

**DEVELOPMENT FEE
NEXUS STUDY
FOR THE
WESTERN PLACER COUNTY
HCP/NCCP**

Final Report

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EXECUTIVE SUMMARY

Introduction

Purpose

This study documents the reasonable relationship, or “nexus”, between activities covered by both the Western Placer County Habitat Conservation Plan and Natural Community Conservation Plan (HCP/NCCP or Plan¹ and the accompanying EIS/EIR)², and the development fees paid by those activities to mitigate their effects under the Plan. Development fees are one-time fees, typically paid when improvement plans or building permits are issued and imposed on development projects by cities and counties.

This nexus analysis provides the evidence to make the findings required by the Mitigation Fee Act (MFA), contained in California Government Code, Sections 66000 through 66025, that guides the adoption and collection of development fees by local agencies. Placer County and the City of Lincoln are the two permittees with authority to approve development within the Plan area so these two agencies may use this study to support their adoption of the HCP/NCCP development fees.

The development fees justified by this nexus analysis will also support implementation of two complementary activities to the HCP/NCCP that together comprise the Placer County Conservation Program (PCCP):

- ♦ The Western Placer County Aquatic Resources Program (CARP)³ will protect streams, wetlands, and other water resources and fulfill the requirements of the federal Clean Water Act (CWA) and analogous state laws and regulations. HCP/NCCP development fees will also mitigate effects identified by the CARP.
- ♦ In-Lieu Fee Program⁴ 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.

¹ Placer County, *Placer County Conservation Program, Western Placer County Habitat Conservation Plan / Natural Community Conservation Plan (Public Draft)*.

² ICF, *Placer County Conservation Program, Final Environmental Impact Statement/Environmental Impact Report*, State Clearinghouse No. 2005032050.

³ Placer County, *Western Placer County Aquatic Resources Program*, September 2018.

⁴ Placer County Community Development Resource Agency, *Western Placer County In-Lieu Fee Program Enabling Instrument (Final)*, December 2018.

The goal of the 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 review and permitting for activities covered by the Plan. Activities covered by the Plan include private development projects, construction and maintenance of public infrastructure, and conservation activities carried out pursuant to the Plan. Thus, the PCCP avoids, minimizes, and mitigates impacts to protected species and natural communities, and meets related natural resource conservation standards, in compliance with state and federal environmental laws while accommodating private development and associated public infrastructure.

This study demonstrates that the Plan is fully funded to meet regulatory requirements of state and federal wildlife agencies related to issuance of permits under the Plan.

Background

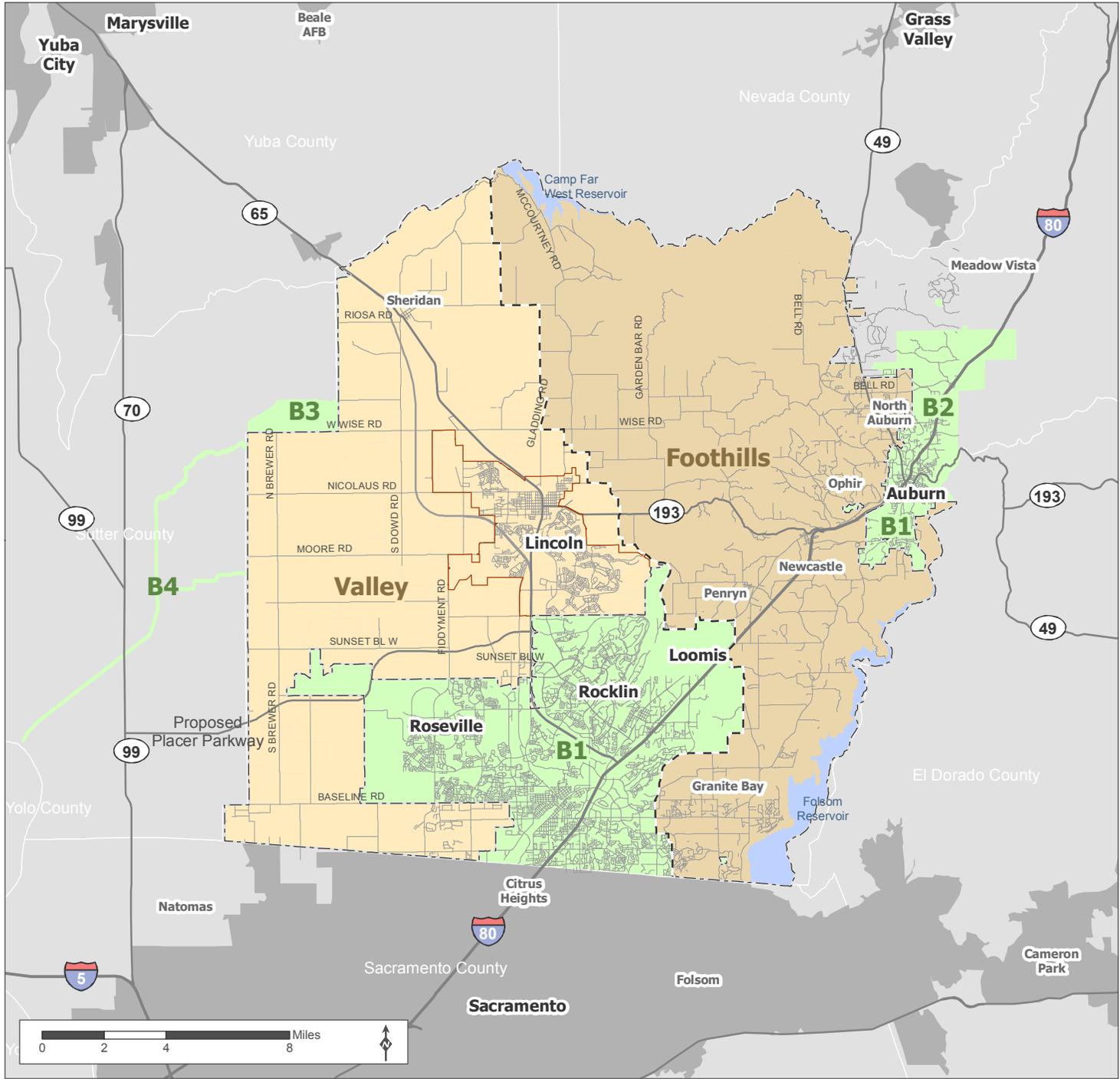
The Plan allows Placer County and the City of Lincoln and other local agencies to receive permits from the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife (Wildlife Agencies) that allow the “incidental take” of species. The Plan also streamlines the environmental review of covered activities over the 50-year permit term. Without the Plan, the federal Endangered Species Act (ESA), the California Endangered Species Act (CESA), the National Environmental Policy Act (NEPA), and the California Environmental Quality Act (CEQA), require private developers and public agencies to analyze effects on protected species and wildlife habitat and to identify and incorporate avoidance, minimization, and mitigation measures on a project-by-project basis.

Under the Plan any covered activity can minimize and mitigate such effects by complying with the Plan including paying applicable development fees. The Placer Conservation Authority (PCA), created to implement the Plan on behalf of the other permittees, has the authority to receive and expend all fee revenue.

The development fee nexus analysis draws on the analysis and provisions of the Plan. The development fees are based on allocating the cost of Plan actions associated with mitigating the effects of covered activities fairly among the maximum extent of covered activities allowed by the permit over the 50-year permit term.

See **Figure E.1** for a map of the Plan area. Plan Area A labeled as the “Valley” and the “Foothills” subareas is the main focus of the HCP/ NCCP and where all future growth and most effects are anticipated to take place. Plan Area A includes the City of Lincoln and all unincorporated lands within western Placer County, approximately 209,800 acres or roughly five-sixths of western Placer County.

T:\CASE\Conservation\GIS\Map\CH_1\NEM\Fig1_2_PlanArea.mxd 5/01/2017



Source: Placer County, 2014; MIG | TRA 2015; CalTrans

— Interstate	Plan Area A	
— Highway	Valley	100,921 acres
— Road	Foothills	109,295 acres
— City of Lincoln	All Plan Area A	210,216 acres
- - Valley/Foothill Divide	Plan Area B	
■ Surrounding Urban Area	B1. Permittee Activity in Non-Participating City Jurisdiction.	50,636 acres
	B2. PCWA Zone 1 Operations and Maintenance.	6,315 acres
	B3. Coon Creek Floodplain Conservation.	1,724 acres in Sutter County
	B4. Fish Passage Channel Improvement.	33 miles of channels in Sutter County
	B5. Big Gun Conservation Bank.	52 acres in Placer County (Not shown on map)

Note: For purposes of the Nexus Study and application of the land conversion fee, the Foothills includes that portion of the Valley that is 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.

Conservation Strategy and Costs

The Plan uses a detailed cost model to estimate costs for Plan implementation, plus ongoing costs of managing and monitoring the reserve system after the permit term in perpetuity. **Table E.1** summarizes total Plan costs in 2019 dollars used as a basis for the nexus analysis. These costs include (1) cost model estimates to fund Plan actions during the permit term, (2) costs associated with the endowment required by the end of the permit term to fund management and monitoring in perpetuity, and (3) plan preparation costs reimbursed to the County. The development fees are based on these cost estimates by subarea.

Table E.1: Total Plan Costs for Permit Term (2019 \$)

	Valley	Foothills	Total	
Plan Implementation (50-year permit term)	\$868,600,000	\$229,160,000	\$1,097,760,000	90%
Endowment Fund Balance (Year 50)	\$ 73,860,000	\$ 28,870,000	\$ 102,730,000	8%
Plan Preparation Reimbursement	\$ 12,550,000	\$ 660,000	\$ 13,210,000	1%
Total Plan Costs	\$955,010,000	\$258,690,000	\$1,213,700,000	100%
Source: Table 3.3.				

Nexus Analysis Approach

The nexus analysis assumes the overall amount of mitigation provided under the HCP/NCCP is reasonably consistent with the overall amount of mitigation that would be provided if mitigation requirements were determined on a project-by-project basis with application of the ESA, CESA, NEPA, and CEQA to Western Placer County. However, not all Plan costs are associated with mitigation of effects from covered activities. The Plan also includes actions and associated costs to qualify as a Natural Community Conservation Plan under the California Natural Community Conservation Planning Act (NCCP) Act. To gain approval as an NCCP and secure regulatory benefits unique to the NCCP Act, the Plan must not only mitigate effects but also contribute to the recovery and continued viability of species whether or not those species are protected under the CESA. This conservation component of the Plan is in addition to mitigation requirements and is accomplished by protecting habitat, natural communities, and species diversity on a landscape or ecosystem level through the creation and long-term management of habitat reserves. Thus, a key part of this nexus analysis is to separate out the mitigation and conservation shares of total Plan costs, and only allocate the former to

funding through development fees and other mitigation-related revenue sources.

This approach to the nexus analysis focuses on a narrow definition of mitigation. Covered activities receive benefits from the conservation component of the Plan which are not directly associated with mitigation as defined by this nexus analysis. Compared to ESA/CESA mitigation requirements, the additional benefits of an NCCP to covered activities include:

- ◆ Coverage for a larger number of species
- ◆ Greater certainty regarding regulatory requirements, including protection against new or increased mitigation requirements for those species
- ◆ Assured coverage for species in the event they are determined in the future to be threatened or endangered.

Inclusion of Plan costs associated with providing these additional benefits to covered activities would support a higher cost share funded by development fees than results from the focused approach taken by this nexus analysis.

Three Types of Fees Capture Different Types of Effects

Special Habitat Fee. Special habitats are particularly sensitive habitats associated with watershed features such as streams including salmonid habitat, marshes, riparian woodlands, and seasonal wetlands including vernal pools. To fund restoration and enhancement of these habitats, covered activities that affect special habitats pay special habitat fees in addition to the land conversion fee.

Land Conversion Fee. All development projects and other covered activities under the Plan pay the land conversion fee. The fee funds mitigation of all direct, indirect, and cumulative effects of land conversion except effects mitigated by special habitat fees. The land conversion fee funds acquisition of all reserve lands including specific lands to be restored or enhanced with funding from special habitat fees.

Temporary Effect Fee. The temporary effect fee applies when direct effects from covered activities alter land cover, but the disturbed area recovers or is restored within one year. The temporary effect fee is determined by applying the land conversion fee and special habitat fees but at reduced fee amounts to reflect the temporary nature of the effect.

Special Habitat Fees

Maintaining and enhancing the integrity of special habitats is a key provision of the Plan because of the many covered species supported by them. The Plan

requires mitigation of effects on special habitats from covered activities by restoring⁵ or enhancing special habitats within the reserve system.

The special habitat fee structure includes seven separate fees that vary based on the cost of restoring or enhancing the type of habitat affected and the type of effect – direct or indirect. Direct effects are immediate, adverse effects on habitat. Indirect effects occur later in time after the covered activity has occurred. Indirect effects on special habitats include increased runoff from impervious surfaces and other effects from covered activities that encroach on or occur in the immediate watershed of sensitive habitats.

There is only one fee for each special habitat applicable to the entire Plan area. The special habitat fee schedule is shown in **Table E.2**.

Land Conversion Fee

All development projects and other covered activities under the Plan pay the land conversion fee to fund mitigation of all direct, indirect, and cumulative effects of land conversion except effects mitigated by special habitat fees. The land conversion fee is the primary source of revenue for the PCA to mitigate the effects of covered activities.

Mitigation Fair Share by Subarea

A key element of the nexus analysis is determining how to fairly allocate Plan costs between mitigation and conservation components. This is accomplished by comparing the reserve acreage required to mitigate the effects of covered activities (detailed in HCP/NCCP Chapter 4 *Effects of Covered Activities*) to the total reserve acreage required by the Plan (detailed in HCP/NCCP Chapter 5 *Conservation Strategy*). **Table E.3** provides the determination of mitigation and conservation fair shares by subarea. Overall, 70.6 percent of the reserve and the cost of all associated Plan actions are needed to mitigate the effects of covered activities.

⁵ Within the context of this Nexus Study any reference to “restoration” of special habitats, and all related terms, includes the concept of “creation” of special habitats as well.

Table E.2: Special Habitat Fee Schedule (2019 \$)

Special Habitat Fee		Type of Effect Mitigated	Temporary Effect Fee? ¹	Unit Cost	Mitigation Ratio	Fee Amount
4a	Vernal Pool Direct Effects	Direct	Yes	\$114,111	1.50	\$171,167 per acre
4b	Vernal Pool Immediate Watershed Effects	Indirect	No	\$ 19,057	1.50	\$ 28,586 per acre
4c	Aquatic/Wetland	Direct	Yes	\$ 80,683	1.50	\$121,025 per acre
4d	Riverine/Riparian	Direct	Yes	\$ 70,779	1.52	\$107,637 per acre
4e	Riverine/Riparian Buffer	Indirect	No	\$ 35,390	1.52	\$ 53,819 per acre
4f	Stream System Encroachment	Direct	No	\$ 70,779	1.52	\$107,637 per acre
4g	Salmonid Stream Channel	Direct	No	\$ 436	1.50	\$ 654 per linear foot
Note: All special habitat fees are paid in addition to the land conversion fee. See Table 2.1 for explanation of the area of effect subject to each fee and the use of fee revenue.						
¹ See Chapter 4.						
Sources: Table 2.5.						

Table E.3: Reserve Fair Shares for Mitigation and Conservation

	Valley Subarea		Foothills Subarea		Total	
	Reserve Allocation (acres)	Fair Share	Reserve Allocation (acres)	Fair Share	Reserve Allocation (acres)	Fair Share
Mitigation Share	24,697	72.6%	8,698	65.4%	33,395	70.6%
Conservation Share	<u>9,303</u>	<u>27.4%</u>	<u>4,602</u>	<u>34.6%</u>	<u>13,905</u>	<u>29.4%</u>
Total Reserve	34,000	100.0%	13,300	100.0%	47,300	100.0%
Subarea Share	71.9%		28.1%		100.0%	
Sources: Table 3.2.						

Cost Allocation Approach

Costs summarized in Table E.1, excluding special habitat restoration and enhancement costs used in the special habitat fees, were allocated to covered activities in the Valley and the Foothills. The amount of effect per acre of land conversion is the basis for assigning costs to various types of covered activities and related fee categories.

The land conversion fee is charged in most instances on gross parcel area rather than on the area of direct effects. To analyze whether a reasonable

relationship is maintained between the parcel area upon which the fee is applied and the need for mitigation of direct effects, the nexus analysis estimates the amount of land conversion (direct effect) per parcel based on the type and size of the development project.

