservation, and Plan Area B4, Fish Passage Channel Improvement.

Oak Woodland: protect and restore. Protect 10,110 acres and restore 100 acres of a diversity of oak woodland land-cover types. Maintain and enhance by promoting regeneration and recruitment of representative species and managing vegetation and invasive plants. Protect 190 acres and restore 225 acres of valley oak woodland with additional restoration in the Valley at 1.5:1 restored to affected ratio.

Agriculture and Other Open Space: incorporate in reserve system. Protect at least 8,240 acres of agricultural lands or natural communities in the Valley, including patches of natural vegetation and large blocks of open space between protected natural communities to preclude development, enhance connectivity, and provide opportunities for protecting, restoring, and managing habitat for Covered Species and other native species.

2. CONSERVATION

further mitigate Covered Activity impacts and to meet the no net loss requirement.

Covered Species Conservation

The PCCP will conserve Covered Species by

regional scale conservation of the natural communities that comprise their habitat. The species level Biological Goals and Objectives are summarized below.

Summary of Species Biological Goals and Objectives

Swainson's Hawk: protect and improve habitat to provide for a sustained population. Protect at least four active Swainson's hawk nest trees distributed within at least 2,964 acres of suitable Swainson's hawk foraging habitat in the reserve system. Protect at least 20 isolated trees with the potential to be used as nesting sites. Maintain or increase prey availability and improve foraging habitat.

California Black Rail: protect and restore habitat to provide for a sustained population. Include at least 10 fresh emergent marsh sites, each at least 2 acres in size and suitable for supporting California black rail within the protected and restored/created wetlands and aquatic land-cover types and including a prescribed number of occupied sites.

Western Burrowing Owl: provide sufficient habitat to maintain or increase the overwintering population and to promote the expansion of a breeding population onto the reserve system. Protect and manage at least three ground squirrel colonies on three separate sites, within protected grasslands providing suitable habitat for western burrowing owl. Artificial burrows may be used if already existing ground squirrel colonies are not present.

Tricolored Blackbird: provide habitat for a sustained population. Protect, manage, and enhance at least 187 acres of modeled tricolored blackbird nesting habitat and 22,138 acres of suitably located foraging habitat within protected or restored vernal pool grassland or grassland natural communities in the Valley reserve system. Protect at least five active tricolored blackbird colony sites and open, accessible water nearby, and at least 200 acres of foraging habitat surrounding each colony site. Locate at least 87 acres of restored/created aquatic/wetland complex with at least five separate suitable nesting habitat sites in the Valley tricolored blackbird range.

Giant Garter Snake: provide habitat to facilitate the expansion of giant garter snake into the reserve system. Protect and manage at least 2,000 acres of rice lands with the necessary perennial water supply in the western portion of the Valley RAA as habitat. Fresh emergent marsh with sufficient water supply can serve in lieu of rice.

Western Pond Turtle: protect and restore habitat for a sustained population. Protect at least 2,800 acres of aquatic and 3,859 acres of upland habitat and manage to provide specific habitat requirements. Restore at least 1,850 acres of aquatic habitat and 1,930 acres of suitable adjacent upland

habitat for western pond turtle.

Foothill Yellow-legged Frog: protect and restore habitat to facilitate the expansion of foothill yellow-legged frog into the Plan Area. Protect 6 miles of streams with 83 acres of riparian vegetation. Restore at least 83 additional acres in the Foothills as foraging and movement habitat.

California Red-legged Frog: protect occupied habitat; restore and create additional habitat. Protect at least 4 acres of occupied California red-legged frog habitat in the Plan Area B5, Big Gun. Protect 1,168 acres of aquatic and 12,484 acres of upland habitat; restore and create 1,241 acres of aquatic and 160 acres of upland habitat in the Foothills.

Salmonids - Central Valley Steelhead, Distinct Population Segment and Central Valley Fall-/Late Fall-Run Chinook Salmon: increase spawning, rearing, and migratory success in the Auburn Ravine, Coon Creek, and Dry Creek watersheds. Protect 25 stream miles of salmonid spawning habitat with 558 acres of associated riparian habitat and protect 10 miles of salmonid migrating habitat with 342 acres of associated riparian habitat, primarily on stream reaches along Coon Creek, Doty Ravine (a major tributary to Coon Creek), and Auburn Ravine. Protect 9,869 acres of oak woodlands and grasslands in the Coon Creek watershed to protect and improve water quality and watershed integrity in the Coon Creek watershed, the primary salmonid Stream System within the RAA.

Valley Elderberry Longhorn Beetle: enhance habitat to support a sustained population. Plant elderberry shrubs and associated riparian species within the restored riparian natural community sufficient to offset loss of valley elderberry longhorn beetle and consistent with USFWS standards.

Vernal Pool Fairy Shrimp & Vernal Pool Tadpole Shrimp: maintain sustained populations. Within the 20,000 acres of protected, restored, and created vernal pool complex, maintain vernal pool fairy shrimp and vernal pool tadpole shrimp occupancy rates equal to or greater than the occupancy rates of vernal pools lost as a result of Covered Activities.

Conservancy Fairy Shrimp: maintain sustained populations. Protect two Conservancy fairy shrimp occurrences for the first occurrence taken and three additional occurrences for each additional occurrence taken, prior to such take.

Reserve System

The reserve system will provide for protection, management, enhancement, restoration, and creation of community types, particularly as habitat for Covered Species and for protection for individuals and enhancement of populations of Covered Species.

The reserve system will be created by acquiring and managing large interconnected blocks of land where ecological sustainability can be maintained, including hydrologic function and land-cover diversity, while minimizing incompatibility of any continuing land use.

The reserve system established for the PCCP will build on a large area of existing protected lands which includes private mitigation banks, land trust holdings, and public lands, much of which was acquired by Placer County under the Placer Legacy program in anticipation of a regional conservation plan. The reserve system will mainly be located in the western and northern Valley and in the northern Foothills and along the Stream System. Table 3 and Figure 6 show how the PCCP will increase community protection, substantially adding to present vernal pool complex lands in the Valley and oak woodland in the Foothills and adding a significant component of aquatic/wetland and riverine/riparian complex conservation in the Stream System and agricultural lands surrounding Valley reserves.

