

Placer County Conservation Plan

Ad Hoc Committee Conservation Strategy Report



September 15, 2008

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EXHIBIT A

Overview

The County of Placer is preparing an ambitious, large-scale habitat and wetland conservation plan in order to achieve a number of environmental, economic, and administrative objectives. The "Placer County Conservation Plan" (PCCP) will combine state and federal regulatory requirements into a comprehensive locally controlled program that will streamline permitting under state and federal endangered species acts and other state and federal environmental laws. The PCCP includes two integrated programs: 1) a joint Natural Community Conservation Plan (NCCP) and Habitat Conservation Plan (HCP) that will protect fish and wildlife and their habitat, and 2) a County Aquatic Resources Program (CARP) that will protect streams, wetlands and other water resources.

The joint NCCP/HCP is intended to:

- ♦ conserve threatened and endangered species in western Placer County;
- ♦ avoid or resolve potential conflicts between species conservation and the construction of new urban, suburban and rural infrastructure and development; and
- ♦ fulfill the requirements of state and federal endangered species acts.

The CARP is intended to:

- ♦ protect streams, wetlands and other water resources;
- ♦ avoid or resolve potential conflicts between water resources protection and the construction of new urban and rural infrastructure and development;
- ♦ fulfill the requirements of the federal Clean Water Act and analogous state laws.

Purpose

This Conservation Strategy Report is intended to outline basic principles, standards and guidelines that can be used to develop a land conservation strategy for Western Placer County and to complete the PCCP. This report summarizes the Conservation Strategy component of the NCCP/HCP as recommended by the PCCP Ad Hoc

Committee. The PCCP Ad Hoc Committee was formed in January of 2007 and consists of 2 members of the Placer County Board of Supervisors and 2 Council Members of the City of Lincoln.

While the NCCP/HCP and CARP will be separate programs within the PCCP, they will be managed through one institutional framework and will share biological goals and objectives. Basic tenets of conservation biology as recommended by a panel of independent scientific advisors have informed the development of each program and are the basis of much of the following discussion. The CARP and the NCCP/HCP are thus combined in the PCCP and are presented together in this summary document.

The purposes of this document are:

- ♦ To report the PCCP Ad Hoc Committee's recommendations to the Placer County Board of Supervisors regarding the development of the PCCP
- ♦ To provide the County Board of Supervisors, City Council of Lincoln, the Resource Agencies and the interested public with a summary of certain proposed key elements of the PCCP conservation strategy
- ♦ To respond to the June 2005 Resource Agency comment letter on the Agency Review Draft Conservation Strategy for the PCCP.
- ♦ To update the Biological Working Group (BWG) members on the development of the PCCP.

Participating Entities and Permitting Agencies

Participating Entities, also termed the *Applicants*, are the entities that will receive permits under the ESA, the NCCPA, Section 404 of the CWA, and Section 1602 of the Fish and Game Code. Because they will receive the state and federal permits, Participating Entities will have the ultimate responsibility for implementing the PCCP. The two chief responsibilities of the Participating Entities will be to ensure that the PCCP's conservation program is implemented successfully and to ensure that projects covered by the PCCP fulfill PCCP mitigation and conservation requirements. The Participating Entities are:

- ♦ Placer County
- ♦ City of Lincoln
- ♦ Placer County Water Agency (PCWA)
- ♦ Placer County Transportation Authority (PCTPA) on behalf of the South Placer Regional Transportation Authority for the Placer Parkway project

The *permitting agencies* are the regulatory entities considering the request for permits. The permitting agencies involved with the PCCP program are:

- ♦ The U. S. Fish and Wildlife Service (USFWS)

- ♦ The National Marine Fisheries Service (NMFS)
- ♦ The U. S. Army Corps of Engineers (USACE)
- ♦ The U.S. Environmental Protection Agency (EPA)
- ♦ The California Department of Fish and Game (CDFG)
- ♦ Central Valley Regional Water Quality Control Board (CVRWQCB)

Regulatory Compliance

One of the PCCP's main purposes is to create a simplified, streamlined environmental review process for a wide range of land development and infrastructure activities and other covered activities that result in impacts to state and federally protected plants and animals and habitat. When the PCCP is approved by the state and federal agencies, they will each issue to the Participating Entities a permit that authorizes implementation of the PCCP and projects covered by the PCCP. To ensure that each covered project conforms to the PCCP, the Participating Entities will conduct an environmental review of the project and identify appropriate mitigation measures derived from the PCCP, consulting informally with the state or federal agencies as needed. If a covered project conforms to the PCCP, it will be authorized under the state and federal permits if and when the Participating Entity approves it. The PCCP will thus enable the Participating Entities to provide "one-stop shopping" for environmental permits and to integrate such permits in the local entitlement processing of applications including environmental impact assessments that comply with the California Environmental Quality Act.

The environmental permits and authorizations that will be issued to Participating Entities and extended to projects covered by the PCCP are:

- ♦ A renewable, 50-year, incidental take permit for 31 species issued by the USFWS under the FESA;
- ♦ A renewable, 50-year, incidental take permit for 3 species issued by the NMFS under the FESA;
- ♦ A renewable, 50-year, incidental take authorization for 34 species issued by the CDFG under the NCCPA (which also fulfills the requirements of the California Endangered Species Act);
- ♦ A renewable, 5-year, Programmatic Section 404 permit issued by the USACE under the Clean Water Act (CWA);
- ♦ A renewable, 5-year, Section 401 certification for the Section 404 permit issued by the CVRWQCB under the Clean Water Act;
- ♦ "Joint Procedures" approved by the USACE that may be used by the Participating Entities for aquatic resource permit processing under the CWA; and

- ♦ A 50-year, programmatic master streambed alteration agreement issued by the CDFG.

Public Review and Participation

Throughout the development of the PCCP conservation strategy, the Participating Entities have sought public involvement through regularly scheduled Biological Stakeholder Working Group (BWG) meetings. Input from the BWG, as well as other public input will continue to play a key role in the development of the draft PCCP. In addition, opportunities for public participation will be provided during the environmental review of the draft PCCP and PCCP Finance Plan.

Covered Activities

Covered activities include actions implemented by the Participating Entities, urban, suburban, and rural infrastructure and development approved by the Plan Participants, and conservation actions necessary to implement the PCCP. A draft, comprehensive list of the activities covered under the PCCP is provided in Appendix A.

Permit Term

The PCCP and State and Federal permits issued in connection with the PCCP would have a 50-year term, but could be renewed at the end of that term if desired by the Participating Entities. Lands used for species or wetlands conservation purposes under the PCCP would be protected in perpetuity.

Chapter 2 Environmental Setting

Land Area and Jurisdictions

The Western Placer County project area comprises 273,729 acres. Within this area there are 57,609 acres of incorporated land within and subject to the land use jurisdiction of the Cities of Lincoln, Auburn, Loomis, Rocklin, and Roseville. The remainder is subject to the land use jurisdiction of the County of Placer. Under California law, cities can establish and plan land use in Spheres of Influence (SOI) on unincorporated land. In Western Placer County, city SOIs collectively cover approximately 26,891 acres.

The City of Lincoln and the unincorporated County area are proposed for permit coverage. This includes the portion of city SOI likely to be subject to land use permitting by either Lincoln or Placer County. Excluding the Non-Participating Cities (NPC) and 3,781 acres of their SOIs, the PCCP area subject to the proposed permits is 224,999¹ acres.

Land Use

Current land use is a mixture of urban, agriculture, and open space (see Table 2-1).

Land Use Type ¹	Area (ac)	% of Total
Urban and Rural Residential	52,075	23%
Agriculture, Cropland	43,869	20%
Rangeland	64,673	29%
Forested	56,424	25%
Open Water and Other	7,569	3%
Total	224,610	100%

¹Minor area differences of 389 acres or less than 0.2 % of total area is due to non-comparable land use categories

The dominant form of developed land in the Valley portion of the PCCP area is large suburban subdivisions largely resulting from annexation of developed and undeveloped agricultural land adjacent to the cities. Some unincorporated development exists at an urban scale in the Dry Creek/West Placer area west of

Roseville. Additional higher density unincorporated areas can be found in North Auburn, Bowman, the Penryn Parkway and Newcastle. The dominant land use in the Foothill portion of the PCCP area is very low density rural residential (typically one dwelling per 5-20 acres) or agriculture (primarily in the form of pasture land).

- Most of the I-80 corridor and the adjoining portion of the North Foothills area is already subdivided into 20 acre or smaller parcels and that 5 acre or smaller parcels are well established.
- Approximately 32,500 acres of the Existing and Planned Urban is mapped as already urban or rural residential or development entitlements have been issued resulting in the anticipated conversion of these areas.