The fee also accounts for the effects of fragmentation of the natural landscape when patches of habitat are isolated by development. As larger parcels are subdivided and developed, fragmentation has significant indirect and cumulative effect on habitat in addition to the amount of direct effects from land conversion. The cost allocation approach accounts for fragmentation by distinguishing between subdivisions that create five or more parcels versus four or fewer parcels. The former is assumed to have less fragmentation effect compared to the latter.

Fee categories and the overall effect per gross parcel area used to guide the nexus analysis and set appropriate land conversion fees are shown in **Table E.4**. The fee category numbers (1a, 1b, 2a, 2b, etc.) refer to the types of covered activities used to allocate costs and develop the land conversion fee schedule. To maintain a reasonable relationship between the amount of the fee and the proportionate cost of mitigation attributable to the type of development paying the fee, fees per parcel acre are:

- ◆ Lowest on low density rural residential
- ◆ Higher on small lots
- ◆ Highest on all other development.

The Foothills includes a substantial amount of projected development that is not a covered activity under the Plan, but which benefits from the Plan's open space acquisition and fire hazard management activities. To address this issue, costs to mitigate covered activities in the Foothills are allocated through two components of the fee, Part A and Part B. The Part A component, complemented by an equivalent but separate open space and fire hazard management fee, applies to all Foothills subarea development whether or not a covered activity. The Part B component only applies to covered activities, as summarized in **Table E.5**.

Table E.6 shows the total Foothills land conversion fee based on the sum of the Part A and Part B fees. The combined Part A and B Foothills land conversion fee reflects the relative effect per parcel acre based on the guidance provided in Table E.4 and derived from the HCP/NCCP effect model.

The land conversion fee for both subareas and all fee categories are shown in **Table E.7**. Land conversion fee revenue is a flexible funding source that may be used for any Plan action, including special habitat restoration and enhancement, and the conservation component of Plan actions, as long as other funding sources offset this by funding an equal amount of funding for the mitigation component of the Plan.

Table E.4: Land Conversion Effect by Fee Category

Fee Category and Subarea				Effect per Parcel Acre		Overall Effect per Parcel Acre
Valley		Foothill		Direct Effect	Fragmentation	
Small Lots						
1a	Covered activity on existing parcel greater than 20,000 square feet up to 1.0 acre	2a	Residential project on existing parcel greater than 20,000 square feet up to 1.0 acre	More	Less	MEDIUM
		2b	Non-residential project on existing parcel greater than 20,000 square feet up to 1.0 acre			
Low Density Rural Residential						
1b	Single family residential on existing parcel greater than 1.0 acre or on any parcel created by subdivision of an existing parcel into four or fewer total parcels	2c	Single family residential on existing parcel greater than 1.0 acre or on any parcel created by subdivision of an existing parcel into four or fewer total parcels	Less	Less ¹	LOW
				Effect per acre declines as parcel size increases		
All Other Development						
1c	All other covered activities	2d	Single family residential on any parcel created by subdivision of existing parcel into five or more total parcels and multi-family residential	More	More	HIGH
		2e	Non-residential project on existing parcel greater than 1.0 acre or on any parcel created by subdivision			
<p>Note: Existing parcel is a parcel at time of Plan adoption.</p> <p>¹ Effects of fragmentation are greater in the Foothills though the overall effect per acre remains less than for small lots.</p> <p>Sources: Urban Economics.</p>						

Table E.5: Foothill Land Conversion Fee Approach

	Foothills Land Conversion Fee	
	Part A All Development	Part B Covered Activities Only
Plan Actions Funded by Fee	<ul style="list-style-type: none"> • Foothills open space land acquisition • Foothills fire hazard management 	<ul style="list-style-type: none"> • All Foothills mitigation actions except those funded by Part A fee
Fee Categories Subject to Fee	<ul style="list-style-type: none"> • Small lots • Low density rural residential • All other development 	<ul style="list-style-type: none"> • Low density rural residential • All other development
Cost Allocation		
Land Use Scenario	All covered activities and other development not covered by the Plan	Covered activities only for categories subject to fee (low density rural residential and all other)
Measure of Impact	Service population (residents and workers) converted to equivalent dwelling units (EDUs)	Acres of direct effect
Application of Fee		
Residential	Per dwelling unit	Per acre
Non-residential	Per acre	Per acre
Sources: Urban Economics.		

Table E.6: Foothills Land Conversion Fee (2019 \$)

Fee Category		Part A Fee	Part B Fee	Total Fee
2a	Residential project on existing parcel greater than 20,000 square feet up to 1.0 acre	\$2,279 per dwelling unit	NA	\$ 2,279 per dwelling unit (no per acre fee)
2b	Non-residential project on existing parcel greater than 20,000 square feet up to 1.0 acre	\$2,757 per acre	NA	\$ 2,757 per acre
2c	Single family residential on existing parcel greater than 1.0 acre or on any parcel created by subdivision of an existing parcel into four or fewer total parcels	\$2,279 per dwelling unit	\$1,332 per parcel acre	\$ 2,279 per dwelling unit plus
				\$ 1,332 per acre up to per parcel maximum amount ¹
2d	Single family residential on any parcel created by subdivision of existing parcel into five or more total parcels and multi-family residential	\$2,279 per dwelling unit	\$7,562 per parcel acre	\$ 2,279 per dwelling unit plus \$ 7,562 per acre
2e	Non-residential project on existing parcel greater than 1.0 acre or on any parcel created by subdivision	\$2,757 per acre	\$7,562 per parcel acre	\$10,319 per acre
<p>Note: Existing parcel refers to parcels at time of Plan adoption.</p> <p>Per acre fees apply to the entire parcel area excluding areas improved at time of Plan adoption and where avoidance occurs pursuant to Section 6.3.1.3, <i>General Condition 3, Land Conversion</i>, including land approved by the PCA set aside as habitat. For low density rural development, per acre fees apply only to the disturbed area footprint of Covered Activities unless the project includes a new dwelling unit (see Section 6.3.1.3.2, <i>Permanent Effect Avoidance for Low Density Rural Development</i>).</p> <p>For mixed use projects with multi-family residential, the project pays the higher fee of either category 2d or category 2e.</p> <p>¹ Maximum amount per parcel applies to per acre fee only. Dwelling unit fee is in addition to the per acre fee.</p> <p>Sources: Table 3.14.</p>				

Table E.7: Land Conversion Fee Schedule (2019 \$)

Plan Area A – Valley		
1a	Covered Activity on existing parcel greater than 20,000 square feet up to 1.0 acre	\$ 5,197 per acre
1b	Single family residential on existing parcel greater than 1.0 acre or on any parcel created by subdivision of an existing parcel into four or fewer total parcels	\$ 3,897 per dwelling unit plus
		\$ 1,299 per acre up to \$12,990 maximum amount ¹
1c	All other covered activities	\$26,473 per acre
Plan Area A - Foothills		
2a	Residential project on existing parcel up to 1.0 acre	\$ 2,279 per dwelling unit
2b	Non-residential project on existing parcel up to 1.0 acre	\$ 2,757 per acre
2c	Single family residential on existing parcel greater than 1.0 acre or on any parcel created by subdivision of an existing parcel into four or fewer total parcels	\$ 2,279 per dwelling unit plus
		\$ 1,332 per acre up to \$13,320 maximum amount ¹
2d	Single family residential on any parcel created by subdivision of existing parcel into five or more total parcels and multi-family residential	\$ 2,279 per dwelling unit plus
		\$ 7,562 per acre
2e	Non-residential project on existing parcel greater than 1.0 acre or on any parcel created by subdivision	\$10,319 per acre
Plan Area B		
Valley (Component B1: Roseville / Rocklin / Loomis area)		
3a	All Covered Activities	\$26,473 per acre
Foothills (Component B1: Auburn area and Component B2)		
3b	Covered Activity on Existing Parcel up to 1.0 acre	\$ 2,757 per acre
3c	Covered Activity on Existing Parcel greater than 1.0 acre	\$10,319 per acre
<p>Notes: Existing parcel refers to a parcel at time of Plan adoption.</p> <p>Per acre fees apply to the entire parcel area excluding areas improved at time of Plan adoption and where avoidance occurs pursuant to Section 6.3.1.3, <i>General Condition 3, Land Conversion</i>, including land approved by the PCA set aside as habitat. For low density rural development, per acre fees apply only to the disturbed area footprint of Covered Activities unless the project includes a new dwelling unit (see Section 6.3.1.3.2, <i>Permanent Effect Avoidance for Low Density Rural Development</i>).</p> <p>For mixed use projects with multi-family residential, the project pays the higher fee of either category 2d or category 2e.</p> <p>¹ Maximum amount per parcel applies to per acre fee only. Per dwelling unit fee is in addition to per acre fee.</p> <p>Source: Table 3.15.</p>		

Temporary Effect Fee

Temporary effects for purposes of the temporary effect fee are direct effects from covered activities that alter land cover for less than one year. The temporary effect fee is based on the amount of the land conversion or special habitat fee that otherwise applies, with the fee reduced to reflect the temporal aspect of the effect.

To qualify as a temporary effect, the disturbed area must recover or be restored to pre-project or ecologically improved conditions within one year. Examples of permitted temporary effects include routine maintenance in stream channels for flood control, construction laydown areas, maintenance along roadsides for highways, and short-term disturbance of the landscape for a linear project such as a pipeline.

The temporary effect fee applies to most fees for permanent effects, including the land conversion fee and some special habitat fees for mitigation of permanent direct effects. In the case of special habitats, the temporary effect fee only applies to:

- ◆ Vernal pool direct effects fee (fee 4a)
- ◆ Aquatic/wetland fee (fee 4c)
- ◆ Riverine/riparian fee (fee 4d).

Covered activities that otherwise are subject to the land conversion fee and special habitat fees listed above, but for their temporary effect, pay a temporary effect fee. The temporary effect fee a fee equals two percent of the fee that otherwise applies to the project footprint for each year in which the activity occurs. Two percent represents one year out of the 50-year permit term.

Funding Plan Summary

The funding plan for the HCP/NCCP is shown in **Table E.8**. The funding plan demonstrates that anticipated revenues are sufficient to fund all Plan costs. Sources of funding include sources (1) dedicated to mitigating effects of covered activities, (2) restricted to funding only the conservation component of Plan action, and (3) that can be used for either the mitigation or conservation components of the Plan.

Table E.8: Funding Plan (2019 \$)

	Valley		Foothills		Total	
PLAN FUNDING						
Mitigation Funding						
Land Conversion Fee	\$531,420,000	56%	\$ 83,030,000	32%	\$ 614,450,000	51%
Special Habitat Fees	172,840,000	18%	60,770,000	23%	233,610,000	19%
Temporary Effect Fees	negligible	<1%	negligible	<1%	negligible	<1%
Open Space & Fire Hazard Mgt. Fee	-	<1%	10,610,000	4%	10,610,000	<1%
Existing Reserve Credit ¹	9,830,000	1%	11,980,000	5%	21,810,000	2%
Bickford Ranch Open Space	-	<1%	500,000	<1%	500,000	<1%
Subtotal	\$714,090,000	75%	\$166,900,000	65%	\$ 880,980,000	73%
Conservation Funding						
State & Federal Grants	\$115,170,000	12%	\$ 36,180,000	14%	\$ 151,350,000	12%
Existing Reserve Credit ¹	12,230,000	1%	8,790,000	3%	21,020,000	2%
Subtotal	\$127,400,000	18%	\$ 44,970,000	27%	\$ 172,370,000	20%
Other Funding						
Opr. Interest Income	2,100,000	<1%	400,000	<1%	2,500,000	<1%
Agricultural Leases	7,990,000	<1%	-	<1%	7,990,000	<1%
Other Local, State & Federal ²	59,480,000	6%	29,240,000	11%	88,720,000	7%
Endowment Investment Earnings	43,950,000	5%	17,180,000	7%	61,130,000	5%
Subtotal	\$113,520,000	12%	\$ 46,820,000	18%	\$ 160,340,000	13%
Total PCCP Funding	\$955,010,000	100%	\$258,680,000	100%	\$1,213,690,000	100%
PLAN COSTS						
Plan Implementation	\$868,600,000	91%	\$229,150,000	89%	\$1,097,750,000	90%
Endowment Fund Balance, Year 50	73,860,000	8%	28,870,000	11%	102,730,000	8%
Plan Preparation	12,550,000	1%	660,000	<1%	13,210,000	1%
Total PCCP Costs	\$955,010,000	100%	\$258,680,000	100%	\$1,213,690,000	100%
PLAN NET REVENUE						
Surplus/(Deficit)	-	0%	-	0%	-	0%

¹ Existing reserve credit is an in-kind (non-cash) contribution to the Plan. Land value allocated to "Mitigation Funding" if original funding was not restricted to conservation purposes, otherwise allocated to "Conservation Funding".

² Estimate of new sources of funding from a combination of local, state, and federal sources, including nonprofits and foundations, reasonably anticipated during the 50-year permit term.

Sources: HCP/NCCP, Appendix L (Cost Estimates and Assumptions), Table 4a; Tables 2.6, 3.3, 3.6, 3.10, 5.2, A.6, A.8, and A.11.

Revenues in Table E.8 are balanced to costs with revenue from “Other Local, State & Federal” sources representing eight percent of total plan revenues. This amount of revenue is reasonable to anticipate given the 50-year permit term, the potential expansion of uses of state and federal grants, and the potential for new revenue sources such as local tax measures and private foundations. In addition, development fees could be revised during Plan implementation to incorporate the cost of providing additional benefits to covered activities through implementation of the conservation component of the Plan (see the *Mitigation and Conservation Cost Shares* section in Chapter 1).

Periodic Fee Reviews

Under the HCP/NCCP, the PCA is required to conduct a comprehensive review of HCP/NCCP development fees every five years during Plan implementation. Periodic fee reviews will inform updates to the development fee schedules and funding plan by analyzing:

- ◆ Plan costs allocated to the land conversion fee and special habitat fees
- ◆ Revenues that offset mitigation costs allocated to the land conversion fee
- ◆ The accuracy of the projected Valley and Foothills land use scenarios, including the relationship between direct effects, dwelling units, and parcel acres, plus the amount of non-covered activities in the Foothills subject to the open space and fire hazard management fee
- ◆ Relative impact factors that convert costs per unit of direct effect or impact into the land conversion fee applied per parcel acre and per dwelling unit.

Table E.3, above, shows the mitigation share of the total reserve cost is 72.6% for the Valley and 65.4% for the Foothills. In accordance with this nexus analysis, periodic fee reviews during Plan implementation will adjust the land conversion fee and other mitigation funding sources to hold this funding share constant by subarea over the course of the permit term. The mitigation share percentage for land conversion remains constant over the permit term after deducting components of the funding plan associated with special habitat restoration and enhancement. These periodic reviews will provide an opportunity for the PCA to recalibrate the development fees to ensure that they fully fund the mitigation cost share by the end of the permit term.

1. INTRODUCTION

Purpose

This study documents the reasonable relationship, or “nexus”, between activities covered by the Western Placer County Habitat Conservation Plan and Natural Community Conservation Plan (HCP/NCCP or Plan⁶ and the accompanying EIS/EIR)⁷, and the development fees paid by those activities to mitigate their effects under the Plan. Development fees are one-time fees, typically paid when improvement plans or building permits are issued and imposed on development projects by cities and counties.

This nexus analysis provides the evidence to make the findings required by the Mitigation Fee Act (MFA), contained in California Government Code, Sections 66000 through 66025, that guides the adoption and collection of development fees by local agencies. Placer County and the City of Lincoln are the two permittees with authority to approve development within the Plan area so these two agencies may use this study to support their adoption of the HCP/NCCP development fees.

The development fees justified by this nexus analysis will also support implementation of two complementary activities to the HCP/NCCP that together comprise the Placer County Conservation Program (PCCP):

- ♦ The Western Placer County Aquatic Resources Program (CARP)⁸ will protect streams, wetlands, and other water resources and fulfill the requirements of the federal Clean Water Act (CWA) and analogous state laws and regulations. HCP/NCCP development fees will also mitigate effects identified by the CARP.
- ♦ In-Lieu Fee Program⁹ 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 goal of the PCCP is to provide an effective framework to protect, enhance, and restore the natural resources in specific areas of western Placer

⁶ Placer County, *Placer County Conservation Program, Western Placer County Habitat Conservation Plan / Natural Community Conservation Plan (Public Draft)*.