Over the 50-year permit term for the Plan, the PCA will acquire approximately 47,300 acres for natural and semi-natural community protection and restoration, including at least 33,000 acres in the Valley and at least 14,300 acres in the Foothills. Within that land, the PCA will restore from 4,405 to 6,220 acres of natural communities. The PCCP reserves will augment the approximately 16,000 acres of existing protected area. Cumulatively, 38

Table 3.
PCCP Addition to Community Protection

Community	Existing Protected Areas	PCCP Reserve System	All Protected Lands
Vernal Pool Complex	7,067	20,000	27,067
Grassland	1,097	3,740	4,837
Aquatic Wetland Complex	591	1,100	1,691
Riverine/Riparian	458	3,550	4,008
Valley Oak Woodland	21	460	481
Oak Woodland	6,122	10,210	16,332
Agriculture	601	8,240	8,841
All Protected Communities	15,957	47,300	63,257

percent of the present natural and semi-natural landscape in Plan Area A would ultimately be subject to conservation management. This progression is illustrated in Figure 7 which shows the proportion of developed land, protected land, and open land, meaning natural and agriculture not under conservation management, for the Valley and the Foothills in the present and at the end of the 50-year permit term as a consequence of the PCCP.

Stream Protection and Enhancement

Maintaining and enhancing the integrity of the streams and floodplains of western Placer County is a key provision of the PCCP. Salmonid and many other Covered Species' habitat is within the Stream System. The Stream System provides a connection linking protected lands along east-west corridors and habitat connectivity north and south. The PCCP

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sets conditions on Covered Activities affecting streams and watersheds. Because the physical geography of the Stream System cannot be recreated, impacts on the Stream System need to be mitigated by restoring higher biological value to what Stream System remains. Thus, the PCCP assesses a fee for encroachment on the Stream System sufficient to restore the riverine/riparian complex community elsewhere in the western Placer Stream System.

Wetland Conservation and No Overall Net Loss of Wetland Values and Functions

The PCCP, through both the HCP/NCCP and the companion CARP, identifies several constituent wetland habitats for protection

and restoration. Protection is accomplished by emphasizing wetland habitats in land acquisition for the reserve system and by setting conditions on Covered Activities to minimize impacts on wetland habitats. Where impacts are not avoided, restoration will occur at a 1.5:1 ratio as mitigation to ensure that there would be no net loss of wetland area, biological values, and ecological function.

Avoidance, Minimization, and Mitigation

The Plan contains conditions on Covered Activities to avoid and minimize effects and, where avoidance is not feasible, requires mitigation for loss of Covered Species habitat. Regional-scale avoidance and minimization

Figure 6. Increase in Community Protection

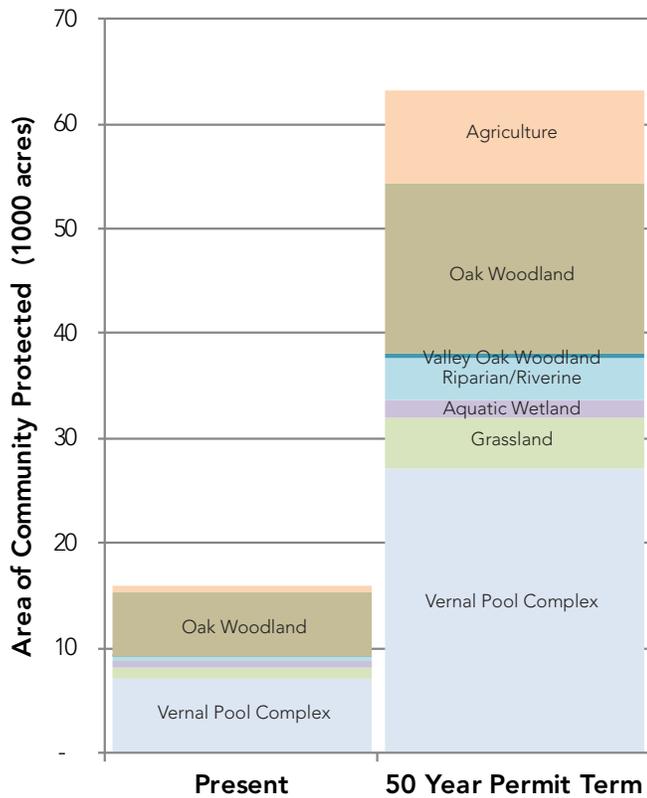
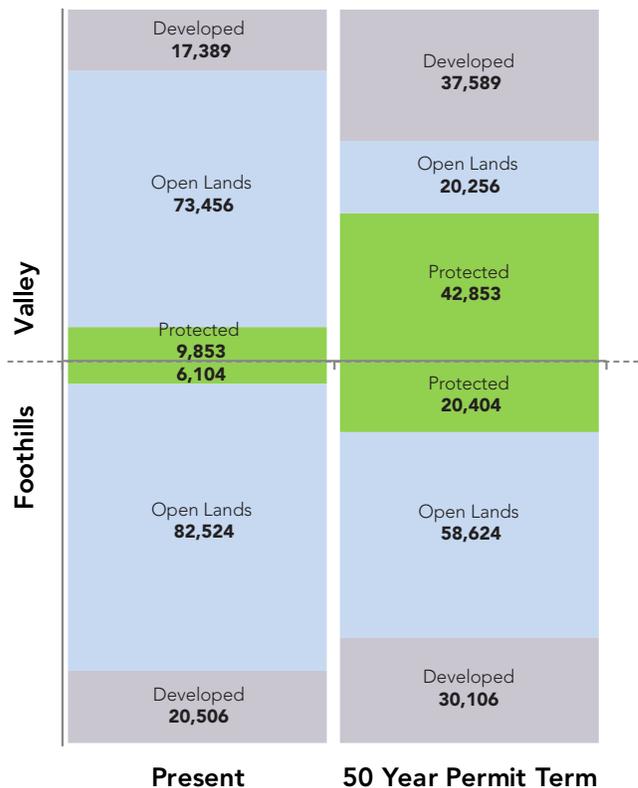


Figure 7. Change in Conservation & Development Area in Acres



reduce the need for individual projects to avoid and minimize effects at the project scale and allow streamlining of regulatory requirements. This Plan assumes take will result from individual Covered Activities and mitigates the aggregate effects through implementation of the conservation strategy protecting and restoring wetlands, vernal pools, oak woodlands, riparian, and other high quality habitats. The regional approach is complemented by species level conditions, including survey requirements in some areas.

Conditions on Covered Activities

The effects of Covered Activities are mitigated by conditions that will apply to the project site and by requirements to pay development fees to contribute to funding acquisition and operation of the reserve system and the other functions of the PCA, summarized here. The reader is referred to the HCP/NCCP Chapter

6 for specifics. Conditions on species survey requirements and avoidance setbacks are subject to adaptive management and will be modified based on experience to maximize effectiveness.

Adaptive management measures performance, tests alternative management methods, and adjusts future management actions based on the best available information. It allows the PCCP to respond to changing conditions, new scientific findings, and experience gained in implementing the Plan.