Natural Communities

The PCCP uses a habitat classification system called the California Wildlife Habitat Relationship (“WHR”) system, which has been modified slightly to reflect conditions in Placer County. WHR was selected over other habitat classification systems because it is widely used by land managers and wildlife biologists throughout California, and it is the system most easily understood by decision makers and the general public. It also provides a sufficient level of detail for landscape-level planning without the burden of having to identify natural communities at a very refined level of detail that can't be mapped without access to private properties.

In the PCCP landscape, the WHR makes up several major ecosystem types or “natural communities” including stream systems (which contains the rivers and associated aquatic habitats, riparian woodland and non-vernal pool wetlands), valley grassland and valley grassland vernal pool complexes, foothill hardwood (blue oak) woodland, and agricultural lands.

Covered Species

The PCCP proposes coverage for the following State and Federal special status species and other species of special concern:

vernal pool tadpole shrimp (<i>Lepidurus packardii</i>)	dwarf downingia (<i>Downingia pusilla</i>)
vernal pool fairy shrimp (<i>Branchinecta lynchi</i>)	Red Bluff dwarf rush (<i>Juncus leiospermus</i> var. <i>leiospermus</i>)
valley elderberry longhorn beetle (<i>Desmocerus californicus dimorphus</i>)	Ahart's dwarf rush (<i>Juncus leiospermus</i> var. <i>ahartii</i>)
bald eagle (wintering) (<i>Haliaeetus leucocephalus</i>)	Loggerhead shrike (<i>Lanius ludovicianus</i>)
California red-legged frog (<i>Rana aurora draytoni</i>)	Yellow warbler (nesting) (<i>Dendroica petechia</i>)
giant garter snake (<i>Thamnophis gigas</i>)	Modesto song sparrow (<i>Melospiza melodia mailliardi</i>)
California tiger salamander (<i>Ambystoma californiense</i>)	Grasshopper sparrow (<i>Ammodramus savannarum</i>)
Bogg's Lake Hedge-hyssop (<i>Gratiola heterosepala</i>)	Rough-legged hawk (wintering) (<i>Buteo lagopus</i>)
American peregrine falcon (wintering) (<i>Falco peregrinus anatum</i>)	Ferruginous hawk (wintering) (<i>Buteo regalis</i>)
Swainson's Hawk (<i>Buteo swainsoni</i>)	Yellow-breasted chat (nesting) (<i>Icteria virens</i>)
California black rail (<i>Laterallus jamaicensis</i>)	Northern harrier (nesting) (<i>Circus cyaneus</i>)
Cooper's hawk (<i>Accipiter cooperii</i>)	Tricolored blackbird (nesting) (<i>Agelaius tricolor</i>)
Bank swallow (nesting) (<i>Riparia riparia</i>)	Central Valley fall/late fall-run chinook salmon (<i>Oncorhynchus tshawytscha</i>)
Sacramento winter-run chinook salmon (<i>Oncorhynchus tshawytscha</i>)	Central Valley steelhead (<i>Oncorhynchus mykiss</i>)
Foothill yellow-legged frog (<i>Rana boylei</i>)	legenere (<i>Legenere limosa</i>);;
California burrowing owl (<i>Athene cunicularia</i>)	Yellow-billed cuckoo (<i>Coccyzus americanus</i>)
Western spadefoot toad (<i>Scaphiopus hammondi</i>)	Northwestern pond turtle (<i>Clemmes marmorata marmorata</i>)

Growth Projections and Projected Take

Population and Non-Residential Growth Projections

The Conservation Planning horizon is to Year 2060. In 2007, Placer County's population was 326,500 (Source: State of California Department of Finance). The County's population could increase by 480,000 people to reach a total of 810,000 by 2060. (Source: SACOG, DOF, and Hausrath Economics Group). Most of this growth will occur in the cities and unincorporated areas of Western Placer. The majority of the population and employment growth requires land for urban/suburban residential, commercial, office and industrial uses, and associated infrastructure and public support facilities (e.g., wastewater treatment plants, libraries, landfills, etc.). Based on plans and proposals for development in the cities and the unincorporated area and on planning level assumptions about development density, updated estimates indicate that about 68,000 acres of land conversion would accommodate this growth, of which 57,000 acres would be in the area covered by the PCCP. The balance would be in the Non-Participating Cities of Auburn, Loomis, Rocklin, and Roseville.

PCCP Analysis Zones

Due to differing growth, land conversion, and conservation objectives within the western Placer County landscape, the plan area is divided up into four analysis zones. These PCCP Analysis Zones, reflected on Figure A, are summarized as follows:

- Existing and Planned Urban (XPU) - The XPU zones consist of lands where urban development currently exists or areas where future development is planned based on existing land entitlements. Growth would be partially accommodated within the XPU areas. Infill development, ongoing rural residential development and new urban/suburban development is the dominant feature in the landscape. This area includes portions of the Placer Parkway Corridor. These areas receive the majority of regulatory relief through the implementation of the PCCP. There would be some natural community avoidance in XPU areas, including conservation of the stream corridors as well as conserving approximately 10% of the vernal pool grasslands located within the XPU boundary.
- Development Transition Area (DTA) - The DTA zone would serve as a transition to the Reserve Acquisition Area (see following summary). The DTA could contain a significant amount of urban development (if General Plan amendments and entitlements are obtained in the future). In addition, a

substantial portion of the lands in the DTA would become part of the Reserve Acquisition Area. A particular emphasis will be on the conservation of existing vernal pool resources within the DTA boundary.

- ◆ Reserve Acquisition Area – Over the 50 year term of the PCCP a large portion of the Reserve Acquisition Area will be permanently protected by conservation easements or by fee title acquisitions. The Reserve Acquisition Area would accommodate currently allowed forms of development as authorized by the General Plan Land Use Diagram and the Placer County Zoning Ordinance. In general the Reserve Acquisition Area landscape is comprised of lands in agricultural production and some amount of rural residential development. Over time, it would be anticipated that there would be continued improvements to the Reserve Acquisition Area's transportation network and the development of agricultural support facilities and recreational land uses. A number of existing preserves are currently established within this zone as a result of past development projects and conservation activities (e.g., Placer Legacy, USDA funded conservation easements, Placer Land Trust, etc.) and would provide the foundation of the PCCP preserve. The Reserve Acquisition Area is dominated by lands designated Agriculture 10-80 acre minimum on the Placer County General Plan.
- ◆ Non-Participating Cities (NPC) – These areas consist of cities not participating in the PCCP which include the Cities of Rocklin, Roseville, Auburn and the Town of Loomis.

Projected “Take” Between 2007-2060

A fundamental requirement of the PCCP is to determine how to mitigate the impacts of the urban development and other covered activities on the 34 species covered by the PCCP. To do this, it is first necessary to determine the extent of the impact (i.e., the *take*) that will be caused by the covered activities. Take occurs when an activity converts habitat that is necessary to support viable populations of endangered species. Because of this, take is usually measured in terms of acres of habitat converted.

Because take in Placer County is expected to result mainly from urban, suburban and rural residential development, take can be estimated by analyzing growth projections and land conversion rates. Hausrath Economics Group (HEG) completed an update to these estimates in August 2008. The original estimates projected growth to 2050. The updated estimates were based upon the Ad Hoc Committee's direction to consider growth projections to 2060 and their potential for conversion of unincorporated areas of western Placer County along with the City of Lincoln's anticipated growth associated with their 2008 General Plan. The net result of this analysis is that the County now has a reasonable estimate of how much growth will impact habitat take through 2060, measured in 10-year increments, and the general location of that growth.

It is estimated that 56,700 acres of land will be impacted by development and associated infrastructure improvements authorized by Participating Entities through

the year 2060. The total area of the PCCP boundary subject to this permit is approximately 221,160 acres. The direct take, or area of habitat impacted, therefore represents approximately 25% of the total land area of Phase 1. This figure includes existing and planned urban areas that will experience infill over time. It also includes continued fragmentation of an existing fragmented landscape in the rural residential areas of the county, mostly dominated by a range of oak woodland and oak woodland savannah habitats. The indirect impacts (such as water quality impacts on stream systems) cover a larger area. The total take including non-participating cities (Auburn, Loomis, Rocklin, and Roseville) is projected to be 68,000 acres between 2007 and 2060.

Table 3-1 summarizes the total amount of land conversion that is anticipated through the year 2060.

Analysis Zone	Acres	Percent of total
Development Transition Area—County	4,900	7%
Development Transition Area—Lincoln	8,800	13%
Existing and Planned Urban—County	27,400	40%
Existing and Planned Urban—Lincoln	3,400	5%
Rural Residential—County	12,200	18%
Non Participating Cities	11,300	17%
Total PCCP Area	68,000	100%
PCCP area excluding non-participating cities	56,700	

As part of the conservation strategy, a GIS-based model will allocated the projected growth to the various WHR types in the existing land cover categories mapped for the PCCP plan area. Because impacts will occur over time and will proceed at different rates in different geographic areas of the PCCP area boundary, a take model has been developed that will predict, in 10-year increments, how the above resources are impacted over time. This is an important element of the conservation strategy because it will guide priorities for acquisitions and restoration activities such that they match the type, intensity, rate of land conversion and location of land conversion over the term of the permit. Mitigation and conservation measures will be implemented over time consistent with the geographic location and amount of impacts that have been predicted.