⁷ ICF, *Placer County Conservation Program, Draft Environmental Impact Statement/Environmental Impact Report*, State Clearinghouse No. 2005032050.

⁸ Placer County, *Western Placer County Aquatic Resources Program*, September 2018.

⁹ Placer County Community Development Resource Agency, *Western Placer County In-Lieu Fee Program Enabling Instrument (Final)*, December 2018.

County, while streamlining environmental permitting for activities covered by the Plan. Activities covered by the Plan include private development projects, construction and maintenance of public infrastructure, and conservation activities carried out pursuant to the Plan. Thus, the PCCP achieves conservation goals for protected species and natural communities in compliance with state and federal environmental regulations while accommodating private development and associated public infrastructure.

The development fees documented by this Nexus Study and adopted pursuant to the MFA will not only serve to mitigate the impacts of development projects covered under the Plan. These fees will also serve to determine the costs to mitigate the effects of public infrastructure projects that are covered activities.

Finally, this study demonstrates that the Plan is fully funded to meet regulatory requirements of state and federal wildlife agencies related to issuance of permits under the Plan.

Background

The federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA) prohibit “take” of protected species without a permit. “Take” is broadly defined to include harm and habitat loss as well as killing. The Plan allows specified local public agencies in Western Placer County to receive permits from the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife (Wildlife Agencies) that allow the “incidental take” of species. The permittees include:

- ◆ Placer County
- ◆ City of Lincoln
- ◆ South Placer Regional Transportation Authority
- ◆ Placer County Water Agency
- ◆ Placer Conservation Authority (PCA).

The Plan also streamlines the environmental review of covered activities under the National Environmental Policy Act (NEPA), and the California Environmental Quality Act (CEQA) over the 50-year permit term. Without the Plan project proponents such as private developers and public agencies must analyze effects on protected species and wildlife habitat, and identify and incorporate avoidance, minimization, and mitigation measures on a project-by-project basis. Under the Plan any covered activity can minimize and mitigation such by complying with the Plan including paying applicable development fees. The PCA, created to implement the Plan on behalf of the other permittees, is designated to receive and expend all fee revenue.

The development fee nexus analysis draws on the analysis and provisions of the Plan. The development fees are based on allocating the cost of Plan actions associated with mitigating the effects of covered activities fairly among the maximum extent of covered activities allowed by the permit over the 50-year permit term.

Plan Area and Subareas

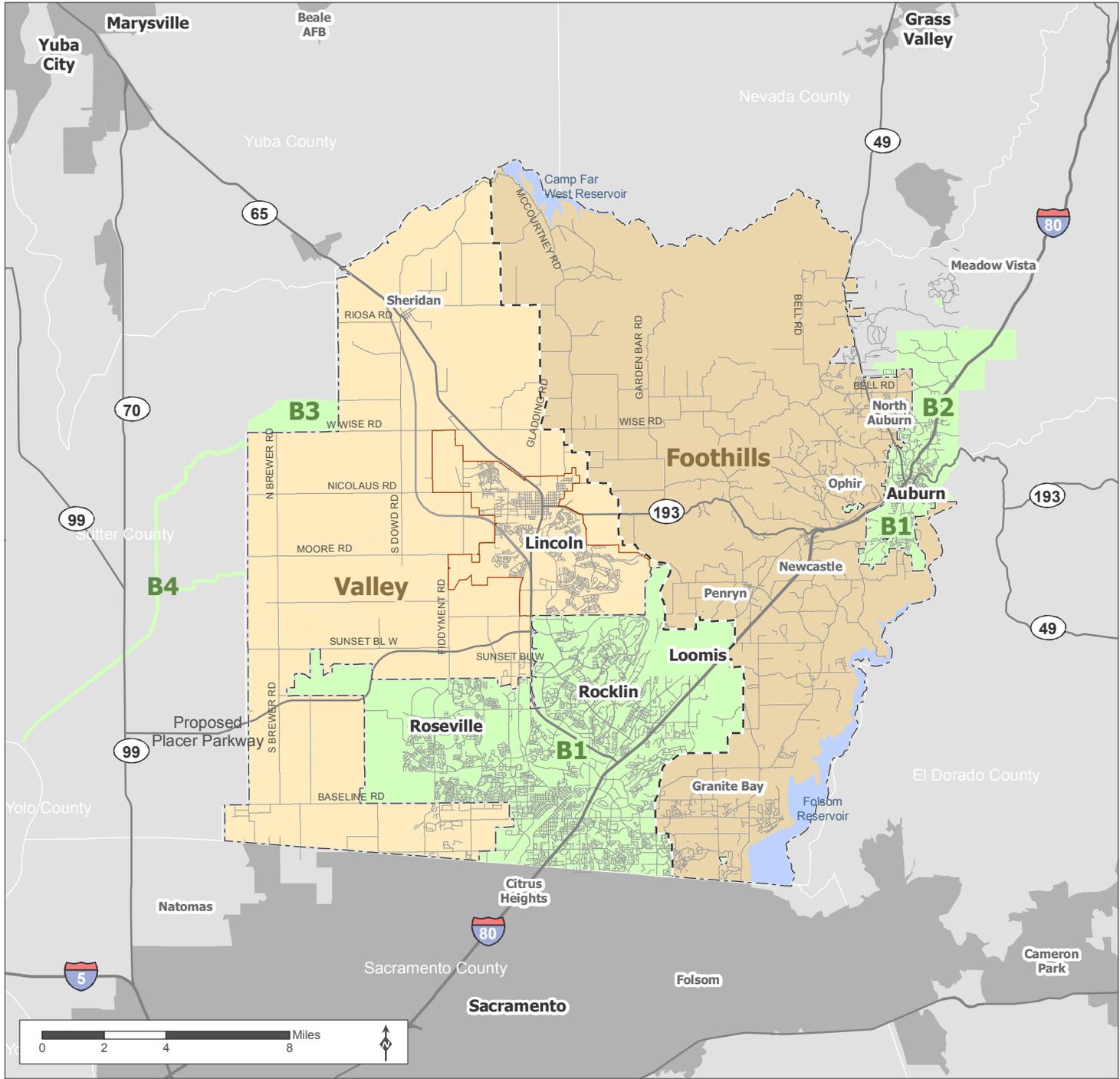
Figure 1.1 shows a map of the Plan area. Plan Area A labeled as the “Valley” and the “Foothills” subareas is the main focus of the HCP/ NCCP and where all future growth and most effects are anticipated to take place. Plan Area A includes the City of Lincoln and all unincorporated lands within western Placer County, approximately 209,800 acres or roughly five-sixths of western Placer County.

Within Plan Area A, there is a transition that occurs within the landscape from the Sacramento Valley on the west to the Sierra Nevada foothills on the east. The HCP/NCCP uses this natural break that falls roughly along the 200-foot contour to demark the Valley and Foothills subareas of Plan Area A.

A small area that is a higher elevation portion of the City of Lincoln planning area is shown as part of the Valley subarea in Figure 1.1 but actually shares more natural land cover characteristics with the adjacent Foothills subarea. Consequently, the Foothills land conversion fee schedule is applied to this small area. The area is 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.

As shown in Figure 1.1, Plan Area B comprises several additional areas in Placer County and adjacent Sutter County where only specific public agency activities or effects associated with conservation activities may occur. Permanent effects requiring mitigation under the HCP/NCCP in Plan Area B result almost entirely from activities in Plan Area B1: “Permittee Activity in Non-participating City Jurisdiction”. Covered activities in Plan Areas B1 and B2 include public program activities undertaken by the permittees in the incorporated area and the sphere of influence of the non-participating cities (Roseville, Rocklin, Loomis, and Auburn). Activities in this area include several specific projects such as PCWA canals and new pipelines, a portion of Placer Parkway, the I-80/SR 65 interchange, and operations and maintenance of miscellaneous County-owned facilities. Effects in Plan Areas A, B1 and B2 are the only effects included in the mitigation fair share calculations used in this nexus analysis.

T:\CASE\Conservation\GIS\Map\CH_1\NEM\Fig1_2_PlanArea.mxd 5/01/2017



Source: Placer County, 2014; MIG | TRA 2015; CalTrans

— Interstate	Plan Area A	
— Highway	Valley	100,921 acres
— Road	Foothills	109,295 acres
— City of Lincoln	All Plan Area A	210,216 acres
- - Valley/Foothill Divide	Plan Area B	
■ Surrounding Urban Area	B1. Permittee Activity in Non-Participating City Jurisdiction.	50,636 acres
	B2. PCWA Zone 1 Operations and Maintenance.	6,315 acres
	B3. Coon Creek Floodplain Conservation.	1,724 acres in Sutter County
	B4. Fish Passage Channel Improvement.	33 miles of channels in Sutter County
	B5. Big Gun Conservation Bank.	52 acres in Placer County (Not shown on map)

Note: For purposes of the Nexus Study and application of the land conversion fee, the Foothills includes that portion of the Valley that is 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.

Covered activities in Plan Areas B3, B4, and B5 are anticipated to consist solely of conservation actions that have a net benefit on covered species and habitats. Therefore, covered activities in these subareas are not included in the nexus analysis.¹⁰

Effects of Covered Activities

The Plan allows the permittees to obtain incidental take permits for the following covered activities. These activities are required to pay the Plan development fees or provide land or conservation actions of an equal or greater value than their fee liability in lieu of paying the fees:

1. Valley Potential Future Growth (PFG)
2. Valley Conservation and Rural Development
3. Foothills PFG
4. Foothills Conservation and Rural Development
5. Regional Public Programs
6. In-Stream Activities
7. Conservation Programs

The first four covered activities include private development in the Valley and Foothills subareas of Plan Area A. The extent of development projected in the Plan area over the Plan's 50-year permit term (dwelling units, employment, and acres of land conversion) is documented in Appendix M (Growth Scenario Memo) of the HCP/NCCP.

The next two activities (regional public programs and in-stream activities) include public projects initiated by the permittees primarily in Plan Areas B1 and B2. Estimates of effects for these covered activities were provided by the permittees.

The final covered activity (conservation programs) is related to implementation of the Plan conservation strategy in Plan Areas B3, B4, and B5. These activities are not subject to fees under the Plan because of their value for implementation of the Plan.

The Plan actions to mitigate effects are based on an effect model, primarily acres of land conversion, to estimate the direct, indirect, and cumulative effects of covered activities on the habitats and species to be protected and conserved by the Plan.

¹⁰ HCP/NCCP, Chapter 4, Section 4.4.1.7.3, *Conservation Programs/ Additional Detail on Programs*.

Conservation Strategy

The Plan provides incidental take permits for 14 covered species. The covered species are either currently listed under the ESA and/or the CESA or have a notable potential to become listed during the permit term. The Plan conservation strategy is designed to mitigate effects on covered species and contribute to their recovery within the Plan area. The conservation strategy consists of the following major types of activities:

- ◆ The achievement of landscape-, natural community-, and species-level biological goals and objectives through the implementation of conservation measures.
- ◆ The acquisition of land and the creation of a reserve system, including regional connections between protected areas;
- ◆ The long-term management, enhancement, and in some cases restoration of natural communities within the reserve system;
- ◆ The development of a comprehensive wetland-related conservation strategy to accomplish no-net loss and to address the needs of covered species;
- ◆ The implementation of a comprehensive, long-term, adaptive management and monitoring program; and
- ◆ The implementation of avoidance and minimization measures on covered activities.

As described in Chapter 9 of the Plan, a detailed cost model is used to project the costs of implementing the Plan during the permit term and the ongoing costs of managing and monitoring the reserve system after the permit term. The cost model is used to estimate funding needs for the Plan. The development fees are based on the costs estimated in the cost model. The cost model's assumptions are based on data from land managers in the Plan area, local experts in habitat restoration and management, and the Permittees. A land valuation analysis, based on comparable real estate transaction data, was used to develop the land acquisition cost estimates.

The cost model estimated Plan costs in the following categories:

- ◆ Establish Reserve System
- ◆ Restore, Manage & Monitor Natural Communities
- ◆ Reserve Management and Enhancement
- ◆ Monitoring, Research, and Scientific Review
- ◆ Environmental Compliance
- ◆ Administration

- ◆ Contingency Fund

The total cost of Plan implementation is estimated to be \$1.214 billion, including (1) \$1.098 million to implement the Plan during the permit term, (2) \$103 million to build an endowment to fund reserve management and monitoring costs in perpetuity, and (3) \$13 million to reimburse the County for Plan preparation costs. Development fees and other sources of funding to mitigate the effects of covered activities provide about 71 percent of total Plan revenues. Other revenues are necessary to fund the conservation cost share of total Plan costs (see discussion, below). All cost and revenue estimates are shown in 2019 dollars. As described in Chapter 9 of the Plan, the fees will be adjusted over time based on inflation and other changes in Plan costs.

The cost model estimates that post-permit management and monitoring of the reserve system will cost \$3.7 million per year. These costs are funded with the proceeds of the endowment fund built steadily over the course the permit term, and ongoing lease revenue from rice lands.

Nexus Analysis Approach

This section describes key elements of the approach to the nexus analysis.

Mitigation and Conservation Cost Shares

The nexus analysis assumes the overall amount of mitigation provided under the HCP/NCCP is reasonably consistent with the overall amount of mitigation that would be provided if mitigation requirements were determined on a project-by-project basis with application of the ESA, CESA, NEPA, and CEQA to Western Placer County. However, not all Plan costs are associated with mitigation of effects from covered activities.

The Plan also includes actions and associated costs to qualify as a Natural Community Conservation Plan under the California Natural Community Conservation Planning Act (NCCP) Act. To gain approval as an NCCP and secure regulatory benefits unique to the NCCP Act, the Plan must not only mitigate effects to the maximum extent practicable but also contribute to the recovery and continued viability of species whether or not those species are protected under the CESA. This conservation component of the Plan is in addition to mitigation requirements. It is accomplished by protecting habitat, natural communities, and species diversity on a landscape or ecosystem level through the creation and long-term management of habitat reserves. Thus, a key part of this nexus analysis is to separate out the mitigation and conservation shares of total Plan costs, and only allocate the former to funding through development fees and other mitigation-related revenue sources.

This approach to the nexus analysis focuses on a narrow definition of mitigation. Covered activities receive benefits from the conservation component of the Plan which are not directly associated with mitigation as defined by this nexus analysis. Compared to ESA/CESA mitigation requirements, the additional benefits of an NCCP to covered activities include:

- ◆ Coverage for a larger number of species
- ◆ Greater certainty regarding regulatory requirements, including protection against new or increased mitigation requirements for those species
- ◆ Assured coverage for species in the event they are determined in the future to be threatened or endangered.

Inclusion of Plan costs associated with providing these additional benefits to covered activities would support a higher cost share funded by development fees than results from the focused approach taken by this nexus analysis.

Special Habitat, Land Conversion, and Temporary Effect Fees

The land conversion fee funds about three-quarters of the mitigation share of total Plan costs. The remaining mitigation costs are associated with effects on special habitats, particularly sensitive riparian and wetland habitats with significantly higher mitigation costs. Costs associated with the mitigation and conservation components of special habitat restoration are analyzed first in Chapter 2. The land conversion fee is based on the mitigation share of all remaining Plan costs and analyzed in Chapter 3. The temporary effect fee addresses effects from covered activities that have a duration of less than one year. The temporary effect fee applies to the land conversion fee and certain special habitat fees and is addressed in Chapter 4.

Mitigation Fee Act Findings

This nexus analysis provides the evidence to make the findings required by the Mitigation Fee Act (MFA), contained in California Government Code, Sections 66000 through 66025 that guides the adoption and collection of development fees by local agencies. Placer County and the City of Lincoln are the two permittees with authority to approve development within the Plan area so these two agencies may use this study to support their adoption of the HCP/NCCP development fees.

The MFA requires local agencies adopting or increasing an impact fee to make findings that demonstrate a reasonable relationship (“nexus”) between new development that will pay the fee and the fee program. The MFA uses the term “public facilities” to include any eligible use of fee revenue and such uses include “public improvements, public services, and community amenities.”¹¹

¹¹ California Government Code, Section 66000(d).