General Conditions

Watershed Hydrology and Water Quality. Comply with California general construction permit requirements.

Conservation Lands: Development Interface Design Requirements. Plan reserves are required to provide internal buffers, when necessary, to protect reserves from impact of adjacent development, but Covered Activities that occur in or adjacent to the Reserve System, or adjacent to existing reserves, mitigation sites, and conservation banks, will incorporate design requirements to minimize indirect effects.

Land Conversion. A project is subject to development fees for permanent effects for all land conversion, meaning land changed from any non-urban use (natural, semi-natural or agricultural landcover) to urban use. The fee applies to all of a parcel area excepting only areas qualifying as avoided.

- Avoidance in the PFG: Because of the diminishing biological value of isolated habitat blocks, a portion of a parcel is only considered avoided if it is: over 200 acres, adjacent to the Reserve Acquisition Area or an existing protected area; in or abuts the Stream System,

contributes to the PCA meeting biological objectives; avoids occurrences of Covered Species; or is required to be avoided by a Permittee, Wildlife Agency, or other regulatory agency to meet Plan goals.

- Avoidance for rural development: Fees for new rural residential development are based on a typical development footprint which is reflected in a graduated fee based on parcel size. Fees will apply to the actual development footprint for structures appurtenant to existing rural residential use and ancillary development for non-residential use on existing parcels.
- Lands accepted by the PCA in lieu of fees are exempt.

Temporary Effects. A project is subject to reduced development fees for temporary effects if it can return habitat to pre-project conditions within one year from the time of initial disturbance.

Worker Training. Where PCCP specific conditions apply, workers will be instructed how to comply.

2. CONSERVATION

Conditions to Avoid and Minimize Effects on Specific Natural Communities

Wetland Avoidance and Minimization (Vernal Pool and Aquatic/Wetland Complex).

Avoidance of Vernal Pool Complex Constituent Habitat: mitigates for impacts, generally through payment of fees if ground disturbance encroaches on either 1) the delineated wetland or on 2) the immediate watershed of a vernal pool constituent habitat feature.

Avoidance of Aquatic/Wetland Complex Constituent Habitat: if ground disturbance encroaches on the delineated wetland, mitigate for impacts, generally through payment of fees.

Aquatic/Wetland Complex Impact Minimization Measures: comply with minimization criteria to have project effects count as temporary instead of permanent.

Salvage of Vernal Pool Constituent Habitat: grant adequate and timely access to allow for salvage prior to development as directed by the permitting jurisdiction or PCA.

Wetlands Restoration: contribute to restoration or creation of these resources as mitigation.

Riverine and Riparian.

Riverine and Riparian Avoidance: exclude construction or other ground disturbance from existing riparian vegetation or mitigate, generally through payment of fees.

Minimize Riverine and Riparian Effects: apply design, construction, and operations minimization measures.

Riverine and Riparian Restoration: contribute to restoration as mitigation.

Placer County Water Agency Operations and Maintenance Best Management Practices: apply in addition to any other applicable conditions.

Valley Oak Woodland.

Valley Oak Woodland Avoidance: exclude construction or other ground disturbance from existing valley oak woodland or mitigate through payment of land conversion fee.

Valley Oak Woodland and Individual Valley Oak Trees Restoration: compensate for loss of Valley Oak Woodland natural community, and individual valley oak trees.

Conditions to Avoid and Minimize Effects on the Stream System

Avoid and minimize. Design and implement Covered Activities in such a way as to avoid or minimize permanent encroachment on the Stream System.

Restoration. Regardless of the community affected, mitigate loss of Stream System by appropriate restoration or enhancement of Stream System elsewhere – generally as the riverine/riparian complex community.

Summary of Species Conditions for Avoidance, Minimization, and Mitigation

Swainson's Hawk. Pre-construction surveys: for activity during nesting season (Feb 1 to Sept 15) in Valley, survey for occupied nesting trees if potentially on-site or within 0.25 mile vicinity of project site.

Construction: active nest trees on-site cannot be removed during nesting season. If active trees in vicinity, activity on site prohibited or buffered during nesting season; construction monitoring.

California Black Rail. Pre-construction surveys: if fresh emergent marsh on-site, or within 500 feet of occurrence, or if activity would alter water supply to fresh emergent marsh.

Construction: The Plan limits the number of occupied wetlands that may be affected by covered activities. If take coverage is granted by the PCA, clearing of habitat or dewatering must take place between September 15 and February 1. Activity near occupied habitat is prohibited

or 500 foot buffer during breeding season; construction monitoring is required.

Western Burrowing Owl. Pre-construction surveys: if potential habitat on-site or within 250 feet of project disturbance.

Construction: during breeding season (Feb 1 to Aug 31), occupied burrows on-site cannot be disturbed; activity near occupied habitat prohibited or 250 foot buffer; during non-breeding season, occupied burrows buffered by 160 feet or with approval, owls can be excluded from burrows; construction monitoring.

Tricolored Blackbird. Pre-construction surveys: for nesting, for certain communities on-site, below elevation 300, and within 1640 feet of open water, or within 300 feet of known active colony; for foraging, if site is in certain communities and within 3 miles of known active colony.

Summary of Species Conditions for Avoidance, Minimization, and Mitigation (continued)

Construction: during nesting season (Mar 15 to July 31), activity prohibited within 1300 feet of nest colony or if site or the area within 1300 feet around site are used for foraging; construction monitoring.

Giant Garter Snake. Pre-construction surveys: assess whether habitat is present for rice or certain aquatic communities shown on PCA range map, typically at elevations below 100 feet.

Construction: No activity in-water/in-channel or within 200 feet of potentially occupied aquatic habitat unless during active period (May 1 to Oct 1) with approved measures allowing escape of individuals.

Western Pond Turtle, Foothill Yellow-legged Frog, and California Red-legged Frog. Project conditions protecting the natural communities providing aquatic and upland habitat serve to minimize impact on these species.

Salmonids - Central Valley Steelhead, Distinct Population Segment and Central Valley Fall-/Late Fall-Run Chinook Salmon. The PCA will maintain a map of known salmonid streams where project conditions protecting the Stream System and special fees will apply. Additional conditions include design guidelines for salmonid passage at stream crossings to preserve a natural stream bed and free passage; maintaining fish passage during construction; pre-construction diversion or exclusion from work areas, and specifications for spawning gravel cleaning.

Valley Elderberry Longhorn Beetle. Pre-construction surveys: if potential riparian or woodland habitat present.

Construction: avoid or replace habitat following Wildlife Agency protocol.