Chapter 4 provides a summary of the conservation strategy and how it will account for the projected take over time.

Growth and Land Conversion Scenario 2007 – 2060

Hausrath Economics Group (HEG) prepared projections of growth for Placer County from the base year (2007) through 2060 and estimates of growth from 2007 through 2060 for the PCCP Phase 1 planning area (western Placer County) based on those

county totals. The estimates of land conversion for the PCCP Phase 1 planning area represent the acres of residential and non-residential development and associated infrastructure that would accommodate projected growth in the Phase 1 planning area from 2007 through 2060.

HEG relied on three primary sources to provide parameters for long-term projections of housing, population, and employment growth in Placer County through the year 2060. The Center for the Continuing Study of the California Economy (CCSCE) conducted an economic and demographic analysis of long-term regional growth trends through 2050 for the Sacramento Area Council of Governments (SACOG) Blueprint project.¹ SACOG produced Blueprint Scenario projections of housing units and employment in 2050 for Placer County (except the Tahoe Basin).² In July 2007, the California Department of Finance (DOF) published updated projections of population by county through 2050. HEG reviewed these materials in conjunction with Census data; estimates of current housing, population, and jobs from DOF, the California Employment Development Department (EDD), and the U.S. Department of Commerce Bureau of Economic Analysis (BEA); trend data from those sources; and scenarios of regional growth by subarea prepared by SACOG for the Blueprint Project.

The long-term projections for Placer County represent a scenario of demand for urban development based on analysis of economic factors, demographic trends, regional growth potential, and development patterns. The projections consider Placer County's role in the regional economy and housing market and link population growth to job growth through analysis of labor force participation and the growth of jobs relative the growth of employed residents. The projections represent a reasonable scenario of expected growth based on the assumption that a high quality of life continues to attract economic activity and new residents and that appropriate infrastructure development occurs to accommodate growth.

The estimates of land conversion reflect development types and development intensities (dwelling units per acre and floor-area ratios for non-residential development) that are currently envisioned in city and county general and specific plans, planning studies, and development proposals as of August 2008, as well as intensification of development density over time, consistent with both observed trends and Blueprint principles for growth. Over the 50-year planning horizon, a number of factors will influence whether or not and how such development actually

¹ This analysis was presented at the SACOG Regional Forum in 2002. See *Growth Trends in the Sacramento Region: Jobs, Population, and Households 1950 – 2050*, October 18, 2002, (http://www.sacregionblueprint.org/sacregionblueprint/the_need/sacgrowthtrends.pdf) CCSCE produced somewhat revised projections and a report summarizing results, assumptions, and methodology in 2005. (http://www.sacog.org/demographics/projections/files/SACOG_Regional_Projections_Final_Report_Sep05.pdf)

² The original Blueprint Preferred Scenario was adopted by the SACOG Board of Directors in December 2004 (http://www.sacregionblueprint.org/sacregionblueprint/the_project/stats/placercountytotal.pdf) SACOG has used this scenario as the basis for updated projections through 2035 prepared for the Metropolitan Transportation Plan. SACOG staff provided HEG with 2050 Blueprint projections for Placer County (without the Tahoe Basin) that reflect additional work on the estimates undertaken as part of the MTP process.

occurs on the Placer County landscape. Relevant factors include local planning policies and other development regulations, development costs (land, materials, financing, infrastructure and public facilities), availability of private capital, levels of public investment, local and regional economic activity, and market preferences. The estimates are intended as a starting point for the PCCP analysis and reflect a reasonable scenario given current economic and planning assumptions.

Table 3-2 summarizes the regional, countywide, and Phase 1 area growth parameters used in the PCCP analysis. Table 3-2 highlights key economic and demographic assumptions as well as development intensity assumptions used in the land conversion analysis. Table 3-4 summarizes the land use plan holding capacity assumptions for the PCCP participating jurisdictions (Placer County and the City of Lincoln) and Table 3-5 summarizes the land use plan holding capacity assumptions for the Non-Participating Cities (Auburn, Loomis, Rocklin, and Roseville).

	PCCP Phase 1 Area	Placer County	Six-County Region
Housing Units	172,000	178,000	773,000
Population	454,000	484,000	2,100,000
Employment	296,000	302,000	1,160,000

**TABLE 3-3
Key Assumptions**

2050 regional population, housing, and employment	CCSCE for SACOG ³
2060 regional population, housing, and employment	CCSCE 2040-2050 growth rate extrapolated for another 10 years
Placer County share of regional job growth	25%
Placer County share of regional housing and population growth	25%
Tahoe Basin growth	50 dwelling units per year
Housing occupancy, 2060 (except Tahoe Basin)	95%
Housing occupancy, 2060 (Tahoe Basin)	50%
Persons-per household, 2060	2.68
Self-employed as percent of total employment	10%
Residential density (dwelling units per acre)	Range based on plans and permitted densities: 0.1 (1 unit per 10 acres) to 13 units per acre; average 3 units per acre
Employment density (jobs per acre)	Range: 18 to 43; average 25 jobs per acre
Share of 2007-2060 housing units that are rural residential, unincorporated area infill	15%
Share of 2007-2060 housing unit increase through redevelopment/reinvestment in cities (no land conversion)	14%
Share of 2007-2060 job growth through redevelopment/reinvestment in cities (no land conversion)	12%

³ Center for the Continuing Study of the California Economy (2005) for Sacramento Area Council of Governments

³ Center for the Continuing Study of the California Economy (2005) for Sacramento Area Council of Governments

TABLE 3-4 Holding Capacity: PCCP Participating Jurisdictions	
Placer County unincorporated area	General Plan, Placer Vineyards Base Plan (approved), Riolo Vineyard, Regional University, Brookfield, Curry Creek, Sunset Industrial Area, including non-residential development in AG 80
City of Lincoln	Proposed General Plan, city limits and existing sphere-of-influence, plus proposed Villages and Special Use Districts

TABLE 3-5 Holding Capacity: Non-Participating Cities	
City of Auburn	General Plan city limits, Baltimore Ravine Specific Plan
Town of Loomis	General Plan town limits
City of Rocklin	General Plan city limits and sphere-of-influence, Downtown Plan
City of Roseville	General Plan city limits, plus Sierra Vista, Creekview, and proposed increase in residential holding capacity for Fiddymont Ranch

Conservation Strategy Summary

Overview

The following discussion summarizes the foundation for the PCCP conservation strategy. The actual conservation strategy for the PCCP will contain detailed goals and objectives for each of the natural communities in the plan area and for each species covered under the PCCP. The following discussion points are a result of multiple conversations among elected officials, staff, a scientific advisory panel, and the permitting agencies.

Draft PCCP Reserve Map

A map identifying the areas where potential conservation and future growth could occur is presented in Figure B. In general the map depicts areas that will emphasize conservation as the dominant element of the landscape (shown in purple) and areas that will have developed land as the dominant form of the landscape (shown in white). The Development Transition Area (DTA) (shown in blue) is an area of transition that includes both development and conservation. Existing preserved properties which contribute to the PCCP reserve system are depicted in green. These existing conserved lands are not providing compensatory habitat for new impacts but instead represent existing protected areas, with intact resources, that serve as building blocks to a larger reserve system. The non-participating cities are depicted in gray. Table 4-1 provides an acreage breakdown for each of these areas. These boundaries are not fixed at this time and may be adjusted once the conservation plan is refined.

The conservation principles, standards, and guidelines presented herein are intended to be applied within the conservation lands in the Reserve Acquisition Areas and in portions of the DTA.

For properties within the Reserve Acquisition Area, the use and development of property can continue under the adopted General Plan and zoning. The PCCP does not change any zone district or prohibit any activity authorized under County Code today.

Map Category	Acres
Reserve Acquisition Area	77,862
Existing Preserves	13,805
Development Transition Area	21,862
Development Opportunity Area	111,470
Non-participating Cities	44,957
Total	269,956

Baseline Data Assumptions

Placer County has collected a significant amount of data to which serves as a foundation for the PCCP. There are two key data sources: aerial photography and associated vegetative mapping and numerous reports and studies that supplement existing published reports. The County will use relevant new data when it is available and would substantively improve the PCCP. However, the existing vegetative mapping and land cover mapping is of a suitable level of resolution for decision-making. Furthermore, the existing background data collection for the PCCP is adequate for decision making. The Science Advisors Report provides an adequate scientific foundation for the development of the conservation strategy.