Specifically, the MFA requires local agencies to make the following five findings:

- ◆ **Purpose:** Identify the purpose of the fee.
- ◆ **Use of revenue:** Identify the use of fee revenue.
- ◆ **Impact:** Determine how there is a reasonable relationship between the need for the public facilities funded by the fee and the type of development paying the fee.
- ◆ **Benefit:** Determine how there is a reasonable relationship between the use of fee revenue and the type of development paying the fee.
- ◆ **Proportionality:** Determine how there is a reasonable relationship between the amount of the fee and the proportionate cost of funded facilities attributable to development.

The documentation provided in this study allows the City of Lincoln and Placer County to make the findings required by the MFA to impose the Plan's development fees. Each finding is addressed at the end of each chapter in this report that describes the related development fee.

Comprehensive Funding Plan

Demonstrating that the Plan can provide adequate funding to cover all costs of implementation is a requirement of the Wildlife Agencies for approval of the Plan ("funding adequacy").¹² Therefore, this Nexus Study describes other reasonably anticipated funding sources that combined with development fees are adequate to fully fund all Plan costs.

Also of importance to the Wildlife agencies is the share of total costs assumed to be funded by state and federal grants related to the NCCP conservation component in the Plan. The Nexus Study provides this estimate as well.

¹² HCP/NCCP, Chapter 9, Section 9.4.5, *Funding Adequacy*.

2. SPECIAL HABITAT FEES

This chapter documents the nexus analysis for the Plan’s special habitat fees. Most of the revenue from development fees are generated by the land conversion fee discussed in the next chapter (Chapter 3). However, the nexus analysis for the land conversion fee depends in part on separating out Plan costs associated with special habitat restoration and enhancement activities that are partially funded by special habitat fees. Thus, special habitat costs and fees are presented in this chapter and used in the land conversion fee analysis presented in the next chapter.

The special habitat fee nexus analysis is presented in the following sections:

- ◆ Special Habitat Fee Structure
- ◆ Special Habitat Effects and Restoration Objectives
- ◆ Special Habitat Cost Allocation
- ◆ Special Habitat Fees
- ◆ Mitigation Fee Act Findings

Special Habitat Fee Structure

Special habitats are particularly sensitive habitats associated with features such as streams including salmonid habitat, marshes, riparian woodlands, and seasonal wetlands including vernal pools. Maintaining and enhancing the integrity of these special habitats is a key provision of the Plan because of the many covered species supported by them. The Plan requires mitigation of effects on special habitats from covered activities by restoring¹³ or enhancing new special habitats within the reserve system.

Covered activities that affect special habitats pay special habitat fees in addition to the land conversion fee. The land conversion fee funds activities associated with mitigating the effects of covered activities whether or not special habitats are affected. The land conversion fee also funds acquisition of all reserve lands including specific lands to be restored or enhanced with funding from special habitat fees.

Mitigating the effect of covered activities on special habitats has significantly higher costs per acre of effect compared to mitigating effects on other communities. Applying a separate fee ensures that covered activities causing

¹³ Within the context of this Nexus Study any reference to “restoration” of special habitats, and all related terms, includes the concept of “creation” of special habitats as well.

effects on special habitats pay a proportionate cost of their total effect from land conversion. This approach supports the findings required by the MFA (see Chapter 1 for more discussion of MFA findings and the last section of this chapter for the special habitat fee MFA findings).

Special habitat fees fund the additional (marginal) cost solely associated with the restoration or enhancement of special habitats including management and monitoring. Special habitat fees vary by special habitat type to account for different per unit costs for restoration or enhancement of each habitat.

As explained more fully in Chapter 3, the land conversion fee varies for the two major subareas of the Plan (Valley and Foothills) to reflect significant differences in Plan costs. There is only one fee for each special habitat applicable to the entire Plan area because, for a given type of special habitat, restoration costs per acre of land restored do not vary by subarea. The nexus analysis in this chapter allocates special habitat costs by subarea only to support the nexus analysis for the land conversion fee in the Chapter 3.

Special habitat fees apply to effects to the following:

- ◆ Vernal pool wetland, seasonal wetland, and seasonal swale constituent habitats¹⁴ within the vernal pool complex natural community
- ◆ Fresh emergent marsh, lacustrine, and non-vernal pool seasonal wetland constituent habitats within the aquatic/wetland complex natural community
- ◆ Stream system and watershed habitats including:
 - Riverine and riparian constituent habitats within the riverine/riparian complex natural community
 - The topographical stream system defined by the floodplain and a variable width buffer¹⁵
 - Salmonid stream channels.
- ◆ Riparian habitat outside the Stream system boundary.

The Plan also includes restoration of upland natural communities including oak woodland, valley oak woodland, and grassland. The nexus analysis did not need to develop special habitat fees for these communities. This approach is reasonable because upland habitats do not share all of the following features of special habitats:

¹⁴ The Plan uses the term “constituent habitat” to describe habitat elements within land cover types that cannot be individually and exhaustively mapped and measured from the aerial photography used to map land cover for the regional scale of the Plan. Fees would be based on project-specific wetland delineation and other detailed mapping.

¹⁵ HCP/NCCP, Section 3.2.7, *Stream System*.

- ◆ Highly valued by the Plan due to their relatively small share of the Plan area and their significance for covered species
- ◆ Subject to more regulatory oversight
- ◆ Significantly more expensive to restore per acre.

The special habitat fee structure includes seven separate fees that vary based on the type of habitat and the type of effect—direct or indirect. Direct effects are immediate, adverse effects on habitat. Indirect effects occur later in time after the covered activity has occurred. Indirect effects on special habitats include increased runoff from impervious surfaces and other effects from covered activities being adjacent to or nearby these habitats.¹⁶

For each fee, **Table 2.1** describes the effects mitigated, how the fee is applied (the land area used to calculate the fee), and the use of fee revenue.¹⁷ In summary:

- ◆ **Direct Effect Fees:**
 - Five fees mitigate direct effects of covered activities (fees 4a, 4c, 4d, 4f, and 4g).
 - Direct effect fees are applied based on the area of ground disturbance that occurs within the special habitat. Area of ground disturbance is measured in acres for all fees except the salmonid stream channel fee that is measured in linear feet of stream channel.
 - The vernal pool direct effects fee (fee 4a) is applied to the entire vernal pool wetland area even if only part of the pool is directly affected by ground disturbance.
- ◆ **Indirect Effect Fees:**
 - Two fees (fees 4b and 4e) mitigate indirect effects on vernal pools and riverine/riparian community types, respectively. Mitigation of all other indirect effects from covered activities not addressed by these special habitat fees are addressed by the land conversion fee discussed in Chapter 3.
 - The vernal pool immediate watershed effects fee (fee 4b) is applied based on the entire area of a vernal pool wetland which is not itself subject to direct effect but where a portion of its immediate watershed is affected by ground disturbance.¹⁸

¹⁶ See HCP/NCCP, Section 4.3.3, *Methods to Estimate Indirect Effects of Urban Growth in the Valley*, and Section 4.3.4, *Methods to Assess Indirect Effects from the Increase in Rural Densities in the Foothills*.

¹⁷ See HCP/NCCP, Chapter 3, *Physical and Biological Setting*, for detailed definitions of special habitats.

¹⁸ See HCP/NCCP, Chapter 6, Sec. 6.1.1, *Definitions*, for a detailed definition of immediate watershed.

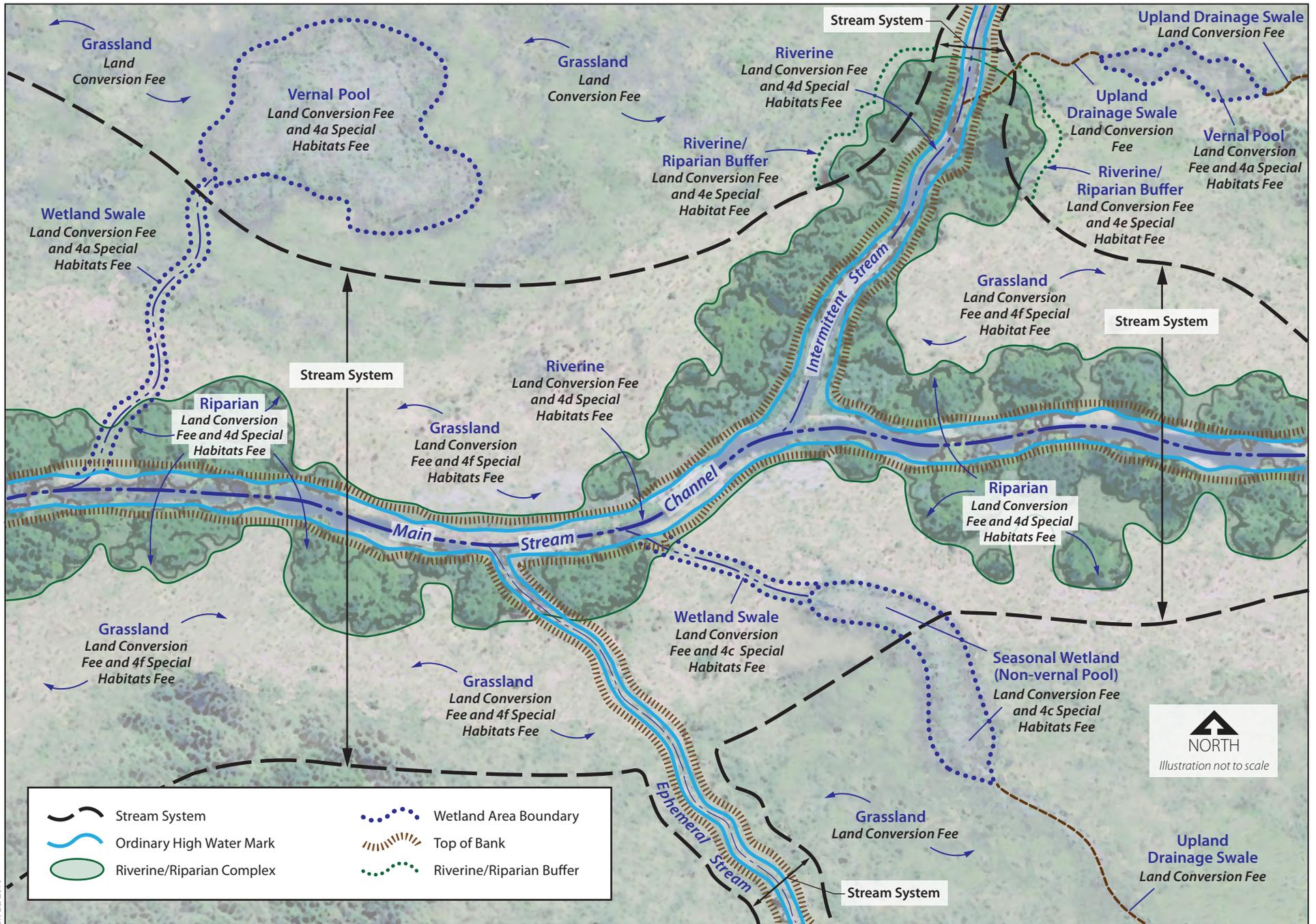
Table 2.1: Description of Special Habitat Fees

Fee		Effects Mitigated	Application of Fee ¹	Use of Fee Revenue
Vernal Pool Special Habitat Fee				
4a	Vernal Pool Direct Effects	Direct effects on vernal pool constituent habitats	Wetted area ²	Restoration of vernal pool habitat
4b	Vernal Pool Immediate Watershed Effects	Indirect effects on vernal pool constituent habitats on project site	Wetted area ² on project site not altered by ground disturbance but within an immediate watershed ³ altered by ground disturbance	Mitigation of indirect effects on vernal pool habitat and part of activities also funded by land conversion fee
Aquatic/Wetland Special Habitat Fee				
4c	Aquatic/Wetland	Direct effects on aquatic/wetland constituent habitats	Wetted area ² of Aquatic/wetland constituent habitat	Restoration of aquatic/wetland habitat
Streams and Watersheds Special Habitat Fees				
4d	Riverine/Riparian	Direct effects on riverine/riparian constituent habitats	Riverine/riparian constituent habitat	Restoration of riverine/riparian habitat and closely associated land cover types
4e	Riverine/Riparian Buffer	Indirect effects on riverine/riparian constituent habitats	Area not in stream system but within 50 feet of delineated riverine/riparian constituent habitat	Mitigation of indirect effects on riverine/riparian habitat and part of activities also funded by land conversion fee
4f	Stream System Encroachment	Direct effects of stream system encroachment	Area of stream system not subject to a separate special habitat fee	Restoration of riverine/riparian habitat and closely associated land cover types
4g	Salmonid Stream Channel	Direct effects on salmonid stream channel alternation	Linear extent (feet) of salmonid stream channel habitat altered or covered	Mitigation share of costs for Conservation Measure 2, measures RAR-3 and RAR-4
<p>Note: Special habitat fees are paid in addition to the land conversion fee (see Chapter 3). Special habitat fees apply to separate and distinct habitats and do not overlap, except for the salmonid stream channel fee (fee 4g) that is paid in addition to any other applicable special habitat fees, e.g. the riverine/riparian fee (fee 4d).</p> <p>The Plan uses the term “constituent habitat” to describe habitat elements within land cover types that could not be individually mapped based on the aerial photography used to map land cover. See HCP/NCCP Chapter 3, <i>Physical and Biological Setting</i>, for detailed habitat descriptions.</p> <p>¹ Based on area of ground disturbance, except fee 4b is applied based on wetted area within the immediate watershed of ground disturbance.</p> <p>² Applies to entire delineated wetland even if only part is affected. “Wetted area” refers to wetted area of a vernal pool constituent habitat and non-vernal pool delineated wetlands.</p> <p>³ “Immediate watershed” refers to the area that has a hydrologic connection to a delineated vernal pool constituent habitat and is assumed to be within 250 unless field analysis determines otherwise. See HCP/NCCP, Section 6.1.1, <i>Definitions</i> and Section 6.3.2.1.1, <i>Community Condition 1.1, Avoidance for Vernal Pool Constituent Habitat Wetlands</i>.</p> <p>Sources: HCP/NCCP, Chapter 9, Table 9-5.</p>				

- The riverine/riparian buffer (fee 4e) applies to any area which is not in the stream system, but which is within 50 feet of delineated riverine/riparian constituent habitat.
- ♦ **Non-overlapping Fees:** Except for the salmonid stream channel fee (fee 4g), special habitat fees apply to effects on separate and distinct land areas and therefore do not overlap within any given area of effect. The linear salmonid stream channel fee (fee 4g) is paid in addition to any applicable area-based special habitat fees, e.g. the riverine/riparian fee (fee 4d).
- ♦ **Use of Revenues:**
 - For fees mitigating direct effects (fees 4a, 4c, 4d, 4f, and 4g) revenues are restricted to the restoration or enhancement of the type of habitat associated with each fee.
 - Revenues from indirect fees 4b and 4e are anticipated to be limited and actions to mitigate indirect effects are integrated across a range of Plan cost categories. For these reasons, fee revenues to mitigate indirect effects (fees 4b and 4e) are combined with land conversion fee revenue (see Chapter 3) to fund the mitigation share of Plan costs associated with these indirect effects.¹⁹

Figure 2.1 provides a landscape sketch of where most of the special habitat fees apply, focusing on habitats in and around the stream system. The figure does not indicate application of the vernal pool immediate watershed effects fee (fee 4b) or the salmonid stream channel fee (fee 4g). The permittees have an implementation guide to describe how these fees are applied to covered activities.

¹⁹ See the *Periodic Fee Reviews* section in Chapter 3 for an explanation of how fee 4b and fee 4e revenues are integrated into the land conversion fee nexus analysis.



NOTES:

- 1) The figure does not include the 4b Vernal Pool Immediate Watershed Effects special habitat fee that applies to vernal pool constituent habitat indirectly affected by land conversion within the immediate watershed and is paid in addition to the land conversion fee.
- 2) The figure does not include the 4f Salmonid Stream Channel special habitat fee that applies to linear feet of direct effects in a salmonid stream channel and is paid in addition to the land conversion fee and any other special habitat fee such as fee 4d Riverine/Riparian.

Figure 2.1
Development Fees within the
Stream System and Adjoining Areas

Special Habitat Effects and Restoration Objectives

The Plan establishes limits to direct effects on special habitats over the permit term and specifies the associated amount of restoration and other activities required for mitigation. Ratios are applied to the area of affected special habitat to determine the area of restored habitat required for mitigation. These mitigation ratios for direct effects are greater than 1.0 to ensure that there is no net loss of special habitat area, biological values, and landscape-level ecological function. These ratios also include compensation for temporal loss because restored habitats take time (often years) to achieve their objectives.²⁰

- ◆ For effects to vernal pool, aquatic/wetland, and salmonid stream channel habitats, the Plan requires restoration at a ratio of 1.5-to-1 meaning that for every acre or linear foot of effect the Plan requires 1.5 acres or 1.5 linear feet of restoration.
- ◆ For effects to riverine/riparian habitats and encroachment on the stream system this ratio is slightly higher, 1.52-to-1, to fulfill the Plan's objectives for these habitats.