Vernal Pool Fairy Shrimp and Vernal Pool Tadpole Shrimp. Pre-construction surveys: During an initial survey phase of permit (roughly the first 10 years) vernal pool and other potential habitat wetlands on project sites will be surveyed. The data will be used to derive an overall estimate of occupancy rate for each species which will serve as a standard to be applied to the reserve system. After that initial period, further surveys will not be required as long as the vernal pool preservation on the reserve system meets the occupancy standard.

Construction: Most of the protection for these species will come from protection of the vernal pool complex lands and their associated wetland habitats. Occurrences on project site to be avoided will require a 250 foot upland buffer.

Conservancy Fairy Shrimp. Pre-construction surveys: Required in sub-watersheds adjacent to known occurrence in the Mariner Vernal Pool Conservation Bank, west of the Lincoln Airport.

Construction: avoid with 250 foot upland buffer; may be taken in accordance with identification and protection of other colonies in PCCP reserve.

Conditions on Regional Public Programs

Design. Projects located in the RAA reduce the effects of barriers in potential conservation lands and minimize effects on Covered Species, natural communities, and wildlife movement.

Construction Best Management Practices. Apply in the rural portion of the Plan Area to reduce the effects of

construction on natural communities and native species.

Operation and Maintenance Best Management Practices. Apply in the rural portion of the Plan Area to reduce the effects of construction on natural communities and native species.

Conditions for Reserve Management

Public Access and Recreation on Future Reserve Lands. Limited recreational access allowed if it does not impede the PCA achieving the biological goals and objectives of the Plan

Recreation Component of Reserve Unit Management Plans. Recreational activities and associated infrastructure will only be allowed in accordance with the recreation component of an approved reserve unit management plan.

Jump-Start Lands. Recreational uses on jump-start lands to be enrolled in the reserve system may continue at the same level and intensity until the recreation component of the Reserve Unit Management Plan is completed and approved by the PCA and Wildlife Agencies.

3. COST AND FUNDING

3. COST AND FUNDING

This section covers the following:

- What it will cost to implement the plan and how the money will be spent.
- Where funding will come from.
- How development fees are structured.

Plan Cost

The cost of the plan during the 50-year permit covers the wide range of activities described in the proposed conservation strategy. Plan cost is estimated from detailed analysis of conservation measures and unit cost factors for the land, labor, materials, and supplies that implement those measures.

Over a 50-year permit term, the Plan funds \$980 million of reserve acquisition, habitat restoration, land management, and habitat and species monitoring (see Figure 8). About three-quarters of plan costs are one-time capital costs including land acquisition and the restoration of natural communities needed to establish the reserve system.

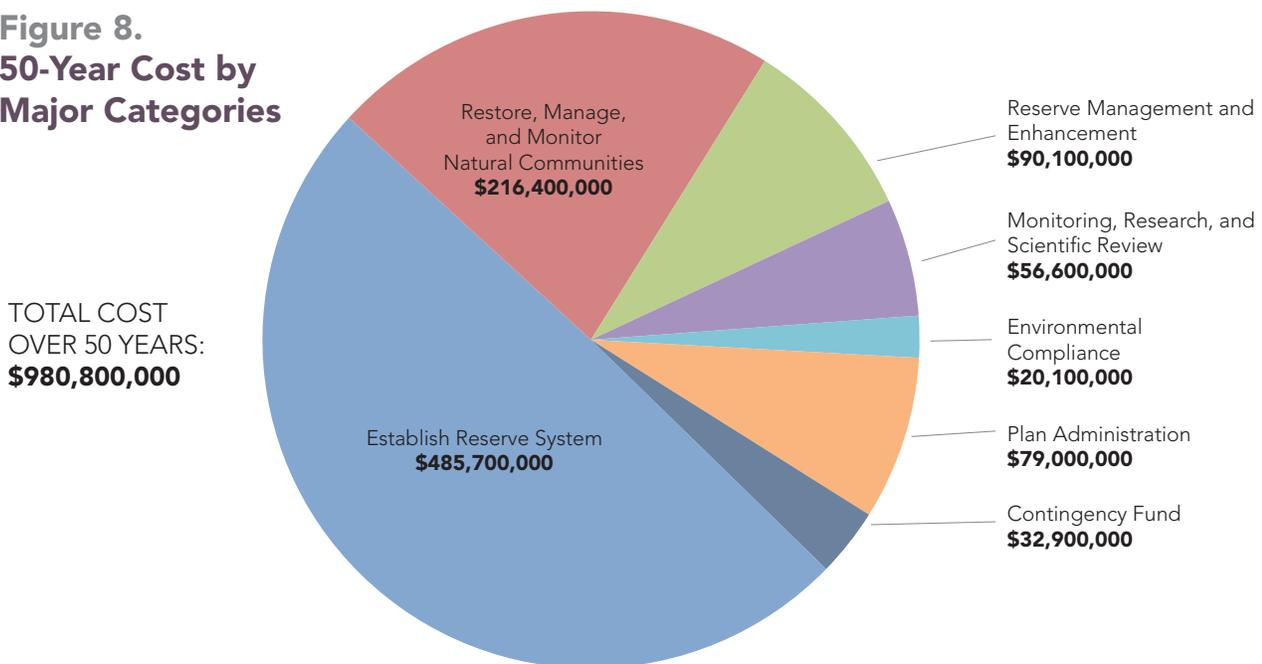
During the permit term, operating costs average about \$6 million per year. Plan operations during the permit term include the following major categories of activities:

- Reserve land and restoration project management: \$3.3 million per year
- Species and habitat monitoring: \$1.1 million per year
- Plan administration: \$1.6 million per year

Plan costs will vary over the course of the permit term, driven largely by the pace of development by covered activities, the acquisition of reserve land, and the implementation of restoration activities. Plan cost estimates will be updated annually and fully reviewed at least every five years based on implementation experience.

Because the reserve system is intended to operate in perpetuity, funding is set aside to establish an endowment to continue management of the reserves in the Valley and Foothills after the end of the permit. Endowment costs as well as a small amount for plan preparation costs are not included in the Plan cost chart in Figure 8.

Figure 8.
50-Year Cost by Major Categories



3. COST AND FUNDING

After the permit term, annual costs are less—estimated to be on the order of \$3.3 million per year.

- Reserve management: \$1.9 million per year
- Monitoring: \$600,000 per year
- Program administration: \$700,000 per year

The biological resources present and the greater extent of future growth in the Valley dictate that roughly four fifths of the overall Plan cost will go to the Valley Conservation Strategy, as shown in Figure 9.

Plan Funding

Plan funding will come from a combination of local, state and federal sources. The local share is projected to cover 77% of Plan cost and will mainly come from development

fees from Covered Activity projects. The City of Lincoln and the County will not be committing general funds to pay for the Plan, but development fees will apply to public projects such as roads and bridges covered by the Plan.