The current baseline data assumptions were used to develop the standards and acreage objectives contained in this report. Any subsequent changes to the baseline data could result in a modification to standards and acreage objectives.

Background Objectives

The following biological principles and conservation objectives form the foundation of the PCCP conservation strategy.

Natural Community Values

There are many reasons to conserve the County's natural communities. Natural communities of native plants, animals, and insects provide many benefits to the residents of Placer County. These benefits include controlling floods, improving local climate, carbon sequestration, preventing soil erosion, maintaining soil fertility, and controlling agricultural pests and disease vectors. Natural communities also contribute to the scenic quality of the county's landscapes, support a multitude of wildlife species, provide recreational opportunities for fishing, hiking, horseback riding and other activities, and generally enhance the community's quality of life in the County.

Importance of Natural Communities

Western Placer supports important natural communities including vernal pool grasslands, creeks, riparian corridors, and valley oak and blue oak woodlands. Some of the species associated with these natural communities have been designated by the State or Federal government as threatened or endangered species, and some are species of concern that may be listed in the future. Retention of these natural communities, their natural processes, and the species that live in them in a system of connected, ecologically viable lands will be the foundation and focus of the PCCP. Western Placer still contains valuable biological resources, however the reduced extent and the fragmentation of the natural communities in Western Placer of today exhibit the effects of land use practices beginning with Spanish-colonial era grazing and placer mining impacts on creeks of 150 years ago and continuing to the present with farming, urban development and rural residential fragmentation.

Classification of Natural Communities

Natural communities are classified by their characteristic vegetation or land cover type (e.g., blue oak woodlands, vernal pool grasslands and freshwater emergent wetlands). Continuous patches of vegetation or land cover types larger than 10 acres are defined as "large patch communities." Small (less than 10 acres), isolated, communities that are biologically important, unique, or have rare species associated with them are defined as "small patch communities." On maps, these may appear as point locations within large-patch communities. Small- and large-patch communities together with agricultural, commercial, and residential lands, form a mosaic at a landscape scale. The Western Placer County Natural Resources Report describes the natural communities within each watershed in Western Placer County. All patches of vegetation and land cover types 0.1 acre or larger have been mapped in the PCCP plan area.

Broad Conservation Goals

The goals for this PCCP are to: 1) sustain all present natural communities in the Western Placer County landscape, 2) partially restore or enhance certain natural communities, 3) for certain individual species covered under the Plan ensure population stability and sustainability, and contribute to the species' recovery, and 4) address cumulative impacts of intensive land use and urbanization in Placer County, 5) conserve landscape connectivity and 6) conservation and restoration of ecosystem processes and functions. The projected time frame for the PCCP will be for 50 years. Western Placer County's natural communities now exist along hundreds of miles of creeks and on tens of thousands of acres of the landscape, although habitat degradation and fragmentation provides an unknown degree of stress upon the sustainability of these natural ecosystems in their current status. The present extent of the resources is nonetheless so limited compared with its former distribution that essentially all of the present biological value, but not necessarily all of the present land acreage, will need to be conserved in order to meet the conservation goals and regulatory requirements of the Plan. In other words, the size or range of existing

natural communities may be reduced somewhat, but it will be necessary to maintain or increase the overall health of those communities.

Biological Values

Biological value is a measure of the Western Placer County landscape's capacity to achieve the Plan's conservation goals. The natural communities present in Western Placer often respond well if they are actively managed. The PCCP can be based on conservation of biological values achieved from a combination of natural land preservation, enhancement of biological value by active management of land, or by maintenance of values on lands with compatible uses. Agriculture and public recreation are often compatible with the conservation of natural communities and can be a component of the management effort required to sustain their biological values. Some agricultural activities help fulfill certain biological needs of natural communities and native species. For example, properly managed grazing can enhance vernal pool grasslands, and rice production can provide valuable benefits to waterfowl and other wildlife. Conservation of agricultural lands and provision of low intensity public recreation has broad public support in the County and will be included in the PCCP and considered along with conservation of the natural communities themselves.

Flexible Preserve Designs

There are arguably few places in such pristine condition that preservation of just a few large parcels of land is enough for the PCCP to be successful. Except for a few small patch ecosystems, there are few areas of such high resource value that they must be part of the ultimate PCCP. Other than the Folsom Lake State Recreation Area, there is no large public ownership that can serve as a nucleus of reserve design. The resources to be protected (e.g., vernal pool grasslands, riparian areas and blue oak woodlands) are, however, amenable to both preservation and restoration/enhancement and thus there is a wide range of possible geographic strategies that could accomplish that objective. This preserve design flexibility makes planning more difficult, but may make implementation easier. The flexibility in preserve design must be based upon scientifically sound principles of conservation biology, incorporating both our current understanding of the natural resources of Western Placer and new information to be developed during the course of the development of the PCCP.

Certainty Gained

A long-term conservation plan must provide greater certainty for public and private projects that impact the natural landscape. The PCCP will include a comprehensive environmental mitigation strategy that will be incorporated into the Plan Participants' land use approval process. In addition, Plan Participants will incorporate measures prescribed in the mitigation strategy into projects that they implement. The strategy will be designed to fulfill the requirements of the California Environmental Quality Act, the federal Endangered Species Act, the Natural Communities Conservation Planning Act, the Clean Water Act, and state laws protecting streams and rivers.

Once approved by the appropriate state and federal agencies, the mitigation strategy must simplify the environmental review of public and private projects, make mitigation requirements consistent and predictable, and ensure that the mitigation provided contributes to the overall goals of the PCCP and the Placer Legacy Open Space and Agricultural Conservation Program (Placer Legacy Program).

Implementation

Habitat Conservation

Funding for habitat preservation, monitoring and adaptive management will come primarily from the entitlement process for covered activities, but other funding sources must be considered. A comprehensive, long range PCCP will require preservation and/or management of tens of thousands of acres of habitat. Because of the extent of lands to be integrated into the PCCP habitat preserve, implementation of the Plan will be costly, even with flexibility in geography and management options. Important progress can be made with available public funds such as grants and locally funded acquisitions, but public funds alone will be inadequate to fully implement the necessary components of a successful PCCP.

The majority, but not all, of the PCCP preserve will have to be assembled through land dedications or "in-lieu" fees as mitigation for urban/suburban development and other activities that could result in impacts to natural communities, agricultural land, or protected species. In a "pay-as-you-go" mitigation fee program, implementation of conservation actions (such as land acquisition or easements and implementation of a specific management and monitoring strategy) will need to keep pace with and precede development impacts. Additional funding from local, state or federal sources will be critical to ensure that implementation of the PCCP does not depend entirely on funding determined by the rate or number of development projects. A critical funding component of the finance plan will be the development of a permanent ongoing funding source to cover all of the annual costs associated with in perpetuity management of the PCCP reserve areas.

An approved conservation program will likely attract financial support from state and federal funding programs and private conservation organizations, thereby defraying implementation costs. This will help to achieve conservation goals and benefits that could not be achieved using only a mitigation-based funding source.

Preserve Monitoring Program

Since the PCCP process provides only an estimate of the ecological and conservation requirements of most of the covered species, the PCCP will rely heavily on the process of monitoring and adaptive management for its execution. There is a critical need to construct an efficient and effective permanent Monitoring Program including both implementation and biological monitoring. The PCCP will include an efficient and effective monitoring program including both implementation (i.e., tracking changes in land use and assuring that fees or other conservation measures are fully

executed) and biological monitoring. Implementation monitoring will track changes in land use and assure fees or other conservation measures are fully executed.

The biological monitoring program will become the basis for decisions concerning management activities of conservation lands that must result in making sure that the goals and the objectives of the PCCP are being met. The link between management activities and the integrity of natural communities and the status of covered and listed species is only as strong as the ability of the biological monitoring plan to measure change and make recommendations on how to respond to change. This is part of an adaptive management program described below.

Adaptive Preserve Management

Preserve management should adapt as more knowledge is available. Present knowledge of biological resources ecology and population biology in Placer County is sufficient to support the PCCP process in general. Less is known about practical land management and compatible agriculture and other land use effects, so the PCCP will need to be adaptable based on monitoring information learned through Plan implementation. Adaptive management is to be part of the Participating Entities' ongoing responsibility to: 1) gauge the effectiveness of the PCCP's conservation measures and techniques, 2) to propose alternative or modified conservation measures as the need arises and 3) to address changed circumstances.

Changes Required to Existing Land Use Policies/Regulations

Implementation will require new or amended land use policies and land use regulations. As a result of the PCCP, the general plans of the County and any participating cities will likely be supplemented by policy amendments, specific implementing ordinances such as zoning ordinances and grading ordinances, and procedural requirements for development permitting and CEQA compliance. A primary goal in creating the process for project review under the PCCP will be to increase simplicity and, as much as possible, to fulfill the requirements of all applicable local, state and federal environmental requirements using one process (in other words, to provide "one-stop shopping").