Maintaining and enhancing the integrity of the streams and floodplains of western Placer County is a key goal of the HCP/NCCP so the Plan sets specific conditions on effects to streams and watersheds. Direct effects from encroachment on the stream system are mitigated by restoration of riverine/riparian habitat elsewhere in the stream system. Even though the present condition of the affected stream system may be in agriculture or contain upland communities such as grassland and oak woodland, and even if the affected area may be in a degraded condition, the Plan requires restoration as riverine/riparian habitat elsewhere in the stream system. This requirement is meant to sustain the overall function of the stream system and counter the impact of continuing diminution of this important part of the western Placer County landscape for the following reasons:

- ◆ The riverine/riparian and aquatic/wetland complex natural communities depend critically on the soils, surface water or near surface water table, and disturbance regime associated uniquely with the streams and the area designated as within the stream system.

²⁰ HCP/NCCP, Section 5.2.1, *Approach to Developing Conservation Commitments*, Section 5.2.6.1, *Vernal Pool Complex and Grassland Natural Communities*, Section 5.2.6.2, *Aquatic/Wetlands Complex Natural Communities*, Section 5.2.6.3, *Riverine and Riparian Complex Natural Communities*, Section 5.3.1, *Conservation Measure 1: Establish Reserve System*, specifically Table 5-4, *Natural Community Restoration Commitments*, Section 5.3.1.3.2, *Placer County Conservation Plan Stream Systems*, and 5.3.2.3.3, *Riverine/Riparian Complex Natural Communities*, specifically CM2 RAR-4, *Improvement of In-channel Features*.

- ◆ The riverine/riparian and aquatic/wetland complex communities associated with the stream system are habitat for eight of the covered species (Swainson's hawk, California black rail, tricolored blackbird, giant garter snake, western pond turtle, foothill yellow legged frog, California red legged frog, valley elderberry longhorn beetle). The western burrowing owl is frequently found in berms and open lands adjacent to streams and vernal pool habitat is often associated with the poorly drained, low gradient lands at the edge of the stream system.
- ◆ The streams themselves are habitat for two of the covered species (Central Valley steelhead and Central Valley fall/late fall-run Chinook salmon) and the integrity and natural condition of the surrounding area designated as within the stream system contributes to water quality through shade (temperature) and pollutant filtration.
- ◆ In addition to present habitat, the streams provide ecosystem services for covered species such as water flow, connectivity, adjacency to foraging and aestivation/hibernation habitat. These benefits depend on the physical geography and hydrology of the stream system and exist only in the area defined as the stream system.
- ◆ The physical geography and hydrology and valuable ecosystem services of the stream system cannot be recreated elsewhere because they are fully dependent on the natural streams and their flood plains.
- ◆ The integrity of the stream system is an integral component of the conservation strategy at a landscape level, providing linkages within the reserve system and to natural areas beyond the Plan area. This connectivity is sharply diminished by even small breaks in the natural condition of the stream and where the width of the corridor is made narrow by encroaching development and associated human presence.
- ◆ Because permanent encroachment into the stream system results in an irreversible loss of the broader values of the stream system, the higher biological value of riverine/riparian habitat will offset the more general loss of stream system functions.
- ◆ The integrity of the three watersheds (Dry Creek, Auburn Ravine and Coon Creek) that support the two covered salmonid species is critical to meeting the biological goals and objectives for those species. Successful adult and juvenile migration through the Valley between the Sacramento River and spawning/rearing areas in the Foothills of the Plan area is dependent upon the continuity, water quality, flows, and temperatures that are wholly or partially derived from conditions in the Foothills. Spawning, incubation and rearing in the Foothills will only be successful when continuity, temperature, and water quality conditions in the Valley allow for successful migration. The two areas of the watershed, the Valley for adult/juvenile migration and the Foothills for spawning, incubation and

rearing need to be conserved and conservation measures need to be implemented which help ensure that the three salmonid watersheds provide optimum conditions for the covered species.

In addition to mitigation of effects, the NCCP Act calls for restoring representative natural and semi-natural landscapes to maintain the ecological integrity of large habitat blocks, ecosystem function, and biological diversity. To comply with these provisions of the NCCP Act, the Plan requires restoration and enhancement of special habitats in addition to and independent of the mitigation of effects from covered activities. This “conservation” requirement is not funded by special habitat fees because it is not directly related to mitigation of effects.

Table 2.2 shows the maximum allowable direct effects to special habitats over the permit term, the associated mitigation requirement based on the mitigation ratios discussed above, and the additional conservation requirement that is independent of covered activities. Amounts are expressed in acres except salmonid stream amounts that are expressed in miles. The table separates effects for the Valley and Foothills subareas of Plan Area A for information only. Plan Area B is included in the Valley subarea to be consistent with cost model assumptions.

Although analyzed in the Plan the Plan does not establish limits on indirect effects.²¹ Therefore, Table 2.2 does not identify restoration objectives related to the two special habitat fees designed to mitigate indirect effects, the vernal pool immediate watershed effects fee (4b) and the riverine/riparian buffer fee (fee 4e).

Special Habitat Cost Allocation

This section describes the approach used to calculate restoration and enhancement unit costs (per acre or per linear foot) for mitigation of effects to special habitats from a covered activity. Unit costs are based on the estimate of total costs divided by the associated amount of restoration.

²¹ HCP/NCCP, Chapter 4, *Effects of Covered Activities*.

Table 2.2: Special Habitat Effects and Restoration / Enhancement Requirements

Habitat Type	Mitigation			Conservation ¹	Total Restoration Objective ¹
	Effects	Mitigation Ratio	Restoration		
<i>(acres, except miles for salmonid stream channel)</i>					
Valley Plan Subarea & Plan Area B					
Vernal Pools	580	1.50	870	30	900
Aquatic/Wetland	130	1.50	195	10	205
Riverine/Riparian	511	1.52	777	18	795
<i>Riverine/Riparian</i>	160				
<i>Other Stream System²</i>	351				
Salmonid Stream Channel ³	0.82	1.50	1.23	Note 4	1.23
Foothills Plan Subarea					
Vernal Pools	-	1.50	-	-	-
Aquatic/Wetland	130	1.50	195	10	205
Riverine/Riparian	405	1.52	616	14	630
<i>Riverine/Riparian</i>	330				
<i>Other Stream System²</i>	75				
Salmonid Stream Channel ³	0.42	1.50	0.63	Note 4	0.63
Total Plan Area					
Vernal Pools	580	1.50	870	30	900
Aquatic/Wetland	260	1.50	390	20	410
Riverine/Riparian	916	1.52	1,393	32	1,425
<i>Riverine/Riparian</i>	490				
<i>Other Stream System²</i>	426				
Salmonid Stream Channel ³	1.24	1.50	1.86	Note 4	1.86
<p>¹ Additional restoration associated with the conservation requirement of the Plan unrelated to mitigation. For each habitat type, allocation of conservation objectives between Valley and Foothills based on effects.</p> <p>² HCP/NCCP (Table 4-1) does not allocate other stream system effects by subarea, so estimated effects by subarea based on each subarea's share of the total restoration objective and then subtracting riverine/riparian effects from total effects by subarea. See Appendix L (Cost Estimates and Assumptions), Table B.2.</p> <p>³ Allocation of effects by subarea for salmonid stream channel not specified in the Plan and estimated based on allocation of salmonid stream channel mitigation costs (in-channel enhancement activities). Mitigation applies to streams with salmonid habitat only.</p> <p>⁴ The Plan includes a conservation requirement for salmonid streams, but that commitment is not quantified by linear feet.</p> <p>Sources: HCP/NCCP, Chapter 4, Tables 4-1 and 4-7A; HCP/NCCP, Chapter 5, Table 5-4 and Section 5.3.2.3.3 (regarding salmonid mitigation ratio); HCP/NCCP, Appendix L (Cost Estimates and Assumptions), Table B.2.</p>					

Total Costs

The determination of total costs for special habitat restoration and enhancement is shown in **Table 2.3**. Costs for “Other Restoration Activities” and “Other Management & Enhancement Activities” shown in the table are not associated with special habitat restoration or enhancement. These “other” costs are shown to allocate certain cost line items that are shared across restoration and enhancement actions. Total costs by cost category sum to the cost model totals shown in Table 9-1 of the Plan. Total costs in Table 2.3 may not exactly match total costs shown in Table 9-1 of the Plan due to rounding. Cost model inputs taken from Appendix L of the HCP/NCCP²² and used to construct both Table 9-1 in the Plan and Table 2.3 in the Nexus Study and are shown in Appendix **Table A.1**.

Vernal Pool, Aquatic/Wetland, Riverine/Riparian, and Stream System Special Habitats

Restoration costs for vernal pool, aquatic/wetland, and riverine/riparian special habitats are based on Plan costs documented in the cost model under the “Restore, Manage, and Monitor Natural Communities” major cost category (see Table A.1). As explained above in the *Special Habitat Effects and Restoration Objectives* section, costs to mitigate direct effects from encroachment on the stream system (fee 4f) are based on riverine/riparian restoration costs.

The total restoration costs shown in Table 2.3 for each of these special habitats include:

- ◆ Direct capital costs for restoration
- ◆ Shared costs that include a proportion, weighted by direct costs, of:
 - Capital costs for vehicles, equipment, and response to changed circumstances
 - Operating costs for field and technical staff and other overhead.

²² HCP/NCCP, Appendix L (Cost Estimates and Assumptions).

Table 2.3: Special Habitat Cost Allocation (2019 \$)

Cost Category / Action	Valley			Foothills			Total ²
	Direct	Shared ¹	Subtotal	Direct	Shared ¹	Subtotal	
Restore, Manage, and Monitor Natural Communities³							
Vernal Pool Restoration	\$ 93,330,000	\$ 9,370,000	\$102,700,000	\$ -	\$ -	\$ -	\$102,700,000
Aquatic/Wetland Restoration	14,990,000	1,510,000	16,500,000	14,990,000	1,590,000	16,580,000	33,080,000
Riverine/Riparian Restoration	<u>51,020,000</u>	<u>5,120,000</u>	<u>56,140,000</u>	<u>40,430,000</u>	<u>4,290,000</u>	<u>44,720,000</u>	<u>100,860,000</u>
Subtotal Special Habitat Restoration	\$159,340,000	\$16,000,000	\$175,340,000	\$55,420,000	\$5,880,000	\$61,300,000	\$236,640,000
Other Actions	<u>40,450,000</u>	<u>4,060,000</u>	<u>44,510,000</u>	<u>8,430,000</u>	<u>900,000</u>	<u>9,330,000</u>	<u>53,840,000</u>
Cost Category Total	\$199,790,000	\$20,060,000	\$219,850,000	\$63,850,000	\$6,780,000	\$70,630,000	\$290,480,000
Reserve Management & Enhancement⁴							
Salmonid Stream Channel Enhancement Mitigation							
In-channel Enhancement Conservation	\$ 1,720,000	\$ 1,060,000	\$ 2,780,000	\$ 880,000	\$ 620,000	\$ 1,500,000	\$ 4,280,000
In-channel Enhancement	2,580,000	1,590,000	4,170,000	1,330,000	930,000	2,260,000	6,430,000
Fish Barrier Removal	<u>2,880,000</u>	<u>1,770,000</u>	<u>4,650,000</u>	<u>1,850,000</u>	<u>1,300,000</u>	<u>3,150,000</u>	<u>7,800,000</u>
Subtotal Conservation	\$ 5,460,000	\$ 3,360,000	\$ 8,820,000	\$ 3,180,000	\$ 2,230,000	\$ 5,410,000	\$ 14,230,000
Subtotal Special Habitat Enhancement	\$ 7,180,000	\$ 4,420,000	\$ 11,600,000	\$ 4,060,000	\$ 2,850,000	\$ 6,910,000	\$ 18,510,000
Other Actions	<u>43,940,000</u>	<u>26,990,000</u>	<u>70,930,000</u>	<u>6,540,000</u>	<u>4,600,000</u>	<u>11,140,000</u>	<u>82,070,000</u>
Cost Category Total	\$ 51,120,000	\$31,410,000	\$ 82,530,000	\$10,600,000	\$7,450,000	\$18,050,000	\$100,580,000
Special Habitat Summary							
Restoration	\$159,340,000	\$16,000,000	\$175,340,000	\$55,420,000	\$5,880,000	\$61,300,000	\$236,640,000
Enhancement	<u>7,180,000</u>	<u>4,420,000</u>	<u>11,600,000</u>	<u>4,060,000</u>	<u>2,850,000</u>	<u>6,910,000</u>	<u>18,510,000</u>
Special Habitat Total	\$166,520,000	\$20,420,000	\$186,940,000	\$59,480,000	\$8,730,000	\$68,210,000	\$255,150,000
¹ Includes capital and operating costs that are shared among multiple cost categories. Allocated based on direct costs. ² Total costs may vary from Table 9-1 of the Plan due to rounding. ³ Restoration activities for vernal pool, aquatic/wetland, riverine/riparian include both mitigation and conservation components. ⁴ Mitigation of salmonid effects based on 40 percent of costs for conservation measures CM2 RAR-3, <i>Modify Unscreened Water Diversions</i> , and CM2 RAR-4, <i>Improvement of In-channel Features</i> . Remaining 60 percent cost share associated with NCCP Act conservation requirements independent of effect for salmonids and other benefitting species, e.g. foothill yellow-legged frog, California red-legged frog, and western pond turtle. Total cost for conservation measure CM2 RAR-2, <i>Removal and/or Modification of Barriers to Fish Passage</i> , is allocated to conservation component (none to mitigation). Sources: Table A.1.							

Salmonid Stream Channel Special Habitat

Enhancement costs for salmonid stream channels are based on Plan costs documented in the cost model under the “Reserve Management and Enhancement” cost category. Direct capital costs associated with salmonid stream channel enhancement include 40 percent of costs associated with two conservation measures in the Plan: CM2 RAR-3, *Modify Unscreened Water Diversions*, and CM2 RAR-4, *Improvement of In-channel Features*.²³ The remaining 60 percent cost share is associated with NCCP Act conservation requirements independent of effect for salmonids and other benefitting species, e.g. foothill yellow-legged frog, California red-legged frog, and western pond turtle. Total cost for conservation measure CM2 RAR-2, *Removal and/or Modification of Barriers to Fish Passage*, is allocated to salmonid conservation (none to mitigation). The mitigation cost share is estimated to achieve a 1.5-to-1 mitigation ratio and may be adjusted during Plan implementation based on the actual results of in-channel enhancement actions.

Similar to the vernal pool and other special habitat costs discussed above, salmonid stream channel enhancement costs also include a proportion of costs shared among all actions within the cost category.

Unit Costs for Restoration

Unit costs (costs per acre and costs per linear foot) for mitigation of direct effects are based on total restoration or enhancement costs for each special habitat estimated for the permit term (Table 2.3), divided by the total amount of restoration or enhancement to occur under the Plan (Table 2.2). Special habitat unit costs are the same for the same habitat type across the entire Plan area, so a single fee is calculated for the Valley and Foothills subareas. The land conversion fee that is different for the Valley and Foothills because costs vary by subarea (see Chapter 3).

Table 2.4 shows unit costs used as a basis for calculating special habitat fees. Restoration costs per acre by natural community type are greater than those shown in HCP/NCCP, Chapter 9, Table 9-2, because they include the shared costs described above.

²³ HCP/NCCP, Chapter 5, Section 5.3.2.3.3, *Riverine/Riparian Complex Natural Communities*, conservation measures CM2 RAR-3 and CM2 RAR-4.