Estimates of local funding from Valley and Foothills development fees are based on scenarios of expected future land development and public projects in each area. Local funding may also come from sources outside the PCCP such as an open space fee in the Foothills.

Expected state and federal grants would be proportional to projected costs so Valley and Foothills funding balances Valley and Foothills cost. See Figure 10. State and federal grant funding is expected to meet

Figure 9. Valley and Foothills Share of Plan Cost

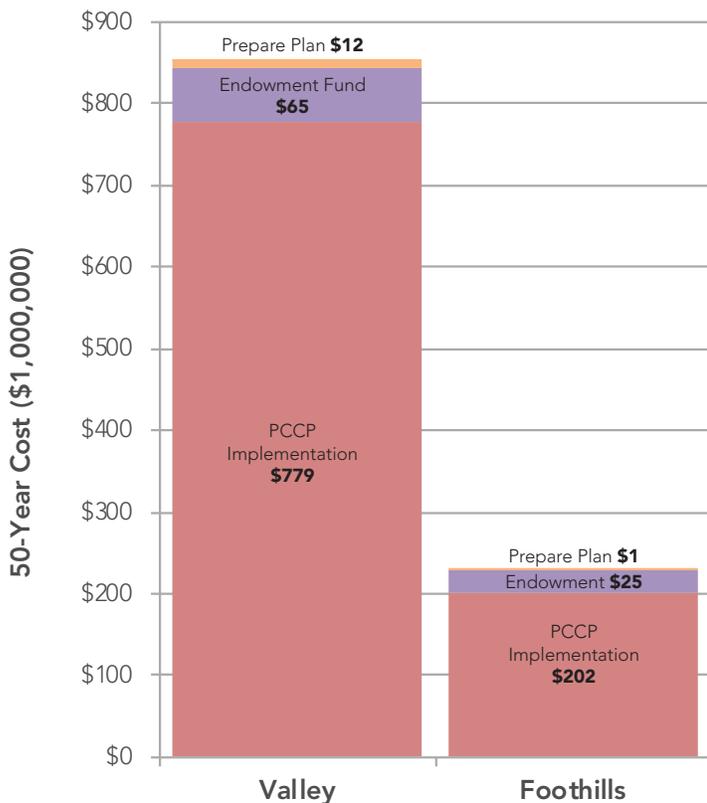
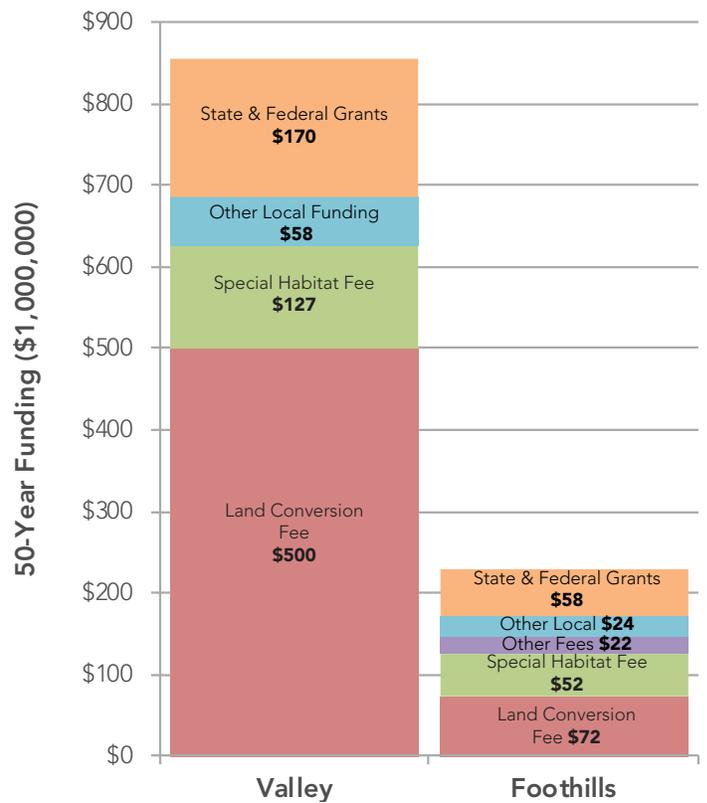


Figure 10. Valley and Foothills Share of Plan Funding



3. COST AND FUNDING

21% of funding needs over the 50-year permit term. Although the state and federal funds cannot be committed to the PCCP in advance, there are several present programs that may be available. See Table 4 for a list of existing federal and state funding sources.

Development Fees

Development fees will only apply to Covered Activities and fall into three categories: land conversion fees, special habitat fees, and temporary effect fees. Permittees will collect fees based on an assessment of each project. The fee will be due at whichever step in the permitting process first applies:

1. Grading permit or grading plan issuance
2. Improvement plan approval
3. Building permit issuance

Table 4.
Federal and State Funding Sources for HCPs and NCCPs in California

Federal Funding Sources
Cooperative Endangered Species Conservation Fund (ESA Section 6)
Land and Water Conservation Fund
Environmental Quality Incentives Program (through Farm Bill)
North American Wetlands Conservation Act Grant Program
Central Valley Project Improvement Act Habitat Restoration Program
State Funding Sources
Watershed Restoration and Delta Water Quality and Ecosystem Restoration Program
Water Quality, Supply, and Infrastructure Improvement Act of 2014
Oak Woodlands Conservation Act of 2001 and Rangelands, Grazing Land and Grassland Protection Program
Habitat Conservation Fund
Sustainable Agricultural Lands Conservation program
Parks, Environment, and Water Bond (Proposition 68)

4. Any other final permit action that authorizes an action impacting a Covered Species or its habitat

For some projects, the fee payment can be split across several steps. Under certain circumstances, private applicants may fund all or a portion of fees with a special tax or special assessment or dedicate land to the reserve system in lieu of development fees. Every five years, the PCA will complete a fee assessment in coordination with the Wildlife Agencies to review the costs and the underlying assumptions of the original funding plan, to evaluate trends in covered activities such as the rate and density of land development, and to estimate the remaining costs to implement the HCP/NCCP. The PCA will adjust fees based on this analysis.

Land conversion fees will apply wherever natural, semi-natural, or other agricultural land is affected and are applied at the same rate regardless of the land cover type present. The basic fee is set to provide funding for the establishment of the reserve system overall, averaging across the costs of acquisition and management of the various natural communities to be protected. Table 5 shows how the fee will be applied. Because of differences in both the biological resources present and the character of future land development, the Valley and the Foothills do not have the same fee schedule. Much of the impact on habitat and species results from development and fragmentation of large parcels, so smaller parcels already existing at the time the Plan is adopted pay lower land conversion fees.