Mitigation Tools Available

A range of tools may be used to ensure that the mitigation component of the PCCP will be successful and will be equitable to landowners. These tools are not mutually exclusive and could be used in a variety of combinations.

- ♦ Land dedication. Landowners needing to provide mitigation for proposed development could be given the option of dedicating other land they own (or purchase) to fulfill the mitigation requirement. The size and location of the land necessary for mitigation, and requirements for restoration and management of the land would be determined based on the PCCP.
- ♦ Acquisition of conservation easements. As an alternative to acquiring or dedicating land outright, landowners could be given the option of acquiring a

conservation easement on their own land, or land owned by another, that would protect the natural values of the land in perpetuity. The size and location of the conservation easement, and requirements for management of the land, would be determined based on the PCCP.

- **PCCP Impact fees.** Landowners could be given the option of paying an impact fee in lieu of dedicating land or purchasing a conservation easement. As explained above, a fee assessed for development activities could partly fund implementation of the PCCP. A fee could be assessed based on the size of the project site, the number of acres developed, or on the number of units constructed, and could vary depending on the value or rarity of the natural resources impacted by development. In the context of the PCCP, payment of the fee could be the principal means of fulfilling the requirements of local, state and federal environmental laws and regulations.
- **Mitigation and conservation banking.** The PCCP could support the creation of mitigation and conservation banks or the use of existing banks. Landowners who own land containing valuable natural resources, and who do not intend to develop the land, could establish mitigation and conservation banks to sell credits to landowners who do intend to develop their land. The PCCP could ease the creation of banks and establish a system for credit sales.

Institutional Framework for Long-term Implementation

Preserve lands, protected in perpetuity, will need to be administered by one or more entities capable of overseeing management, monitoring and adaptive management. Formation of a JPA or partnership with a local land trust or other organization may assist long-term implementation. To provide increased capacity for long-term implementation of important elements of the PCCP, a joint powers authority consisting of the County, participating cities, and special districts could be formed, or a partnership with a local land trust could be established, or both.

Plan Amendments

The PCCP can be amended and implementation actions adjusted consistent with its original intent. Implementing ordinances and general plan elements may need to be changed over the course of the PCCP. The PCCP would not limit the County's or participating cities' land use authority, including their authority to adopt ordinances or revise their general plans. However, amendments to the PCCP itself will require the approval of the state and federal regulatory agencies that must approve the Plan (e.g., the United States Fish and Wildlife Service and the California Department of Fish and Game). If a new or revised ordinance or amendment to a general plan would require an amendment to the PCCP, the state and federal regulatory agencies would have to be consulted about the possibility of amending the PCCP.

Conservation Strategy Guiding Principles

The following guiding principles are intended to reflect key goals and assumptions underlying the discussions between the Permitting Agencies and the Plan Participants

and to identify what the Permitting Agencies and the Plan Participants expect will be key elements of a successful conservation plan for western Placer County. These general principles are intended to assist the Permitting Agencies and the Plan Participants in the development of specific biological resources goals and objectives, a detailed conservation strategy, a conservation reserve map, and other elements of a complete Habitat Conservation Plan and Natural Community Conservation Plan. The principles are not comprehensive; they focus on key issues and elements of the plan that are particularly challenging or are particularly important to the success of the PCCP.

Landscape-Level Conservation Standards

Stream System

The PCCP conservation strategy will minimize take of species within the stream system by establishing stream and riparian setbacks. Setbacks are variable, but the primary objectives are to: prevent impacts within 300 feet from the edge of riparian vegetation, or the extent of the 100-year FEMA floodplain (whichever is greater) in developing areas, and to prevent impacts within 600 feet from edge of riparian, or the extent of the 100-year FEMA floodplain (whichever is greater) within areas with limited or no development (e.g., agricultural areas and PCCP reserve lands). These setbacks are an essential component of the CARP, minimizing and avoiding impacts to Federally-regulated waters of the United States, ensuring avoidance of non-wetland critical resources, contributing to water quality integrity, and ensuring connectivity among sensitive aquatic resources.

Oak Woodlands

For blue oak woodlands, development projects will be required to mitigate for woodland canopy loss and habitat fragmentation. Smaller projects (e.g., <2 acres of canopy loss) will be mitigated at the project level pursuant to existing and future tree ordinances. Priority will be given to land conservation over onsite/offsite compensatory replacement or restoration activities unless onsite conditions clearly provide opportunities for compensatory replacement. Habitat fragmentation that results from rural residential subdivision activity (where minimal or no canopy loss is predicted) will be addressed through a graduated scale of mitigation based upon the degree of fragmentation associated with the project. At some scales (e.g., > 40 acres) the anticipated losses due to fragmentation will be considered negligible and little or no mitigation would be required.

Valley oak woodlands are rarer in Placer County and consequently onsite/offsite in-kind replacement, including compensation for temporal losses is expected in addition to conservation of existing resources.

Vernal Pool Grasslands

For vernal pool grasslands, the emphasis is to preserve vernal pool complexes within an ecosystem context rather than preserving individual pools or small clusters of pools as isolated fragments in larger ecosystems. Protecting existing high value

resources is a higher priority than restoring degraded habitats. In order to minimize irreversible impacts before the benefits of conservation are established, the PCCP places a cap on the amount of vernal pool conversion that can take place.

In order to determine the amount of area to be conserved and/or restored in the DTA it is necessary to understand the overall biological goals and objectives for vernal pools in the PCCP. While no fixed ratios have been identified, for planning purposes a minimum preservation ratio of 50% (1:1) is being utilized to evaluate the western Placer County landscape. A compensatory replacement requirement will also be required at a 1:1 ratio in order to replace wetland functions.

The Conservation Strategy will contain biological goals and objectives that consist of four components for vernal pool ecosystems: (1) landscape level-biological goals, (2) measurable landscape-level biological objectives, (3) measurable species-specific biological objectives, and (4) adaptive management and monitoring activities.

Vernal Pool Conservation/Mitigation Requirements for the DTA

For the DTA, the following goals and measurable objectives apply to acquisitions within the DTA area. In order to satisfy the minimum planning threshold described above (2:1 ratio), it is necessary to avoid approximately 2,100 acres of the vernal pool complexes in the DTA:

- Goal #1 - Conserve intact vernal pool complexes within the Development Transition Area as a contribution towards the overall conservation of the vernal pool natural community for the PCCP. Objective: Based upon current baseline data assumptions, the DTA shall conserve a minimum of 2,100 acres of intact vernal pool complexes (see discussion below).
- Goal #2 - Conserve natural or semi-natural areas within the Development Transition Area to insure that vernal pool complexes are buffered from incompatible land uses and are connected to other vernal pool reserve areas. Objective: To the extent practicable, the DTA shall conserve areas that: 1) provide buffers around vernal pool conservation areas and 2) connect vernal pool reserve areas.
- Goal #3 - Other species impacts can be mitigated within the DTA or outside the DTA boundary within the Reserve Acquisition Area. Objective: Mitigate impacts that occur within the DTA consistent with the general mitigation and conservation standards of the PCCP Conservation Strategy.

Impacts to vernal pool complexes within the DTA will result in a requirement to conserve intact vernal pool complexes and to replace the functions lost. Functional replacement requirements are associated with impacts on the vernal pool wetland and the upland area that contributes important ecological functions to vernal pools.

- Mitigation Standard - Impacts to vernal pool complexes within the DTA shall replace vernal pool complexes at a 1:1 ratio. Compensatory habitat may be created inside or outside the DTA boundary. Compensatory habitat must account for no net loss of the functions of wetlands (including Waters of the

United States) and upland areas that contribute to the ecological function of vernal pools.

- Conservation Standard - Impacts to vernal pool complexes within the DTA must be compensated by preserving existing, intact vernal pool complexes, consistent with the standards described in Section IV, at a ratio of not less than 0.8:1 within the DTA area and 0.2:1 in the DTA or Reserve Area.
- DTA Acquisition Objective - The minimum acquisition objective for the DTA is 2,100 acres of viable vernal pool complexes. This acquisition objective will be satisfied if the Participating Entities or other public/private parties (e.g., non-participating cities, land trusts, and mitigation/conservation banks) permanently protect 2,100 acres of viable vernal pool complexes within the DTA. At such time that the 2,100 acres has been conserved inside the DTA, mitigation obligations can be satisfied within the Reserve Acquisition Area or the DTA. Once all viable vernal pool complexes in the Reserve Acquisition Area have been permanently protected, the 1:1 vernal pool preservation requirement for vernal pool impacts that occur in the DTA or Existing and Planned Urban (XPU) areas (See Figure A) can be satisfied by conservation of out-of-kind habitat in the form of perennial and seasonal wetlands, and/or perennial/intermittent streams within the DTA or Reserve Acquisition Area.
- Timing - Mitigation and conservation obligations must be satisfied prior to issuance of improvement plans and/or the initiation of any grading activity that would impact vernal pools within the project boundary.
- In Lieu Payment Option - Projects with impacts to vernal pool complexes within the DTA must meet the 0.8:1 conservation requirement by land dedication within the DTA. The 0.2:1 conservation requirement outside the DTA boundary can be met by land dedication, by an in lieu payment, or a combination of the two. The 1:1 compensatory mitigation requirement can be satisfied by reestablishing lost functions, by an in lieu fee payment or through the purchase of mitigation credits from a qualified mitigation bank.