Table 2.4: Special Habitat Restoration Unit Costs (2019 \$)

Special Habitat Fee		Total Cost ¹	Area of Restoration/Enhancement ¹	Restoration or Enhancement Unit Cost		
				Direct Effects	Indirect Effects Factor	Unit Cost
4a	Vernal Pool Direct Effects	\$102,700,000	900 acres	\$114,111	NA	\$114,111 per acre
4b	Vernal Pool Immediate Watershed Effects				16.7%	\$ 19,057 per acre
4c	Aquatic/Wetland	\$33,080,000	410 acres	\$ 80,683	NA	\$ 80,683 per acre
4d	Riverine/Riparian	\$100,860,000	1,425 acres	\$ 70,779	NA	\$ 70,779 per acre
4e	Riverine/Riparian Buffer				50.0%	\$ 35,390 per acre
4f	Stream System Encroachment				NA	\$ 70,779 per acre
4g	Salmonid Stream Channel	\$ 4,280,000	1.86 miles	\$ 436	NA	\$ 436 per linear foot

¹ Costs and areas include mitigation and conservation components for vernal pool, aquatic/wetland, and riverine/riparian and only the mitigation component for salmonid stream channel.
Sources: Tables 2.2 and 2.3; Urban Economics.

The vernal pool immediate watershed effects fee (fee 4b) is applied based on the area of vernal pool habitat indirectly affected by ground disturbance. For the fee to apply, the ground disturbance must occur within the immediate watershed and within 250 feet of the vernal pool.²⁴ The fee is set at one-sixth (16.7 percent) of the amount of the vernal pool direct effects fee (fee 4a) to reflect the cost of mitigating indirect effects on the immediate watershed.

The riverine/riparian buffer fee (fee 4e) is applied based on the area of ground disturbance occurring within 50 feet of riverine/riparian habitat and that occurs outside of the stream system.²⁵ If the affected area is determined to be in the stream system, then the stream system encroachment fee (fee 4f) will apply instead of the buffer fee. The buffer fee is set at one-half (50 percent) of the amount of the riverine/riparian effects fee (fee 4d) to reflect the cost of mitigating indirect effects within this buffer.

Fee 4b is set lower than the fee 4e, compared to their respective direct effect fees, because the former has a larger area of indirect effect (up to 250 feet

²⁴ HCP/NCCP, Section 6.1.1, *Definitions* and Section 6.3.2.1.1, *Community Condition 1.1, Avoidance for Vernal Pool Constituent Habitat Wetlands*.

²⁵ HCP/NCCP, Section 6.3.2.2.1, *Community Condition 2.1, Riverine and Riparian Avoidance*.

versus 50 feet) and therefore lower indirect effects on average per acre of ground disturbance compared to the latter.

Special Habitat Fees

The special habitat fee schedule is shown in **Table 2.5**. Each fee in Table 2.5 is equal to the unit cost for mitigation of the associated direct or indirect effect (Table 2.4), multiplied by the mitigation ratio for the applicable special habitat (Table 2.2). Unit costs for fees to mitigate indirect effects are set at a percent of the corresponding fee for direct effects to reflect the lower level of effect and therefore lower mitigation cost obligation. Refer to the *Special Habitat Fee Structure* section for a description of each fee including applicable mitigation ratios.

Table 2.5: Special Habitat Fee Schedule (2019 \$)

	Special Habitat Fee	Temporary Effect Fee? ¹	Unit Cost	Mitigation Ratio	Fee Amount
4a	Vernal Pool Direct Effects	Yes	\$114,111	1.50	\$171,167 per acre
4b	Vernal Pool Immediate Watershed Effects	No	\$ 19,057	1.50	\$ 28,586 per acre
4c	Aquatic/Wetland	Yes	\$ 80,683	1.50	\$121,025 per acre
4d	Riverine/Riparian	Yes	\$ 70,779	1.52	\$107,637 per acre
4e	Riverine/Riparian Buffer	No	\$ 35,390	1.52	\$ 53,819 per acre
4f	Stream System Encroachment	No	\$ 70,779	1.52	\$107,637 per acre
4g	Salmonid Stream Channel	No	\$ 436	1.50	\$ 654 per linear foot
<p>Note: All special habitat fees are paid in addition to the land conversion fee. See Table 2.1 for explanation of the area of effect subject to each fee and the use of fee revenue.</p> <p>¹ See Chapter 4.</p> <p>Sources: Tables 2.2 and 2.4.</p>					

Table 2.5 also indicates whether a temporary effect fee is applicable for temporary effects to special habitats. Temporary effect fees are charged when ground disturbance is temporary, and the affected habitat is anticipated to return to its original condition within one year of ground disturbance. Temporary effect fees are not charged on indirect effects and only charged where temporary direct effects are anticipated to be significant (vernal pools, aquatic/wetland, and riverine/riparian habitats). See Chapter 4 for a description of the temporary effect fee.

Total revenues from special habitat fees are shown in **Table 2.6**. No estimates for indirect effects for fee 4b and fee 4e were available at time of Plan adoption. Revenues from these fees will be integrated into the nexus analysis through periodic fee reviews during Plan implementation.

Table 2.6: Special Habitat Fee Revenue (2019 \$)

Special Habitat Fee	Direct Effect ¹	Fee ²	Revenue	
Valley				
4a	Vernal Pool Direct Effects	580	\$171,167	\$ 99,280,000
4b	Vernal Pool Immediate Watershed Effects ²	NA	\$ 28,586	NA
4c	Aquatic/Wetland	130	\$121,025	15,730,000
4d	Riverine/Riparian	160	\$107,637	17,220,000
4e	Riverine/Riparian Buffer ²	NA	\$ 53,819	NA
4f	Stream System Encroachment	351	\$107,637	37,780,000
4g	Salmonid Stream Channel	0.82	\$ 654	2,830,000
	Subtotal			\$172,840,000
Foothills				
4a	Vernal Pool Direct Effects	-	\$171,167	\$ -
4b	Vernal Pool Immediate Watershed Effects ²	NA	\$ 28,586	NA
4c	Aquatic/Wetland	130	\$121,025	15,730,000
4d	Riverine/Riparian	330	\$107,637	35,520,000
4e	Riverine/Riparian Buffer ²	NA	\$ 53,819	NA
4f	Stream System Encroachment	75	\$107,637	8,070,000
4g	Salmonid Stream Channel	0.42	\$ 654	1,450,000
	Subtotal			\$ 60,770,000
	Total			\$233,610,000
¹ Maximum allowable direct effect to special habitats over the permit term. Direct effect shown in acres and fee shown per acre except salmonid stream channel effects shown in miles and fee shown per linear foot.				
² No estimates for indirect effects for fee 4b and fee 4e were available at time of Plan adoption. Revenues from these fees will be integrated into the nexus analysis through periodic fee reviews during Plan implementation.				
Source: Tables 2.2 and 2.6.				

Mitigation Fee Act Findings

Based on the nexus analysis presented in this chapter, below are the findings required by the MFA for adoption of the special habitat fees shown in Table 2.5. See Chapter 1 for more background on the MFA and these findings.

Vernal Pool Direct Effects (Fee 4a)

Purpose: The purpose of the fee is to mitigate direct effects of ground disturbance on vernal pool constituent habitat.

Use: Fee revenue will be used for restoration of vernal pool constituent habitat including a percentage of capital and operating costs shared among Plan cost categories.

Impact: There is a reasonable relationship between the need for vernal pool constituent habitat restoration and covered activities that cause ground disturbance of vernal pool constituent habitat because that ground disturbance results in the permanent loss of this habitat.

Benefit: There is a reasonable relationship between the use of fee revenue and covered activities paying the fee because fee revenue is restricted to restoration of vernal pool constituent habitat including capital and operating costs shared among Plan cost categories.

Proportionality: There is a reasonable relationship between the amount of the fee and the proportionate cost to mitigate direct effects on vernal pool constituent habitat caused by covered activities paying the fee because (1) every 1.00 acre of ground disturbance of vernal pool constituent habitat requires 1.50 acres of the same constituent habitat to fully mitigate the direct effects of covered activities, and (2) the fee per acre of ground disturbance from covered activities reflects the estimated cost to fund 1.50 acres of restored vernal pool constituent habitat.

Vernal Pool Immediate Watershed Effects (Fee 4b)

Purpose: The purpose of the fee is to mitigate indirect effects on vernal pool constituent habitat located on the site of a covered activity from ground disturbance caused by a covered activity within the immediate watershed²⁶ of the vernal pool constituent habitat.

Use: Fee revenue will be used to implement any of the vernal pool conservation measures in the HCP/NCCP because these measures protect

²⁶ “Immediate watershed” refers to the area that has a hydrologic connection to a delineated vernal pool constituent habitat and is assumed to be within 250 unless field analysis determines otherwise. See HCP/NCCP, Section 6.1.1, *Definitions* and Section 6.3.2.1.1, *Community Condition 1.1, Avoidance for Vernal Pool Constituent Habitat Wetlands*.

and enhance the vernal pool complex natural community and thereby mitigate the indirect effects of covered activities on vernal pool constituent habitat.²⁷

Impact: There is a reasonable relationship between the need for mitigation of indirect effects on vernal pool constituent habitat and covered activities within an immediate watershed because ground disturbance from covered activities within an immediate watershed indirectly affects vernal pool constituent habitat.

Benefit: There is a reasonable relationship between the use of fee revenue and covered activities paying the fee because fee revenue funds implementation of the HCP/NCCP conservation measures that protect and enhance the vernal pool complex natural community and excluding other conservation measures to mitigate the direct effects of covered activities on special habitats.

Proportionality: There is a reasonable relationship between the amount of the fee and the proportionate cost of mitigating indirect effects on vernal pool constituent habitat caused by covered activities paying the fee because (1) the fee is based on the size of the vernal pool constituent habitat subject to indirect effects, and (2) the fee is based on the cost of mitigating direct effects reduced to reflect the lower unit cost of mitigating indirect effects.

Aquatic/Wetland (Fee 4c)

Purpose: The purpose of the fee is to mitigate direct effects of ground disturbance on aquatic/wetland constituent habitat.

Use: Fee revenue will be used for restoration of aquatic/wetland constituent habitat including a percentage of capital and operating costs shared among Plan cost categories.

Impact: There is a reasonable relationship between the need for aquatic/wetland constituent habitat restoration and covered activities that cause ground disturbance of aquatic/wetland constituent habitat because that ground disturbance results in the permanent loss of this habitat.

Benefit: There is a reasonable relationship between the use of fee revenue and covered activities paying the fee because fee revenue is restricted to restoration of aquatic/wetland constituent habitat including capital and operating costs shared among Plan cost categories.

²⁷ Specific conservation measures related to the vernal pool complex natural community include: CM1 L-4, Connectivity within the Plan Area, CM1 VPCG-1, Vernal Pool Protection, CM1 VPCG-2, Reserve Design for Vernal Pool Restoration/Creation, CM1 VPB-1, Protection and Restoration of Occupied Vernal Pool Fairy Shrimp and Vernal Pool Tadpole Shrimp Habitat, CM1 VPB-2, Protection of Conservancy Fairy Shrimp Occurrences, CM2 L-1, Vegetation Management and Invasive Plant Control, CM2 VPCG-1, Vernal Pool Complex and Grassland Vegetation Management, CM2 VPCG-2, Vernal Pool Complex Enhancement of Hydrologic Conditions, CM2 VPCG-3, Ground Squirrel Population Enhancement, CM3 VPB-1, Translocation of Vernal Pool Branchiopod Cysts.

Proportionality: There is a reasonable relationship between the amount of the fee and the proportionate cost to mitigate direct effects on aquatic/wetland constituent habitat caused by covered activities paying the fee because (1) every 1.00 acre of ground disturbance of aquatic/wetland constituent habitat requires 1.50 acres of restored aquatic/wetland constituent habitat to fully mitigate the direct effects of covered activities, and (2) the fee per acre of ground disturbance from covered activities reflects the estimated cost to fund 1.50 acres of restored aquatic/wetland constituent habitat.

Riverine/Riparian (Fee 4d)

Purpose: The purpose of the fee is to mitigate direct effects of ground disturbance on riverine/riparian constituent habitat.

Use: Fee revenue will be used for restoration of riverine/riparian constituent habitat and closely associated land cover types including a percentage of capital and operating costs shared among Plan cost categories.

Impact: There is a reasonable relationship between the need for riverine/riparian constituent habitat restoration and covered activities that cause ground disturbance of riverine/riparian constituent habitat because that ground disturbance results in the permanent loss of this habitat.

Benefit: There is a reasonable relationship between the use of fee revenue and covered activities paying the fee because fee revenue is restricted to restoration of riverine/riparian constituent habitat and closely associated land cover types including capital and operating costs shared among Plan cost categories.

Proportionality: There is a reasonable relationship between the amount of the fee and the proportionate cost to mitigate direct effects on riverine/riparian constituent habitat caused by covered activities paying the fee because (1) every 1.00 acre of ground disturbance of riverine/riparian constituent habitat requires 1.52 acres of restored riverine/riparian constituent habitat and closely associated land cover types to fully mitigate the direct effects of covered activities, and (2) the fee per acre of ground disturbance from covered activities reflects the estimated cost to fund 1.52 acres of restored riverine/riparian constituent habitat and closely associated land cover types.

Riverine/Riparian Buffer (Fee 4e)

Purpose: The purpose of the fee is to mitigate indirect effects on riverine/riparian complex habitat from ground disturbance caused by a covered activity occurring nearby.

Use: Fee revenue will be used to implement any of the riverine/riparian conservation measures in the HCP/NCCP because these measures protect and enhance the riverine/riparian complex natural community and thereby

mitigate the indirect effects of covered activities on riverine/riparian constituent habitat.²⁸

Impact: There is a reasonable relationship between the need for mitigation of indirect effects on riverine/riparian complex habitat and covered activities occurring nearby because ground disturbance from covered activities indirectly affects nearby riverine/riparian complex habitat.

Benefit: There is a reasonable relationship between the use of fee revenue and covered activities paying the fee because fee revenue funds implementation of the HCP/NCCP including many conservation measures that protect and enhance the riverine/riparian complex natural community and excluding other conservation measures to mitigate the direct effects of covered activities on special habitats.

Proportionality: There is a reasonable relationship between the amount of the fee and the proportionate cost to mitigate indirect effects on riverine/riparian constituent habitat caused by covered activities paying the fee because (1) the fee is based only on the area of ground disturbance from a covered activity located adjacent to riverine/riparian complex habitat and outside the stream system, and (2) the fee is based on the cost of mitigating direct effects reduced to reflect the lower unit cost of mitigating indirect effects.

Stream System Encroachment (Fee 4f)

Purpose: The purpose of the fee is to mitigate direct effects of ground disturbance that permanently encroaches on the stream system.

Use: Fee revenue will be used for restoration of riverine/riparian constituent habitat and closely associated land cover types including a percentage of capital and operating costs shared among Plan cost categories.

Impact: There is a reasonable relationship between the need for stream system restoration and covered activities that encroach on the stream system because the encroachment results in the permanent loss of land area which contributes to the hydrology and ecology of the watershed and forecloses restoration of the affected area.

Benefit: There is a reasonable relationship between the use of fee revenue and covered activities paying the fee because fee revenue is restricted to restoration

²⁸ Specific conservation measures related to the riverine/riparian complex natural community include: CM1 L-3, Connectivity and Conservation within the Region, CM1 L-4, Connectivity within the Plan Area, CM1 FYLF-1, Foothill Yellow-legged Frog Habitat Protection, CM1 FISH-1, Fish Habitat Protection, CM1 RAR-1, Riverine and Riparian Protection, CM2 RAR-1, Riparian Vegetation Management, CM2 RAR-5, Non-native Animal Species Control.

of riverine/riparian constituent habitat and closely associated land covert types including capital and operating costs shared among Plan cost categories.

Proportionality: There is a reasonable relationship between the amount of the fee and the proportionate cost to mitigate direct effects of encroachment on the stream system caused by covered activities paying the fee because (1) every 1.00 acre of permanent encroachment on the stream system requires 1.52 acres of restored riverine/riparian constituent habitat and closely associated land cover types to fully mitigate the direct effects of covered activities, (2) the fee per acre of ground disturbance from covered activities reflects the estimated cost to fund 1.52 acres of restored riverine/riparian constituent habitat and closely associated land cover types, and (3) the fee is not paid by covered activities subject to a separate special habitat fee such as the riverine/riparian fee (fee 4d).

Salmonid Stream Channel (Fee 4g)

Purpose: The purpose of the fee is to mitigate direct effects of ground disturbance on salmonid stream channels.

Use: Fee revenue will be used to (1) modify unscreened water diversions and (2) improve in-channel features, including a percentage of capital and operating costs shared among Plan cost categories.

Impact: There is a reasonable relationship between the need for salmonid stream channel enhancement and covered activities that cause ground disturbance in salmonid stream channels because that ground disturbance results in the permanent loss of this habitat.