Special habitat fees will apply wherever Covered Activities affect wetlands or the Stream System. Table 6 shows how the fee will be applied. All special habitat fees are

Table 5.
Land Conversion Fee Schedule

ID	Fee Name	Fee	
Plan Area A - Valley (Components A1 and A2)			
	Any existing parcel less than 20,000 square feet	no fee	(not a Covered Activity)
1a	Covered Activities on any existing parcel from 20,000 square feet to 1.0 acres	\$4,887	per acre
1b	Single Family Residential on an existing parcel greater than 1.0 acre, or on any parcel created by subdivision of an existing parcel into four or fewer total parcels	\$3,665	per dwelling unit
			plus
		\$1,222	per acre up to a max. of \$24,440
1c	All other Covered Activities	\$24,894	per acre
Plan Area A - Foothills (Components A3 and A4)			
	Any existing parcel less than 20,000 square feet	no fee	(not a Covered Activity)
2a	Residential Development Projects on Existing Parcel from 20,000 square feet to 1.0 acres	\$2,015	per dwelling unit
2b	Non-residential Development Projects on Existing Parcel from 20,000 square feet to 1.0 acres	\$2,901	per acre
2c	Single Family Residential on an Existing Parcel greater than 1.0 acre or on any parcel created by subdivision of an Existing Parcel into four or fewer total parcels	\$2,015	per dwelling unit
			plus
		\$1,163	per acre up to a max. of \$23,260
2d	Single Family Residential on any parcel created by subdivision of any parcel into five or more total parcels and any multi-family residential	\$2,015	per dwelling unit
			plus
		\$5,800	per acre
2e	All Non-residential projects on Existing Parcel greater than 1.0 acre or on any parcel created by subdivision	\$8,701	per acre
Plan Area B - Valley (Component B1: Roseville / Rocklin / Loomis area)			
3a	All Covered Activities	\$24,894	per acre
Plan Area B - Foothills (Component B1: Auburn area and Component B2)			
3b	Covered Activities on Existing Parcels less than 1.0 acres	\$2,901	per acre
3c	Covered Activities on Existing Parcels greater than 1.0 acres	\$8,701	per acre
Notes:			
<ul style="list-style-type: none"> Fees reflect 2017 cost estimates. Changes in land cost and other inflation factors will be applied annually to the HCP/ NCCP development fees ensure that funding keeps pace with Plan costs (see Section 9.4.1.7, Adjustment of Development Fees). Non-covered activities are not subject to PCCP Development Fees, but may be subject to other local fees. Per acre fees apply to the entire parcel area excluding any areas already improved or where avoidance occurs pursuant to Section 6.3.1.3, General Condition 3, Land Conversion. Such exclusions may comprise land approved by the PCA to be set aside as habitat or the balance of existing parcels subject to low density rural development. An "existing parcel" refers to a parcel at time of Plan adoption. Foothills fee also applies to the higher elevation portion of the City of Lincoln planning area roughly eastward of a line dropped due south from the intersection of Virginiatown Road and Hungry Hollow Road, and pulled west to follow the 200' elevation line which runs roughly along the NID irrigation ditch north of Hwy. 193 and Oak Tree Lane. 			

3. COST AND FUNDING

paid in addition to the land conversion fee. The special habitat fees mitigate loss of specific, valuable habitats and are set to provide adequate funding for restoration and enhancement; the fee varies depending on what habitat is affected.

Temporary effect fees are assessed at 2% of listed permanent fees and apply only when a

natural community is restored within one year of initial ground disturbance. This condition will usually not be easily met and temporary fees will apply mainly to projects such as stream channel maintenance, pipelines, or lay down areas adjacent to short term public works construction.

Table 6.
Special Habitats Fee Schedule

ID	Fee Name	Fee
4a	Vernal Pool Direct Effects	\$109,550 per acre of vernal pool constituent habitat altered by ground disturbance; includes entire delineated wetland area if any part is affected
4b	Vernal Pool Immediate Watershed Effects. Not subject to temporary effects fee.	\$18,296 per acre of vernal pool constituent habitat on project site not altered by ground disturbance, but within an immediate watershed that is altered by ground disturbance. Set equal to 1/6 of fee 4a-Vernal Pool Direct Effects
4c	Aquatic/Wetland	\$74,964 per acre of aquatic/wetland constituent habitat altered by ground disturbance
4d	Riverine/Riparian	\$101,020 per acre of riverine/riparian constituent habitat altered by ground disturbance
4e	Riverine/Riparian Buffer	\$50,510 per acre of ground disturbance not in Stream System, but within 50 feet of delineated riverine/ riparian constituent habitat. Set equal to 1/2 of fee 4d-Riverine/ Riparian.
4f	Stream System Encroachment Not subject to temporary effects fee.	\$101,020 per acre of natural, semi-natural, and other agricultural communities in Stream System altered by ground disturbance and not subject to a separate special habitat fee
4g	Salmonid Stream Channel Not subject to temporary effects fee.	\$591 per linear foot; paid in addition to any other special habitat fee

Notes:

- All special habitat fees are paid in addition to the land conversion fee.
- All amounts are in 2017 dollars.
- The PCA will update fees on an annual basis to reflect cost inflation.

4. PLAN PARTICIPATION AND PERMIT ADMINISTRATION

This section discusses plan start-up and operation, the role of the Placer Conservation Authority, how the Permit applies to individual projects, and how the Plan can change.

Launching the Plan

Start-up. A series of actions by Permittees are needed to set the Plan in action. The County and the City will enact implementing ordinances establishing Plan fees and conditions for Covered Activities within their land use authority and integrate PCCP permit participation into the customary project review process. Permittees will form the Placer Conservation Authority (PCA) as a joint exercise of powers agency, defining its responsibilities and relationship to parties involved in the PCCP.

The Placer Conservation Authority will:

- Establish the reserve system. The PCA may hold title to lands or conservation easements it purchases and may enter into cooperative agreements with other land management entities to own or manage lands for the PCA as part of the reserve system.
- Manage the reserve system, overseeing planning and design, habitat restoration, monitoring, and management programs.
- Keep the account of take and mitigation. The PCA will receive documentation from the other Permittees on Covered Activities, track the amount of take coverage granted, the mitigation conditions applied, and the amount and payment schedule of development fees.
- Maintain the PCCP database and serve as

the primary clearinghouse of resource data associated with implementation of the Plan.