Valley Grasslands

Development projects will be required to mitigate for the loss of grasslands if impacts are greater than 20 acres. Reasonably large (> 20 acres) grassland parcels have value for avoidance if they are near established reserve areas or if they have high restoration potential for vernal pool complex.

Agriculture/Open Lands

Development projects will be required to provide mitigation for impacts greater than 20 acres in size. A priority will be given to the preservation of cropland that has higher habitat value for covered species and to the restoration of some biologically lower valued cropland to appropriate natural habitats. Best Management Practices (BMPs) will be incorporated to minimize the effects of development on adjacent agricultural croplands and rice fields.

Key Standards for Habitat Lands in the PCCP Preserve System:

Acquisition and management of lands as part of the PCCP Preserve System should adhere to the following general standards:

- ♦ Upland habitat quality within the Reserve Area will be maintained and managed generally in similar or better condition as at the time lands are conveyed to the PCCP Conservation Area.
- ♦ Rapid assessment surveys of wildlife and plant species are to be conducted prior to any acquisition. Covered species are the highest priority. Reserve design biological objectives for non-vernal pool, landscape-dependent species, such as Swainson's hawk (requires large patches of undisturbed foraging habitat) must be considered. Similarly, riparian habitat that provides important wildlife corridors and provides habitat for a range of important species, must be considered.
- ♦ The interface between urban/suburban land uses and preserve lands should be minimized (i.e., minimize edge effects). Reserve acquisitions should emphasize connectivity with other reserve lands and minimize the interface between urban/suburban and reserve lands. Buffers should be required of new development projects that have an interface with reserve lands. The overall goal is to insure that incompatible land uses and indirect effects are avoided.
- ♦ Vernal pool habitat quality within the Reserve Area will be maintained and managed generally in similar or better condition as at the time lands are conveyed to the PCCP Reserve Area.
- ♦ No urban/suburban development can be placed within 250' from the outer edge of any vernal pool wetland or swale. This buffer distance may increase or decrease provided that optimal hydrologic conditions are maintained.
- ♦ An area considered for conservation must have onsite/offsite hydrologic conditions that insure that vernal pool resources can be protected in perpetuity. Offsite hydrological conditions that detrimentally impact the preserve site must be mitigated before an acquisition can be considered. Maintenance of the existing hydrologic regime should occur.
- ♦ No outfall or similar storm drainage facilities can be directed to, or constructed within, preserved vernal pool complexes unless such facilities are directed to intermittent or perennial streams or storm drainage facilities and where such discharges do not affect the hydrology of protected vernal pools and swales. The goal is to insure that the existing vernal pool hydrology is not impacted by perennial or long-term seasonal inundation that would result in impacts to vernal pool habitat.
- ♦ Preserved vernal pool wetlands and uplands must have the ability to be grazed, burned or some other viable means must be available and appropriate given adjacent land uses to control noxious weeds and to insure ecological integrity.

Key Standards for Habitat Lands in Development Transition Area

The Development Transition Area (DTA) will conserve a minimum of 2,100 acres of intact vernal pool complexes within the DTA boundary (the area depicted in blue on Figure B). In order to insure that acquired properties contain viable vernal pool resources and to insure that these intact resources remain viable over time, it is necessary to acquire property consistent with the overall conservation strategy of the PCCP. Because the DTA is a transition area between development and a conservation landscape, the DTA is to utilize specific guidelines and standards to direct land acquisition efforts. Guidelines will be prepared that provide specific direction to the County, City of Lincoln and landowners who impacts vernal pool resources within the DTA. At a minimum, the guidelines will address the following issues:

- ♦ Separation of incompatible uses
- ♦ Consideration of upstream hydrologic conditions
- ♦ Long term management requirements including the projected influence of human activity.
- ♦ Long term/short term changes to the surrounding environment
- ♦ Habitat contiguity and conservation of large, intact habitat blocks
- ♦ Consideration of “directional” influences such as migration/dispersal patterns, rain, wind, fire and the nature and frequency of relevant disturbances
- ♦ Grassland patch sizes supporting pairs of burrowing owl and grasshopper sparrow
- ♦ Identification of perch sites/trees for hawks and loggerhead shrike
- ♦ Minimum dispersal patches for target bird and amphibian species
- ♦ Geographic isolation and proximity to potential sources of invaders
- ♦ The productivity of the habitat and the nature of the biota currently living within it
- ♦ The ease with which organisms move through the habitat as determined by relevant features such as vegetation type, wind, or water flow rates
- ♦ The minimum parcel size for an acquisition is 200 acres if the acquisition area is not contiguous with other reserve lands including CARP areas
- ♦ Identification of environmental corridors of sufficient width and with appropriate buffering
- ♦ There is no minimum lot size for parcels adjacent to other reserve lands or CARP areas

- ♦ Mehrten vernal pools should be conserved under all circumstances, regardless of parcel size, unless future hydrologic, land use or other characteristics eliminate the viability of an acquisition

Other Key Elements of the Conservation Strategy

The following is a list of additional key elements which will contribute to the development of a successful PCCP conservation strategy.

- ♦ Mitigation to occur in advance of take.
- ♦ The PCCP will sustain all present natural communities within the Western Placer County landscape.
- ♦ The PCCP will restore or enhance certain natural communities and ecosystem processes and functions.
- ♦ The PCCP will ensure population stability and sustainability of covered species and contribute to the species' recovery.
- ♦ The PCCP will insure/maintain landscape connectivity.
- ♦ The PCCP will address cumulative impacts of intensive land use and urbanization in Placer County.
- ♦ In order to meet conservation objectives, including no net loss of wetlands and contribution to recovery of species, the PCCP must show how Western Placer County will retain the same level of biological resource values that it has now, even though the extent or range of existing biological resources will be reduced.
- ♦ The PCCP conservation strategy will incorporate low impact development (LID) standards to mitigate impacts on water quality associated with stormwater runoff. The goals of PCCP LID program will be to preserve open space and minimize land disturbance to the extent necessary to protect water quality; protect natural systems and processes (drainage ways, vegetation, soils, sensitive areas); reexamine the sizing of traditional site infrastructure (lots, streets, curbs, gutters, sidewalks); incorporate natural site elements (wetlands, stream corridors, mature forests) as design elements; and decentralize storm water at its source.
- ♦ The PCCP conservation reserve map and accompanying conservation strategy and aquatic resource program are collectively intended to be the least damaging practicable alternative (LEDPA) for CWA 404 permitting for the unincorporated area and the City of Lincoln in the PCCP boundary.
- ♦ The PCCP will include a finance plan.

Regional “LEDPA”

One of the key elements of the PCCP is to identify a reserve system-design that can serve as a regional “least environmentally damaging practicable alternative” (or LEDPA) for purposes of avoiding impacts to federally-regulated wetlands caused by urbanization.

If the PCCP reserve system meets the federal guidelines of a regional LEDPA, a wetland-permitting program that meets federal requirements under the Clean Water Act would be managed by the Plan Participants, creating a savings in time, an increase in certainty, an increase in PCCP utility, and an assurance that wetland resources are protected in perpetuity within the reserve system.

Status Quo

For individual projects the required mitigation for wetland impacts is made on a case-by-case basis by the U.S. Army Corps of Engineers independent of the local land use authority’s discretionary review and approval of the project. The individual permit process under section 404 of the Clean Water Act consists of a series of steps: submission of a permit application; public notice (and in some cases as public hearing); compliance with a variety of legal provisions outside of section 404 (such as state water quality certification, NEPA, ESA, etc.); and the issuances of a record of decision or statement of findings and permit, as appropriate. A key part of this process is determining whether the proposed discharge activity would comply with the guidelines promulgated by EPA pursuant to CWA section 404(b)(1).