Benefit: There is a reasonable relationship between the use of fee revenue and covered activities paying the fee because fee revenue is restricted to enhancement of salmonid stream channels including a percentage of capital and operating costs shared among Plan cost categories.

Proportionality: There is a reasonable relationship between the amount of the fee and the proportionate cost to mitigate direct effects on salmonid stream channels caused by covered activities paying the fee because (1) every 1.00 linear foot of ground disturbance in salmonid stream channels requires 1.50 feet of enhanced habitat of the same type to fully mitigate the direct effects of covered activities, and (2) the fee per linear foot of stream channel directly affected by ground disturbance from covered activities reflects the estimated cost to fund 1.50 linear feet of enhanced salmonid stream channel.

Periodic Fee Reviews

Under the HCP/NCCP, the PCA is required to conduct a comprehensive review of HCP/NCCP development fees every five years during Plan

implementation.²⁹ These periodic reviews provide an opportunity for the PCA to recalibrate the special habitat fees based on actual experience with restoration projects to ensure that fee revenues are adequate to fully fund the restoration required to mitigate effects.

As explained in the *Mitigation Fee Act Findings* section, revenue from the special habitat fees on indirect effects (fees 4b and 4e) can fund a range of protection and enhancement actions that are also funded by the land conversion fee. To ensure that covered activities are fully credited for all fee revenue, each periodic fee review will credit revenue from these two fees on indirect effects against mitigation costs assigned to the land conversion fee (reducing the land conversion fee as a result) as described in Chapter 3.³⁰ Revenue from these two special habitat fees generated by covered activities located in the Valley will be credited against the Valley land conversion fee. Revenue from this fee generated by covered activities in the Foothills will be credited against Part A of the Foothills land conversion fee.

²⁹ HCP/NCCP, Section 9.4.1.7.2, *Periodic Assessment and Adjustment of Fees*.

³⁰ HCP/NCCP, Section 9.4.1.7.2, *Periodic Assessment and Adjustment of Fees*, and the section *Periodic Fee Reviews* in Chapter 3 of this Nexus Study.

3. LAND CONVERSION FEE

This chapter documents the nexus analysis for the Plan's land conversion fee. All development projects and other covered activities under the Plan pay the land conversion fee. The fee funds mitigation of all direct, indirect, and cumulative effects of land conversion except those effects mitigated by the specific special habitat fees described in Chapter 2. Thus, the land conversion fee is the primary source of revenue for the PCA to mitigate the effects of covered activities.

The nexus analysis develops a separate land conversion fee for the two major subareas of the Plan, the Valley and the Foothills. See the *Plan Area and Subareas* section of Chapter 1 and Figure 1-1 for an explanation and map of the Plan area. This approach reflects differences in the amount of land conversion by community type and related mitigation cost obligations. As a result of these differences, the Valley has higher costs per acre of direct effect. Major differences in mitigation costs per acre of land conversion in the Valley compared to the Foothills include:

- ◆ Land acquisition costs due to (1) types of habitat acquired, (2) acquisition parcel size, and (3) share of lands acquired through fee title versus conservation easement
- ◆ Upland restoration and related capital and operating costs, including mitigation of Oak Woodland effects in the Valley through purchase of Oak Woodland located in the Foothills
- ◆ Operating costs related to management and enhancement activities
- ◆ Contingency costs.

The nexus analysis approach for the land conversion fee is summarized below and explained in the sections that follow:

1. **Mitigation Fair Share by Subarea:** Determines the fair share of the reserve by subarea associated with the mitigation of effects from land conversion versus the conservation requirements under the NCCP to contribute to the recovery and continued viability of species.
2. **Plan Costs by Subarea:** Allocates Plan cost categories to each subarea excluding costs associated with special habitat restoration (see Chapter 2) and adding in certain costs (endowment and Plan preparation) not included in the Plan's cost model.
3. **Cost Allocation Approach:** Describes the approach taken to allocate costs by type of covered activity based on the level of effect per acre. Types of covered activity (small lots, low density rural residential, all other development) vary in relative level of effect per parcel acre. The nexus

analysis captures these differences in fee categories established for the land conversion fee schedules.

4. **Land Conversion Fees:** Uses the mitigation fair share to determine the share of Plan costs by subarea to be funded by the land conversion fee. Calculates the fee for each fee category based on (1) the average mitigation cost per acre of effect and (2) the relative level of effect per acre for each fee category.
5. **Findings:** Provides the findings for the land conversion fee that the MFA requires for adoption by the City of Lincoln and Placer County.

Mitigation Fair Share by Subarea

A key element of the nexus analysis is determining how to fairly allocate Plan costs between mitigation and conservation components. This is accomplished by comparing the reserve acreage required to mitigate the effects of covered activities to the total reserve acreage required by the Plan.

The total projected future PCCP reserve is 47,300 acres. Of this amount, 34,000 is allocated to the Valley and 13,300 acres is allocated to the Foothills based on:

- ◆ Magnitude of land conversion effects from covered activities
- ◆ Location of reserve land acquisition opportunities³¹
- ◆ Conservation imperatives such as presence of species and habitat protected by the Plan and other regulatory mandates such as the Clean Water Act.

For the mitigation fair share allocation, the mitigation share of the reserve is calculated by applying landscape-scale mitigation ratios to the maximum acres of permanent direct effects from land conversion allowed over the permit term. The remaining portion of the reserve is associated with the conservation requirements of the NCCP. The analysis is conducted for each subarea (Valley and Foothills) and therefore is sensitive to mitigation requirements that vary by community type.

Table 3.1 shows that 30,100 acres of permanent direct effects from land conversion are allowed during the permit term within Plan Areas A, B1, and B2 (20,453 acres in the Valley and 9,647 acres in the Foothills).³²

³¹ For example, oak woodland located in the Foothills is allocated to the Valley to mitigate Valley impacts on oak woodland.

³² See HCP/NCCP, Chapter 4, Table 4-1 for the maximum amount of direct effect by land cover type allowed by the Plan. Estimates of land conversion for Plan Area A are based on HCP/NCCP, Appendix M (Growth Scenario Memo). Estimates of direct effects in Plan Area B1 and B2 were provided by the permittees.

Table 3.1: Permit Term Limit Land Conversion and Reserve Mitigation (acres)

Natural Community	Land Conversion (acres)			Mitigation Ratio	Mitigation Share of Reserve (acres)
	Plan Area A	Plan Area B ¹	Total		
Valley Subarea					
Vernal Pool Complex	12,400	50	12,450	1.35	16,807
Grassland	3,500	76	3,576	1.00	3,576
Aquatic/Wetland	120	7	127	1.50	191
Riverine/Riparian	150	7	157	1.52	238
Valley Oak Woodland	30	6	36	1.50	54
Oak Woodland	1,100	6	1,106	0.75	829
Agriculture	2,900	101	3,001	1.00	3,001
Subtotal	20,200	253	20,453		24,697
Foothills Subarea					
Vernal Pool Complex	100	0	100	1.35	135
Grassland	3,300	24	3,324	1.00	3,324
Aquatic/Wetland	130	3	133	1.50	199
Riverine/Riparian	330	3	333	1.52	507
Valley Oak Woodland	100	4	104	1.50	156
Oak Woodland	5,100	4	5,104	0.75	3,828
Agriculture	540	9	549	1.00	549
Subtotal	9,600	47	9,647		8,698
Total Plan Areas A and B					
Vernal Pool Complex	12,500	50	12,550	1.35	16,943
Grassland	6,800	100	6,900	1.00	6,900
Aquatic/Wetland	250	10	260	1.50	390
Riverine/Riparian	480	10	490	1.52	745
Valley Oak Woodland	130	10	140	1.50	210
Oak Woodland	6,200	10	6,210	0.75	4,658
Agriculture	3,440	110	3,550	1.00	3,550
Total	29,800	300	30,100		33,395
<p>Note: Mitigation per acre ratios are reasonably applicable at a landscape scale in the context of the HCP/NCCP and do not necessarily represent ratios used for a project-level analysis.</p> <p>¹ Plan Area B has effects adjacent to both the Valley and Foothills subareas. However, the HCP/NCCP does not break out Area B effects by subarea. In the table above, Plan Area B land conversion is allocated in a two-step process: (1) total land conversion is allocated to subareas and community types based on Plan Area A land conversion, then (2) 50 percent of the Foothills amounts by community type are re-allocated to the Valley to reflect the relatively lower level of activity for County infrastructure projects anticipated in the Foothills.</p> <p>Sources: HCP/NCCP, Chapter 4, Table 4-1.</p>					

Land conversion from covered activities in those components of Plan Area B1 and B2 that are adjacent to the Valley (Roseville, Rocklin, and Loomis areas) are included to the Valley subarea. Those components adjacent to the Foothills (Auburn area) are included in the Foothills subarea. See the *Plan Area and Subareas* section of Chapter 1 for an explanation of Plan areas and their relationship to the nexus analysis.

The land conversion permit term limits shown in Table 3.1 are multiplied by the mitigation ratio applicable to each community type to determine the reserve acreage mitigation share required for covered activities. Mitigation ratios for the communities present in the Plan area are reasonably applicable at a regional scale to achieve the biological goals and objectives of the HCP/NCCP and do not necessarily represent ratios used for a project-level analysis.

Table 3.2 provides the determination of mitigation and conservation fair shares by subarea. For each subarea, the total reserve acreage is split between mitigation share and conservation share, starting with the subarea mitigation acreage calculated in Table 3.1. The remainder of the reserve acreage for that subarea is the basis for the conservation share associated with the requirements of the NCCP to contribute to the recovery of natural communities and covered species, over and above the mitigation of effects from covered activities.

As shown in Table 3.2, the mitigation share for the Valley is 72.6 percent based on the reserve acres associated with mitigation of effects in the Valley. The mitigation share for the Foothills is 65.4 percent. As explained in the *Introduction*, these mitigation cost shares are based on a narrow definition of mitigation because they do not reflect regulatory benefits received by covered activities from the conservation component of the Plan not directly associated with mitigation.

Table 3.2: Reserve Fair Shares for Mitigation and Conservation

	Valley Subarea		Foothills Subarea		Total	
	Reserve Allocation ¹ (acres)	Fair Share	Reserve Allocation ¹ (acres)	Fair Share	Reserve Allocation ¹ (acres)	Fair Share
Mitigation Share	24,697	72.6%	8,698	65.4%	33,395	70.6%
Conservation Share	<u>9,303</u>	<u>27.4%</u>	<u>4,602</u>	<u>34.6%</u>	<u>13,905</u>	<u>29.4%</u>
Total Reserve	34,000	100.0%	13,300	100.0%	47,300	100.0%
Subarea Share	71.9%		28.1%		100.0%	

¹ Allocation to the mitigation share is from Table 3.1. The remainder is allocated to the conservation share. Mitigation share includes effects by subarea regardless of the location of the reserve, for example some effects to oak woodlands caused by land conversion in the Valley are mitigated with reserve in the Foothills but allocated to the Valley.

Sources: HCP/NCCP, Appendix L (Cost Estimates and Assumptions), Table A (based on HCP/NCCP, Table 5-2); Table 3.1.

Plan Costs by Subarea

A cost model was developed to estimate total Plan costs over the permit term. See Chapter 9 of the Plan for a summary of the cost model. Cost inputs to the nexus analysis are based on the cost model tables provided in Appendix L of the HCP/NCCP, particularly the breakout of costs to the Valley and Foothills subareas.

Total Plan costs are summarized in **Table 3.3**. The cost model estimates in the table are drawn from **Table A.1**. The allocation of special habitat costs to mitigation and conservation shares shown in Table 3.3 is drawn from Table 2.3.

The nexus analysis makes three adjustments or additions to Plan costs estimated by the cost model that are listed below and explained in the subsections that follow:

- ◆ Re-allocate upper watershed land acquisition costs to reflect effects on salmonids from land conversion.
- ◆ Add costs not included in the cost model to build an endowment during the permit term to fund reserve monitoring and management in perpetuity.
- ◆ Add costs for reimbursement to Placer County for funding preparation of the Plan, also not included in the cost model.

Table 3.3: Total Plan Costs for Permit Term (2019 \$)

	Valley	Foothills	Total		Include in Fee Calculation?
Cost Model Estimates					
Establish Reserve System	\$398,480,000	\$ 94,040,000	\$ 492,520,000	41%	Yes
Special Habitat Restoration & Enhancement	\$186,940,000	\$ 68,210,000	\$ 255,150,000	21%	No
Other Restoration	\$ 44,510,000	\$ 9,330,000	\$ 53,840,000	4%	Yes
Other Management & Enhancement	\$ 70,930,000	\$ 11,140,000	\$ 82,070,000	7%	Yes
Monitoring, Research & Scientific Review	\$ 41,530,000	\$ 18,310,000	\$ 59,840,000	5%	Yes
Environmental Compliance	\$ 18,210,000	\$ 9,540,000	\$ 27,750,000	2%	Yes
Plan Administration	\$ 60,160,000	\$ 32,070,000	\$ 92,230,000	8%	Yes
Contingency	\$ 27,000,000	\$ 7,350,000	\$ 34,350,000	3%	Yes
Subtotal	\$847,760,000	\$249,990,000	\$1,097,750,000	90%	
Valley Share of Upper Salmonid Watersheds	\$ 20,840,000	\$(20,840,000)	\$ -	0%	Yes
Subtotal (Cost Model)	\$868,600,000	\$229,150,000	\$1,097,750,000	90%	
Other Plan Costs					
Endowment Fund ¹					
Plan Funding Sources	\$ 29,910,000	\$ 11,690,000	\$ 41,600,000	3%	Yes
Fund Investment Earnings	<u>43,950,000</u>	<u>17,180,000</u>	<u>61,130,000</u>	<u>5%</u>	No
Endowment Fund Balance (Year 50)	\$ 73,860,000	\$ 28,870,000	\$ 102,730,000	8%	
Plan Preparation Reimbursement ²	\$ 12,550,000	\$ 660,000	\$ 13,210,000	1%	Yes
Total Plan Costs	\$955,010,000	\$258,680,000	\$1,213,690,000	100%	
<p>¹ Endowment funding allocated to subareas based on subarea share of total reserve (see Table 3.2). All investment earnings are reinvested during the permit term while the endowment is growing with no withdrawals. Endowment balance at end of permit term designed to generate annual investment earnings equal to annual costs, in perpetuity.</p> <p>² Plan preparation cost reimbursement for funding provided by Placer County general fund only. Excludes grant funding. Ninety-five percent of costs allocated to Valley subarea reflecting the substantially greater planning effort associated with mitigation for development in the Valley.</p> <p>Sources: Placer County (for Plan preparation costs); Tables 2.5, 3.2, A.1, A.2, and A.5.</p>					

Upper Salmonid Watershed

The protection of certain upper watersheds in the Foothills subarea benefits the entire Plan area. These watersheds contain particularly sensitive stream habitat for the spawning, incubation, rearing and adult holding of salmonids. Without suitable conservation and restoration of the streams in the upper watersheds, spawning, incubation, rearing, adult holding, and out migration would not occur. In addition to conservation and restoration of the streams, protecting watershed integrity in the Foothills helps to protect in-stream conditions downstream in the Valley by insuring that water quality, sediment transport, temperature, and flows are optimum for migration.³³ Over 90 percent of the Plan area includes watersheds with salmonids, so salmonid stream habitat is at risk from indirect effects such as sediment runoff from nearly all land conversion activities occurring in these watersheds. Therefore, the nexus analysis allocates Plan costs for the acquisition of upper watershed reserve lands in the Foothills to both the Valley and Foothills subareas because of the importance of these upper watersheds to salmonid species covered by the Plan. See **Table A.2** for detail on the allocation of upper watershed costs by subarea.

Endowment

The cost model provided an estimate of annual costs in perpetuity to manage and monitor the reserve following the permit term. Lands within the reserve anticipated to be leased for rice farming provide ongoing revenue to offset part of these costs. Appendix **Table A.3** shows the net annual costs that require funding from an endowment.

The nexus analysis modeled growth of an endowment fund over the 50-year permit term based on a (1) constant annual contribution during the permit term, (2) real rate of return of 3.25 percent on the fund balance from investment earnings, net of investment management costs and inflation, and (3) no withdrawals until the end of the 50-year permit term. The annual contribution is funded largely by development fees, though other Plan funding sources could contribute as well.³⁴ The rate of return reflects investment in a diversified portfolio of marketable securities similar to other nonprofit endowments and pension funds. The rate of return assumption was originally developed for a regional habitat endowment management program operated by the National Fish and Wildlife Foundation under agreement with the

³³ HCP/NCCP, Chapter 4, Section 4.7.9, *Salmonids: Central Valley Fall-/Late Fall-Run Chinook Salmon, Central Valley Steelhead*.