- Coordinate with Wildlife Agencies on a regular basis and provide annual reports.
- Coordinate with science advisors, outside consultants, and land management agencies.
- Apply for and manage grants, contracts, and other funding sources.
- Hire staff and/or contract with existing local agencies, non-profit organizations, or private consultants to carry out its responsibilities.

The PCA will maintain the PCCP Database, including:

- Current land cover map. A compilation of air photos, land cover, and habitat mapping used to plan reserve acquisition and guide project review.
- Baseline land cover map. A compilation of data used during the PCCP planning process to be used for baseline land-cover map consistency finding during project review.
- Stream System/salmonid habitat map. The “blue line” streams from the National Hydrography Dataset and 100-year flood zones defining the PCCP Stream System, adapted to reflect current conditions with respect to stream continuity, channel lining, watershed size, and stream reaches serving as salmonid habitat.
- Covered Species occurrence records. A compilation of current and historical data for occurrences and occupied and potential habitat.
- Survey areas for select Covered Species. A map and calendar defining where and in what season surveys will be needed for

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certain species. The map will show where specific conditions on Covered Activities will apply.

- Established Reserves. A map and tabulation of the reserve system lands, ownership status, and natural communities protected.
- Covered Activities. A map and tabulation of affected lands and conditions applied.

The PCA will establish a formal relationship with parties involved in the PCCP:

- Inter-agency working group, comprising representatives of the Wildlife Agencies will assist in the implementation of the PCCP by providing coordinated advice, recommendations, proposals, and review and approval where required by the Plan.
- Science advisors will provide science-based expert opinion and recommendations, peer review, and feedback regarding key scientific aspects of PCCP implementation such as reserve design, reserve management, monitoring protocols, and grant proposals.
- Public advisory committee will solicit input from stakeholders interested in Plan implementation.
- Permittees (County, Lincoln, PCWA, SPRTA) will involve the PCA in review of public and private projects and convey fees collected.

Stay-ahead and Jump-Start. The benefits of the regional reserve system will offset the adverse effects of loss of habitat to Covered Activities because assembly of the reserve system will lead or “stay-ahead” of impacts – the PCA is required to preserve habitat faster than Covered Activities remove habitat. To meet the stay-ahead provision during the early phase, nearly 2,400 acres of existing conservation lands contributing to the

biological goals and objectives of the PCCP already purchased by the County under the Placer Legacy program will be included in the reserve system and will be counted toward Plan acquisition commitments in order to “jump-start” implementation. Several already established and proposed conservation or mitigation banks may seek approval for credits to help meet Plan stay-ahead commitments, including purchase of California red-legged frog conservation credits at the Big Gun Conservation Bank, east of Auburn.

The Plan in Action

Assembling the Reserve System. By permit year 45, the PCA will assemble a reserve system spanning 47,000 acres in Western Placer County. The land will mainly be acquired by purchase, but some will come from land dedicated in lieu of paying fees and cooperative agreements with other land management entities, including private mitigation banks. Lands will only be acquired through a willing seller process. Acquisition may be by outright purchase of fee title or by a conservation easement.

Land acquisition will follow an initial process of site assessment for conservation objectives, followed by Wildlife Agency concurrence. Once the purchase is complete, the PCA will develop a Reserve Unit Management Plan for Wildlife Agency approval.

All Reserve Unit Management Plans will include:

- Biological goals and objectives of the reserve unit;
- Biological inventory of the site;
- Community and Covered Species’ habitat management, enhancement, and restoration;

- Monitoring and adaptive management;
- Fire management;
- Reserve buffer areas on adjacent development sites; and
- Invasive species management.

Where relevant, Reserve Unit Management Plans will include:

- Management of water and aquatic resources
- Management of rice lands or other agriculture
- Maintenance of infrastructure
- Recreational use and public access
- Mosquito and vector control
- Measures to reduce invasive species and disease affecting Covered Species.

The Plan assumes that the PCA will purchase approximately 20 percent of the land for the reserve system in conservation easements. An easement allows productive use of land consistent with the land's conservation purpose and is recorded in the favor of the wildlife agencies to assure that purpose. In some cases, after a conservation easement is recorded, the land may be sold to a third party. For example, rice lands may be purchased, placed under a conservation easement, and then sold to a rice farmer to continue rice cultivation on the lands - subject to the terms and conditions of the easement.

Operating Reserves, Management and Monitoring. Lands in the reserve system with similar management needs will operate under a reserve unit management plan based on either a Valley or Foothills template. The unit plans will set long range objectives and guide day-to-day operations. Operations will

comprise enhancement and restoration of natural communities and Covered Species habitats as well as land stewardship such as maintaining fencing and fire breaks.

Monitoring will be used to show compliance with the Plan and to verify progress toward achieving the biological goals and objectives. Monitoring will measure the effectiveness of management actions and guide future implementation. Monitoring for Covered Species will rely on protocols adopted by the wildlife agencies, where available. Monitoring for other species and for habitat is based on current knowledge of their ecology.

The Plan outlines the general approach to monitoring; Western Placer-specific protocols will be developed during the first five years of Plan implementation and as land is acquired as part of the reserve system.

The conservation strategy sets forth comprehensive objectives. At the planning stage, it is uncertain which management techniques are best suited to fulfilling objectives, particularly for habitat enhancement and restoration—all habitat restoration and creation measures must be completed by year 40 to allow time to meet performance criteria within the permit term. The PCA will begin applying methods from other programs to Western Placer County and improve on those methods using an adaptive management approach which measures performance, tests alternative management methods, and adjusts future management actions based on the new information. The formal adaptive management process will be administered by the PCA. An independent science advisor group will evaluate the effectiveness of existing and proposed management actions and changes would be

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subject to approval by the Wildlife Agencies.

The PCA will prepare annual reports over the term of the PCCP that documents permit compliance, conservation measures, management measures, restoration/creation measures, and monitoring results.

Proceeding with Covered Activities

Plan Permittees will have take authorization for projects if they are Covered Activities and comply with the terms of the Plan. The process of initiating participation in the Plan will be integrated into the local jurisdictions' normal CEQA procedures for discretionary permits or, for ministerial projects, the normal land development review process. For public projects, carried out by a Permittee, the Permittee must document consistency with the Plan and provide a copy of this documentation to the PCA.

Private projects subject to permits or other land use regulations by either the City of Lincoln or Placer County will need to provide information to the City or County so it can determine the type and scope of Covered Activities, the impact on Covered Species and wetlands, applicable project conditions, and applicable fees.

The City and the County will develop an HCP/NCCP participation process that will integrate the steps needed for PCCP permit coverage with each Permittee's already established land use and CEQA process. The scope and detail of documentation will be tailored to the scope and complexity of the project under consideration: large subdivisions or specific plans that affect Covered Species habitat may require extensive documentation; a building permit or minor grading permit may require

only a few checklist items and verification with an aerial photograph.