Generally speaking, the Guidelines provide that activities resulting in the discharge of dredged or fill material will not be permitted if there is a practicable alternative to the proposed discharge that would have a less adverse impact on the aquatic ecosystem, so long as the alternative does not present other significant environmental consequences. The Corps must analyze a range of alternatives and determine that the proposed activity is the least environmentally damaging practicable alternative or “LEDPA” before it can grant a permit authorizing the discharges. Among the alternatives that the Corps may consider is relocating the project to an area not owned by the project applicant, but which the applicant could reasonably obtain to satisfy the basic purpose of the proposed activity. Unless clearly demonstrated otherwise, the Corps will assume that there are practicable alternatives to activities that will impact wetlands but are not dependent upon being in or having access to wetlands.

With the PCCP

The PCCP will be analyzed in an environmental impact statement (EIS) that could include an alternatives analysis that satisfies the Corps’s alternative analysis obligations under the Guidelines as well as NEPA. Instead of conducting an alternatives analysis project-by-project, the Corps could rely on the alternatives analysis conducted for the entire PCCP. When reviewing subsequent individual permit applications for projects that are covered by the PCCP, the Corps would use the PCCP alternatives analysis to determine, among other things, whether an

alternative off-site location should be considered for the project. This would essentially eliminate the need for additional off-site alternatives analysis and, in many cases, make project-level EISs unnecessary for such projects, which will significantly reduce processing times for individual permit applications. The Corps and the County can further streamline permitting for larger projects by developing joint procedures that will ensure that the substantive requirements of the CWA individual permitting process are fulfilled while avoiding duplicative public notice and comment procedures and the like.

In addition, the Corps should have considerably more flexibility in dealing with questions of onsite avoidance for projects that meet the PCCP and the CARP's avoidance and mitigation parameters. One of the premises of the PCCP and the CARP is that it is environmentally preferable to establish reserves to protect larger areas of vernal pools and other aquatic resources rather than requiring avoidance of small vernal pools. If the Corps finds that the PCCP/CARP avoidance and mitigation standards satisfy the Guidelines' requirements regarding avoidance of significant degradation of waters and minimization of impacts, the Corps should be able to adopt a flexible approach to onsite mitigation for individual projects.

The regional LEDPA is the best available option to streamline permitting under both the federal Endangered Species Act and the Clean Water Act. The staff for the Corps and U.S. EPA have been supportive of the development of this concept and their ongoing support is essential if it is to be successful. Additionally, both Corps and U.S. EPA management have been briefed on this approach and strongly support the County's efforts.

Failure to design the PCCP reserve map alternative as a regional LEDPA would result in a significant missed opportunity to streamline environmental permitting in the County and would diminish the overall value of the PCCP. The importance of obtaining a regional LEDPA to the success of the PCCP cannot be overstated. Proceeding with a PCCP reserve design that can function as the LEDPA is an essential component of the PCCP.

Plan Costs and Financing

Implementation of the PCCP involves both one-time and on-going annual costs. One-time costs are capital costs for acquiring land and restoring or enhancing habitat to meet the plan's 50-year conservation goals. On-going annual costs include the costs of program administration, land management, monitoring, and adaptive management to ensure that the PCCP meets its species, ecosystem, and resource conservation goals during the permit-term and in perpetuity. This chapter presents planning-level estimates of the implementation budget for the PCCP, discusses the components of PCCP cost, how those costs might be allocated, and presents conceptual estimates of mitigation costs that would be assigned to new development.

The PCCP Cost Model produces estimates of cumulative one-time and on-going costs for use in economic analysis of the PCCP, including fiscal analysis and financial analysis of plan costs, potential revenues, and financing strategies. The cost input assumptions and results will continue to change as the PCCP develops. Further review of cost assumptions may result in changes to cost factors, and refinement of the PCCP will result in the need to verify and possibly revise cost assumptions.

The cost estimates contained in this chapter are based upon an analysis completed in 2006 for a range of reserve map alternatives under consideration at that time. This cost analysis will be updated to reflect the final conservation strategy and the measurable quantified objectives that result from the conservation plan (measured in acres acquired and restored). The estimates presented in this chapter (based on the 2006 analysis) provide an approximation of the level of one-time and on-going costs to implement the PCCP.

One-time acquisition and restoration costs

Habitat conservation will be achieved on reserve lands acquired and habitat restored according to PCCP standards. There are costs to acquire and restore land. These one-time costs for land acquisition and restoration would be assigned to the activities seeking coverage for species impacts under the PCCP.

The Implementing Entity will assemble PCCP reserves by accepting dedicated land or conservation easements and by acquiring reserve land or conservation easements. Fees "in-lieu" of land dedication would be established to enable covered activities to satisfy mitigation requirements. Impact fees would also be established to cover restoration requirements.

Total one-time costs could be in the range of \$1.3 billion over 50 years. The total includes acquisition cost of about \$1 billion, restoration costs of about \$120 million,

and a 10 percent contingency budget. Conceptual acquisition cost estimates are based on a generalized assessment of the location and characteristics of properties that would satisfy the mitigation requirements and conservation goals of the PCCP. The estimates conservatively assume that the majority of acquisition would be fee title purchases of land from willing sellers. The alternative of conservation easements could, on average, reduce the acquisition costs for any one property by 50 percent.

On-going implementation costs

The annual costs to implement the PCCP include costs to administer the program, manage reserve lands, and monitor progress toward biological goals and objectives. The cost estimates are based on assumptions about staffing and/or contracting needed to accomplish the following: identifying and executing land acquisitions; collecting and managing impact fee and other revenue; preparing applications for state and federal funding; developing annual budgets and financing strategies; preparing reports to wildlife agencies; managing public participation; implementing land management, restoration, and biological monitoring programs; tracking program compliance; and maintaining required records. While these tasks would be the responsibility of the Implementing Entity, the PCCP implementation budget be supported by a multiple-source funding plan.

The annual costs are a function of the types of activities required and the amount of land managed. To begin, at start-up, total costs of \$2 – 3 million per year average about \$500 per acre managed. By the mid-point of PCCP implementation, it would cost about \$200 per acre to manage PCCP lands. This would amount to total annual costs of \$ 5 – 6 million per year when ½ or more of planned reserves would be under management. By 2060, per-acre land management costs would be lower (about \$170 per acre) and the on-going annual costs to implement the program, including managing 40,000 – 50,000 acres of reserve lands (based on the reserve maps evaluated in 2006), would be about \$7 million per year.

Costs increase over time as more reserve land is acquired and more staffing is required to manage program implementation and manage the growing reserve land base. Costs per acre decline over time, however, as the level of activity decreases after initial start-up, acquisition, and restoration are completed and the managing entity gains experience and begins to realize efficiencies and economies of scale.

The annual costs are the responsibility of the local government implementing entity and cover the costs of staff, contractors, equipment, and overhead. The cost estimates provide for an administrative staff and a field and technical staff, and an operating contingency. Costs also cover contractors providing some land management services as well required legal, financial, real estate, and biological monitoring services. Costs for public safety services provided to reserve lands (law enforcement and fire protection costs) are also included in PCCP budget.

Although a financing plan has not been determined, these costs are expected to be funded by covered activities and other new funding sources. The details of the PCCP financing plan will determine the extent to which PCCP costs might ultimately require some commitment from the Placer County General Fund.

Estimating the costs of a complex program such as the PCCP involves numerous assumptions and the use of average cost estimating factors for a variety of administrative, land management, and monitoring activities. The costs estimates for such a long-term planning program are by nature not precise; adding a significant contingency factor provides a hedge against underestimates. The estimates are nevertheless subject to evaluation to indicate their utility and validity for the purposes of program and financial planning.

Research conducted for the PCCP cost analysis indicates that the resultant estimated average annual costs per acre managed are valid estimates for planning purposes. Operating costs for agencies that manage open space lands are sensitive to the number of acres managed and the degree of public access and recreational use as well as the degree of habitat management obligations. Research conducted for the PCCP cost analysis indicates that, although costs are uncertain, these estimates appear to be in an appropriate range when compared to those incurred by other land management entities. The estimated average annual costs per acre managed for the PCCP are, therefore, valid estimates for planning purposes.

Monitor costs to improve implementation budget over time

The detailed cost estimating exercise conducted for the PCCP provides up-front insights into aspects of program implementation that might require more resources than estimated. The process of acquiring reserve lands is one area in particular where there might be extraordinary costs associated with any protracted negotiations or complicated real estate transactions. Other areas of concern regarding potential sources of on-going cost escalation are financial management and providing adequate financial reserves to cover remedial measures indicated by adaptive management findings or changed circumstances.

Offsetting revenues and land management efficiencies

By contrast to the *ad hoc*, case-by-case mitigation program currently in place, however, the PCCP provides the additional capacity to generate offsetting revenues and implement generalized land management policies to minimize on-going public agency cost exposure. Income-generating agricultural operations could continue on much PCCP reserve land, either through leaseholds or by re-selling easement-encumbered land back to the private sector. Hunting clubs might also be compatible with some PCCP reserves. These management options available to the PCCP implementing entity would provide a cushion against General Fund exposure. Furthermore, one-time fees or annual assessments on covered activities to fund PCCP management costs could be set to cover costs of public safety services to PCCP reserves, thereby reducing what would otherwise be a General Fund obligation.

Principles for a PCCP Financing Plan

The PCCP permit holders will be responsible for ensuring that mitigation is accomplished for private development activity and public projects, and that funding sources are adequate to manage and monitor conservation lands and conservation activities in perpetuity. The PCCP financing plan must identify funding sources and

financing mechanisms that will cover the one-time costs associated with local mitigation and public conservation, as well as on-going costs for land management and plan administration. The financing plan will identify and estimate new revenue specific to the PCCP, such as habitat mitigation or development impact fees, special taxes, or benefit assessments, in addition to state and federal funds and plan-generated revenues such as lease revenue. The intent throughout the planning process has been to design a financing plan that does **not** rely on existing County General Fund revenues.

This can be accomplished by adhering to the following principles:

- ◆ Allocate local mitigation costs to private and public development in proportion to impacts
- ◆ Adjust mitigation or impact fee amounts to keep pace with changes in costs
- ◆ Accept appropriate dedication of reserve land
- ◆ Assess on-going costs to covered activities using a combination of impact fees for an endowment, annual assessments, or special taxes.
- ◆ Include mitigation cost obligations in project budgets for County-sponsored covered activities and seek to cover these costs through new revenue sources (e.g., include PCCP compliance costs in facility cost estimates used to derive countywide capital facilities fees and traffic impact fees, and earmark funds from a proposed transportation sales tax to cover habitat mitigation costs).
- ◆ Pursue new broad-based special revenue sources to fill funding gaps.
- ◆ Maximize private management of conservation lands through grazing and other agricultural leases, re-sale of easement-encumbered conservation land, and partnership with conservation banks, mitigation banks, and other potential land management partners such as the Placer Land Trust.
- ◆ Encourage state and federal acquisition and management of public conservation lands.

Cost sharing and cost allocation

One of the significant benefits of the PCCP over *status quo* conditions for mitigating impacts to species and habitat would be the ability of the public agency implementing entity to tap diverse sources of public funding. This is evident in state and federal agency commitments to the public conservation component of the PCCP. Placer County has been successful to date in competitive funding for both land acquisition and planning funds offered by state and federal sources, attracting over \$5.2 million in state and federal grant funds. Accounting for 40 percent of total costs to date, this outside funding has leveraged local sources to achieve natural resource goals and objectives that might otherwise languish for lack of funding. State and federal dollars have funded planning and acquisition for both Placer Legacy and the PCCP. Because a comprehensive approach to habitat planning and protection has broadly recognized benefits to species, natural communities, and the general public, allocations of state and federal taxpayers dollars are available. This type of cost sharing is not possible with individual players acting in isolation.

Furthermore, the PCCP has the potential to be a vehicle for allocating the costs of habitat conservation more broadly, both over time and over a more diverse local funding base. The public financing mechanisms outlined in the financing options memorandum could have several cost benefits. Public debt financing would allow up-front land acquisition, limiting the impact of land value escalation over time on overall costs. Other forms of public financing would allow costs to be spread over time and over a broader funding base, thereby reducing the up-front obligations of land developers. In some plans, a portion of local mitigation cost is explicitly assigned to taxpayers more generally. The rationale for a broader cost allocation can be compelling:

- Existing development has contributed to the decline in habitat values and the need for species listings and should bear some of the cost associated with species conservation and recovery efforts.
- Many of the quality of life and economic benefits associated with large-scale habitat conservation accrue generally to all residents, businesses, and visitors.
- Spreading some of the costs beyond new development benefits the consumers of new development: newcomers (both residents and businesses), as well as those moving within the county –especially the new households formed by children of existing residents and older households seeking more manageable housing options.

PCCP FINANCE PLAN

It is anticipated that most of the local mitigation costs of the PCCP will be borne by the new development receiving incidental take coverage for impacts to species and habitat under the PCCP permit. The greatest percentage of participation will come from new development in unincorporated western Placer County and the City of Lincoln. Projections prepared for the PCCP indicate long-term growth from 2007-2060 of about 172,000 housing units, population increase of 454,000, and 296,000 additional jobs for the Phase 1 area.

The summary above describes estimates of PCCP costs for the Phase 1 area of the PCCP. MuniFinancial will be preparing a draft finance plan for the Board's consideration once the mitigation strategy has been agreed to. The plan will address the funding that would need to be obtained from funding partners such as state and federal agencies as well as from parties benefiting from the PCCP.

Cost Allocation/Fees for One-Time Costs

New residential and non-residential development in the unincorporated area of western Placer County and the City of Lincoln will bear much of the cost of the local mitigation for impacts attributable to covered activities, largely proportional to the conversion of land from non-urban to urban uses. For example, since non-residential development would represent about 15 percent of the total conversion to urban uses, it is likely that non-residential development would bear a share of the PCCP local mitigation cost proportionate to that impact. Other covered activities such as public

agency projects including major infrastructure projects (e.g., Placer Parkway), will also contribute to these costs.

A full range of options for cost allocation will be outlined in the complete financial alternatives analysis. For illustrative purposes at this stage of the PCCP evaluation, a preliminary scenario, allocating all local mitigation costs to new development proportional to the acres of land converted, irrespective of the specific natural communities and/or species that would be impacted. The resultant fee per acre is translated to a fee per dwelling unit or a fee per 1,000 square feet of non-residential development. The incentives to reduce the footprint and increase densities are logical in that less land required for development will result in less conversion of land that harbors sensitive species. For example, a high-density project (20 units per acre) with a small development footprint has 10 percent of the per unit obligation of a project that is at a very low suburban density (2 units per acre).

Assuming one-time acquisition and restoration costs indicated above (about \$1.3 billion over the 50-year term of the PCCP, development representative of the average density of residential development in the greater Sacramento area today (about 4 units per acre) would incur a PCCP fee of about \$6,000 per unit. Alternatively, development at the residential densities proposed by the SACOG Blueprint project (about 12 units per acre) would incur a fee of about \$2,000 per unit. By utilizing Blueprint densities, development projects would reduce the PCCP fee per-unit by a factor of 3 when compared to traditional suburban development patterns.

Ongoing Costs

The ongoing costs are more difficult to specifically identify on a per unit basis because such costs could be spread through a variety of finance mechanisms. If an endowment only alternative was considered, a very significant amount of funding would have to be set aside in a non-wasting account in order to generate sufficient revenue on an annual basis to support the ongoing costs in perpetuity. Because such an account may be difficult to establish and protect in perpetuity (over \$400M would be necessary) other alternatives are to be examined and presented in the financial analysis.

SUMMARY

The following is a summary of the overall budget and financial considerations for the PCCP:

- ♦ Acquiring 40,000 to 50,000 acres of land – fee title and conservation easement – and restoring significant habitat: \$1.3 billion over 50 years funded by state and federal contributions and new development impact fees
- ♦ Actual costs would be lower to the extent significant mitigation land were provided through land dedications by new development
- ♦ Start up operating costs: \$2 – 3 million per year
- ♦ On-going annual costs at 2060: \$7million per year

- Offsetting revenues and alternative financing options have not yet been estimated
- The average PCCP fee per dwelling unit at 4 units per acre could be about \$6,000. The fee per unit would be less at higher development densities.

Appendix A
PCCP Covered Activities

- A.** Urban development and related infrastructure, and conservation actions, within the unincorporated portions of the County through 2060, including:
- Transportation Facilities
 - Residential, Commercial, Public Facility, and Industrial Construction
 - Infill land development
 - Pipeline Installation and Maintenance
 - Land Management Activities
 - Recreational Activities and Facilities, including multi-purpose trails
 - Stormwater Management Activities
 - Habitat/Land Restoration Activities
 - Waste Management Activities
 - Flood Control Activities
 - Placer Legacy Implementation Activities
- B.** Urban development and related infrastructure, and conservation actions, within the City of Lincoln growth through 2060 including:
- Transportation Facilities
 - Residential, Commercial, Public Facility, and Industrial Construction
 - Infill land development
 - Pipeline Installation and Maintenance
 - Land Management Activities
 - Recreational Activities and Facilities, including multi-purpose trails
 - Stormwater Management Activities
 - Habitat/Land Restoration Activities
 - Waste Management Activities
 - Flood Control Activities
- C.** Indirect and cumulative impacts associated with the Sacramento River diversion for the Placer County Water Agency (PCWA)
- D.** Direct impacts associated the construction of new water conveyance facilities and the operations and maintenance of existing and new facilities (PCWA)
- E.** Direct, indirect, and cumulative impacts for corridor acquisition, construction, and maintenance of the Placer Parkway (SPRTA).

Figure A
PCCP Analysis Zones