The HCP/NCCP participation package will provide Permittees and the PCA with the information needed to apply appropriate Plan conditions on Covered Activities:

- Provide project description and map permanent, direct, indirect, and temporary effects.
- Document natural community types on site and baseline consistency based on the most recent natural community information provided by the PCA and other applicable biological surveys.
- Identify aquatic features present on the project site, including any areas within an adjacent wetland zone.
- Map the Stream System and salmonid streams, if present.
- Determine project effects on biological resources addressed by the Plan which include the natural community type, Stream System, and Covered Species' habitat.
- Report results of applicable species surveys.
- Assess fees or land in lieu of fees if the project includes land that will be offered for dedication or as a contribution to the reserve system.
- Specify applicable avoidance and minimization requirements including pre-construction surveys and construction monitoring requirements.

The Wildlife Agencies issue the PCCP permits based on a consideration of the environmental setting prevailing during the PCCP planning period, and have set 2011 as the baseline year against which effects are evaluated. The baseline consistency determination would

show whether wetlands that may have been present may have been altered by activities not covered by the PCCP. If this is the case, the City or County will assess special habitat fees based on the baseline conditions rather than current conditions.

Changing the Plan

Adaptive management is incorporated into the Plan so that most of its operation, including management of the reserves and application of conditions on Covered Activities, can be adjusted to maximize effectiveness based on experience. Changed operation resulting from adaptive management is not considered a modification to the Plan itself.

Administrative changes are internal changes or corrections to the Plan that do not require authorization from the Wildlife Agencies. Examples include changes to monitoring protocols to conform to new or changed Wildlife Agency protocols, automatic annual fee adjustments for inflation, and the 5-year periodic review of plan costs and development fees.

Minor modifications are changes that do not affect the impact assessment or conservation strategy, and do not affect the ability of the PCA to achieve the biological goals and objectives of the Plan. Minor modifications do not require an amendment to the permits, but they do require approval by the Wildlife Agencies. Examples of minor modifications include changes in conservation measures consistent with overall Plan goals, changes to the reporting protocol, and changes in the land acquisition strategy necessary to address changing land use patterns or a lack of willing sellers.

Amendments are changes that may affect the conservation strategy in the Plan. Amendments to the Plan will also require an amendment to the permits and hence will follow a formal state and federal review process. Examples of changes that will require an amendment include changing the Plan Area boundary, changing the list of Covered Species or Covered Activities, increasing the allowable take limit, or modifying any important component of the conservation strategy.

Adapting to the future. The PCCP reflects the best information available at the time the Plan was developed. The Plan provides for implementation to overcome planning stage limitations: ground-level survey and high accuracy delineation will be used for project review. Monitoring results will be used for adaptive management to improve applied conservation techniques and to respond to changing regional trends, including those associated with global climate change. The Permittees will be responsible for implementing and funding measures needed to respond to reasonably foreseeable changed circumstances spelled out in the Plan. Accordingly, a portion of the Plan implementation budget is allocated to respond to foreseeable events such as wild fire, drought, flooding, and disease that would affect reserve management and protected populations of Covered Species. Should unforeseen circumstances requiring additional mitigation arise once the permit is in place, the federal No Surprises Regulation provides assurances to the Permittees that no additional money, commitments, or restrictions of land or water will be required. The Plan sets thresholds for unforeseen circumstances.

5. REFERENCES

5. REFERENCES

All references below are to the Western Placer County Habitat Conservation Plan and Natural Community Conservation Plan.

Figures

- Figure 1. PCCP Location. Figure 1-1
- Figure 2. Plan Area. Figure 1-2
- Figure 3. Communities in Plan Area A. Figure 3-8. NOTE: Mapping reflects baseline conditions 2003 - 2011
- Figure 4. PCCP Map Designations. Figure 1-5
- Figure 5. Stream System and Salmonid Habitat. Figures 1-6, 4-3, and 5-4
- Figure 6. Increase in Community Protection. Tables 5-2 and 5-3
- Figure 7. Change in Conservation & Development Area. Tables 4-2, 5-2, and 5-3. Note: Surface area of the major reservoirs not included; although reservoirs as managed open water are classed as a non-natural community, they do not represent “developed” area in the usual sense.
- Figure 8. 50-Year Cost by Major Categories. Table 9-1
- Figure 9. Valley and Foothills Share of Plan Cost. Table 9-4
- Figure 10. Valley and Foothills Share of Plan Funding. Table 9-4

Tables

- Table 1. Covered Communities. Section 3.3.1
- Table 2. Covered Species. Section 3.3.2 and Appendix D Species Accounts
- Table 3. PCCP Addition to Community Protection. Tables 5-2 and 5-3

- Table 4. Federal and State Funding Sources for HCPs and NCCPs in California. Section 9.4.3 and Table 9-9
- Table 5. Land Conversion Fee Schedule. Section 9.4.1 and Table 9-6
- Table 6. Special Habitats Fee Schedule. Table 9-7
- Table 7. Private Project Plan Participation. Section 6.2.4

Goals and Objectives

- Summary of Landscape Level Biological Goals and Objectives. Section 5.2.5
- Summary of Natural Community Goals and Objectives. Section 5.2.6
- Summary of Species Biological Goals and Objectives. Section 5.2.7

Conditions

- List of General Conditions. Section 6.3.1
- Conditions to Avoid and Minimize Effects on Specific Natural Communities. Section 6.3.2
- Conditions to Avoid and Minimize Effects on the Stream System. Section 6.3.3
- Conditions on Regional Public Programs. Section 6.3.4
- Summary of Species-level Conditions for Avoidance, Minimization, and Mitigation. Section 6.3.5
- Conditions for Reserve Management. Section 6.3.6

Cover Photos

From top to bottom, left to right:

- Freshwater Marsh - Loren Clark
- Burrowing Owl - Cornell Lab of Ornithology

5. R E F E R E N C E S

- Western Pond Turtle - Yathin S. Krishnappa
- Black Rail - Phil Robertson
- Grassland/Poppies - Loren Clark
- Oak Woodland - Loren Clark
- Chinook Salmon - Oregon State University
- Riparian/Riverine Habitat - Placer County
- Swainson's Hawk - Placer Land Trust
- Agriculture - Loren Clark
- California Red-Legged Frog - Edgar Ortega on CaliforniaHerps.com
- Vernal Pool Fairy Shrimp - Earth.com
- Oak Woodland - Loren Clark
- Riverine and Vernal Pool Complex - Placer County