³⁴ Other funding sources include operating fund interest earnings, agricultural land leases, and other sources to be identified. In return for development fees funding post-permit term costs associated with the conservation share of the reserve, other funding sources fund a larger share of costs associated with the mitigation share, such as a larger share of land acquisition costs.

CDFW. The same assumption is being used for endowment planning in other regional HCP/NCCPs in northern California.³⁵

The endowment needs a balance of \$102.7 million at the end of the permit term to fund net annual costs in perpetuity. The constant annual contribution during the permit term was calculated such that it is sufficient when combined with re-invested earnings to generate this balance at the end of 50 years.³⁶ See Appendix **Table A.4** for the endowment fund analysis.

The endowment assumptions and methodology including the schedule for funding shown in Table A.4, is in compliance with the requirements for HCP/NCCPs of the Mitigation Lands: Nonprofit Organizations chapter of the California Government Code.³⁷

Endowment fund contributions are allocated by subarea based on the size of the reserve by subarea shown in the last line in Table 3.2, above.

Plan Preparation

The cost of preparing the HCP/NCCP through June 30, 2018 was \$15.0 million. Funding has come from state and federal grants totaling \$1.8 million and the remainder, \$13.2 million, from the Placer County general fund. This amount funded directly by Placer County is added to the total cost of the Plan. The County is reimbursed for this expenditure from Plan revenues during the permit term.

Ninety-five percent of this reimbursement amount is allocated to the Valley subarea to reflect the substantially greater planning effort associated mitigating development in the Valley.

Cost Allocation Approach

This section describes the approach used to allocate costs to the land conversion fee by subarea. The amount of effect per acre of land conversion is the basis for assigning costs to various types of covered activities and related fee categories. The following sections apply this approach to calculate the land conversion fee for the Valley and Foothills subareas.

³⁵ Other HCP/NCCPs using a 3.25 percent investment earnings rate include those currently being implemented in East Contra Costa County, the Santa Clara Valley, and Yolo County.

³⁶ Modeling a constant annual contribution amount is reasonable though actual annual contributions are likely to vary above and below this amount based on land conversion fee revenue. The real rate of return and endowment contribution amount will be adjusted based on actual results during Plan implementation (see the *Periodic Fee Reviews* section at the end of this chapter).

³⁷ California Government Code, Sections 65965 through 65968.

Direct Effects Versus Gross Parcel Area for Low Density Rural Residential

Low density rural residential development tends to have project footprints and, therefore, direct effects from ground disturbance that are less than entire size of the parcel. Direct effects can be substantially less for larger parcels. Applying the land conversion fee based on direct effects could create burdensome information requirements in project applications for these small projects. Greater oversight and enforcement would then also be required by Placer County and the City of Lincoln to ensure that projects conformed to the level of direct effects anticipated when the fee was calculated.

These issues are particularly relevant in the Foothills where a substantial amount of low density rural residential development is anticipated.³⁸ By contrast, the large majority of development in the Valley is anticipated to be from planned developments where direct effects and parcel area are typically more congruent. However, the Valley also has some limited potential for low density rural residential development where these issues surface as well.³⁹

To avoid these application and oversight requirements, the land conversion fee is charged in most instances on gross parcel area rather than on the area of direct effects.⁴⁰ However, to maintain a reasonable relationship between the parcel area upon which the fee is applied and the need for mitigation of direct effects, the nexus analysis needs to consider the amount of land conversion (direct effect) per parcel and how that generally varies depending on the type of development. These considerations include:

- ◆ Larger parcels typically have larger direct effect footprints from low density rural residential development. However, the footprint as a proportion of total parcel area typically decreases as parcel area increases.⁴¹
- ◆ The direct effect footprint from low density rural residential development as a proportion of total parcel size tends to be small on parcels in the range of 10 to 20 acres and negligible on parcels above that threshold.⁴²

³⁸ HCP/NCCP, Section 4.4.1.3, *Foothills Potential Future Growth*, and Section 4.4.1.4, *Foothills Conservation and Rural Development*.

³⁹ HCP/NCCP, Section 4.4.1.2, *Valley Conservation and Rural Development*.

⁴⁰ Deductions from parcel area is made where documented avoidance of direct effects occurs including land approved by the PCA set aside as habitat. HCP/NCCP, Section 6.3.1.3, *General Condition 3, Land Conversion*. Also, the fee is applied based on disturbed area footprint rather than parcel area for covered activities in low density rural settings that do not include a dwelling unit. Finally, certain land conversion fees are applied per dwelling unit and not per parcel acre.

⁴¹ HCP/NCCP, Section 4.3.1.2, *Land Conversion In the Foothills*.

⁴² For example, the HCP/NCCP analysis of indirect effects from increasing rural development density in the Foothills suggests limited or no indirect effects on the balance of parcels greater than 10 acres in size. See HCP/NCCP, Section 4.3.4, *Methods to Assess Indirect Effects from the Increase in Rural Densities in the Foothills*.

The PCA tracks direct effect footprint and parcel area by project to verify and adjust these assumed relationships as needed during Plan implementation (see the *Periodic Fee Reviews* section at the end of this chapter).

Fragmentation Effects

Fragmentation is an indirect effect that occurs when patches of habitat are reduced in size and isolated by development resulting in reduced species diversity due to lower carrying capacity and reduced habitat quality due to increased edge influence from human activity. Fragmentation of the natural landscape as larger parcels are subdivided and developed has significant indirect and cumulative effect in addition to the amount of direct effects from land conversion. The effects of fragmentation are particularly common in the Foothills due to the dominant pattern of low density rural residential development discussed in the prior subsection.⁴³

The HCP/NCCP and supporting studies examined the existing pattern of fragmentation in the Foothills and used it to model the effects of the Foothills growth scenario. This analysis took into consideration that anticipated development in the Foothills over the permit term is largely occurring in areas that are already highly fragmented. The large unfragmented areas in the Foothills are expected to become part of the reserve system and will not be subject to effects from fragmentation for subdivision activity.

Developing a fee schedule that integrates the effects of fragmentation is difficult, however, due to the many different types of development patterns that can occur. The State's Subdivision Map Act offers reasonable thresholds to indicate levels of fragmentation. The Act governs approval of subdivisions by local jurisdictions.⁴⁴ Provisions of the Act distinguish between subdivisions that create five or more parcels (typically called "major subdivisions" in Placer County) versus four or fewer parcels (typically called "minor subdivisions" or "parcel maps").⁴⁵ Many local jurisdictions in the state including the City of Lincoln and Placer County have more streamlined procedures for approval of minor subdivisions as opposed to major subdivisions. This distinction is justified because minor subdivisions typically have a lower level of development activity, density, and impacts compared to major subdivisions. Consequently, this nexus analysis uses the threshold between minor and major subdivisions as a reasonable indicator of the degree of fragmentation effects associated with types of rural residential development.

⁴³ HCP/NCCP, Section 4.4.1.3, *Foothills Potential Future Growth*, and Section 4.4.1.4, *Foothills Conservation and Rural Development*.

⁴⁴ The Subdivision Map Act is contained in California Government Code, Sections 66410 through 66499.38.

⁴⁵ California Government Code, Section 66426.

Fee Categories to Capture Relative Effects

The nexus analysis develops fee categories based on types of covered activities to demonstrate a reasonable relationship between the amount of the land conversion fee and the proportionate cost of mitigation attributable to the type of development paying the fee. Types of covered activities used to develop the land conversion fee categories, described below, reflect the considerations discussed above regarding the relative effects of variation in footprint-to-parcel area and fragmentation.

For this reason, the fee categories are based on existing parcel size at time of plan adoption.

The term “existing parcel” used throughout these fee category descriptions means an existing parcel at time of Plan adoption. Thus, existing parcel size refers to the parcel size at time of Plan adoption, and subdivision activity refers to activity following Plan adoption through the end of the permit term. This approach reflects the underlying analysis of Plan effects that used existing parcel sizes to estimate the present extent of fragmentation effects, and the potential for further subdivision and development under the growth scenario, to estimate the impacts of covered activities.

Small Lots

The small lots category includes covered activities on existing parcels greater than 20,000 square feet up to 1.0 acre in size. The lower threshold corresponds to a provision in the Plan that excludes parcels of 20,000 square feet and smaller from being covered under the Plan and therefore from being subject to the Plan’s development fees.⁴⁶ The upper threshold of 1.0 acre corresponds to the distinction between small lots and low density rural residential (see next subsection).

On the one hand, projects on small lots have greater effects per gross parcel acre because direct effects are equal to gross parcel size. On the other hand, projects on small lots have less effect because their small size indicates that fragmentation of the landscape has already occurred prior to Plan adoption.

In the Foothills subarea, small lots are split into residential and nonresidential fee categories. This approach allows the Plan to incorporate other sources of mitigation funding from development not covered by the Plan but that benefit from the open space acquisition and fire hazard management provided by the Plan. See the *Foothills Land Conversion Fee* section, below, for more explanation.

⁴⁶ HCP/NCCP, Section 2.7, *Activities Not Covered by This Plan*.

Low Density Rural Residential

Low density rural residential includes covered activities for single family development on existing parcels greater than 1.0 acre in size that are not subdivided or subdivided into four or fewer parcels following Plan adoption. Low density rural residential has less effect per gross parcel acre because (1) land conversion direct effect tends to not occur over the entire parcel, and (2) less subdivision activity is related to a lower level of fragmentation. Unlike other covered activities, effects per acre decline as parcel size increases. This category has a cap of 20 acres on any individual parcel subject to the fee to reflect the negligible incremental effects from single family development on parcels above that size.

All Other Development

“All other development” includes all covered activities besides small lots and low density rural residential. All other development includes the large planned developments anticipated to cause much of the adverse effects from covered activities in the Valley.

These types of covered activities have more effect per gross parcel acre because (1) direct effects from the development footprint equals parcel size, and (2) fragmentation effects are higher compared to both small lots and minor subdivision low density rural residential.

As with the small lot category, in the Foothills subarea all other development is split into residential and nonresidential fee categories. As mentioned above, this approach allows the Plan to incorporate other sources of mitigation funding from development not covered by the Plan but that benefit from the open space acquisition and fire hazard management provided by the Plan. See the *Foothills Land Conversion Fee* section, below, for more explanation.

Summary of Fee Categories and Relative Effects

Fee categories and the overall effect per gross parcel acre that guide the nexus analysis and calculate land conversion fees are shown in **Table 3.4**. The category numbers (1a, 1b, 2a, 2b, etc.) refer to the Valley and Foothills land conversion fees developed in the next sections of this analysis and used in the fee schedules. To maintain a reasonable relationship between the amount of the fee and the proportionate cost of mitigation attributable to the type of development paying the fee, fees per parcel acre are:

- ◆ Lowest on low density rural residential
- ◆ Higher on small lots
- ◆ Highest on all other development.

Table 3.4: Land Conversion Effect by Fee Category

Fee Category and Subarea				Effect per Parcel Acre		Overall Effect per Parcel Acre
Valley		Foothill		Direct Effect	Fragmentation	
Small Lots						
1a	Covered activity on existing parcel greater than 20,000 square feet up to 1.0 acre	2a	Residential project on existing parcel greater than 20,000 square feet up to 1.0 acre	More	Less	MEDIUM
		2b	Non-residential project on existing parcel greater than 20,000 square feet up to 1.0 acre			
Low Density Rural Residential						
1b	Single family residential on existing parcel greater than 1.0 acre or on any parcel created by subdivision of an existing parcel into four or fewer total parcels	2c	Single family residential on existing parcel greater than 1.0 acre or on any parcel created by subdivision of an existing parcel into four or fewer total parcels	Less	Less ¹	LOW
				Effect per parcel acre declines as parcel size increases		
All Other Development						
1c	All other covered activities	2d	Single family residential on any parcel created by subdivision of existing parcel into five or more total parcels and multi-family residential	More	More	HIGH
		2e	Non-residential project on existing parcel greater than 1.0 acre or on any parcel created by subdivision			
<p>Note: Existing parcel is a parcel at time of Plan adoption.</p> <p>¹ Effects of fragmentation are greater in the Foothills though the overall effect per acre remains less than for small lots.</p> <p>Sources: Urban Economics.</p>						

In addition, in the Foothills compared to the Valley, the nexus analysis results in less of a difference between the fees on small lots and low density rural residential on the one hand, and fees on all other development on the other hand. This result is related to the increased benefits from fuels management

and increased effects from fragmentation in the Foothills that are associated with all three fee categories.

Valley Land Conversion Fee

The following sections describe how the nexus analysis determined the Valley land conversion fee schedule. The analysis captures the variation in overall effect per parcel acre by fee category (Table 3.4) to establish the necessary reasonable relationship between the amount of the fee and the type of development paying the fee.

Valley Land Use Scenario

The nexus analysis further refined the Valley land use scenario used to estimate direct effects (see the *Mitigation Fair Share by Subarea* section of this chapter, above) to estimate how the fee structure should apply to possible future development. This effort involved analysis of existing parcelization and zoning to assign future development over the permit term to fee categories. The scenario for the Valley showing covered activities and associated direct effects by fee category is shown in **Table 3.5**.

Table 3.5 shows that:

- ◆ Only a small share of covered activities, about two percent of direct effects and six percent of total parcel acreage, are anticipated in the small lot (fee 1a) and low density rural residential fee categories (fee 1b) combined.
- ◆ The relationship between effects and parcel area (direct effect acres from land conversion per parcel acre) is 1.0-to-1.0 for small lots and all other covered activities (fees 1a and 1c, respectively). For rural residential (fee 1b) this relationship is less than 1.0 to reflect the characteristics of this type of development described in the *Cost Allocation Approach* section, above.
- ◆ A relatively small amount of parcel acreage is estimated on individual low density rural residential parcels exceeding the 20-acre cap applied to fee 1b (see discussion in the *Low Density Rural Residential* subsection of the *Cost Allocation Approach* section, above). This adjustment is used in the calculation of fee revenue in Table 3.7.

Mitigation Costs and Required Funding

The Valley land conversion fee is based on the 72.6% mitigation share of total Plan costs allocated to the Valley as shown in **Table 3.6**. After a series of adjustments to total Valley costs, the average mitigation cost per acre of direct effect is calculated using the total acres of direct effect allowed by the HCP/NCCP during the permit term in the Valley (see Tables 3.1 and 3.5).

Table 3.5: Valley Land Use Scenario Allocated by Fee Category

Fee Category		Dwelling Units	Direct Effect (acres)	Parcel Area (acres)	Direct Effect per Parcel Acre
1a ¹	Residential project on existing parcel greater than 20,000 square feet up to 1.0 acre	49	34	34	1.00
	Non-residential project on existing parcel greater than 20,000 square feet up to 1.0 acre	NA	19	19	1.00
	Total covered activity on existing parcel greater than 20,000 square feet up to 1.0 acre	49	53	53	1.00
1b ²	Single family residential on existing parcel greater than 1.0 acre or on any parcel created by subdivision of an existing parcel into four or fewer total parcels	214	428	1,335	0.32
1c ³	All other development	78,737	19,972	19,972	1.00
Total		79,000	20,453	21,360	0.96
Fee 1b Adjustment for 10-acre Cap on Per Parcel Fee⁴					
	Total			1,335	
	Acres subject to 10-acre cap (no fee)			(110)	
	Net parcel area subject to fee			1,225	
<p>Note: Existing parcel is a parcel at time of Plan adoption.</p> <p>¹ Existing parcels 20,000 square feet or less are not covered activities and therefore not subject to HCP/NCCP development fees. Dwelling unit and parcel area data are from GIS query of vacant parcels in County land use database.</p> <p>² GIS query of vacant rural residential parcels in County land use database identified 443 parcels of which 20 percent (89 parcels) with an average existing parcel size of 15 acres are assumed to develop within the permit term (1,335 acres total). Subdivision is assumed to occur at an average density of 6.25 acres per parcel resulting in 2.0 acres of direct effect per dwelling unit.</p> <p>³ Dwelling units and direct effects represent remaining amounts after deducting categories 1a and 1b. Direct effect includes non-residential development. Parcel area based on direct effect per parcel area of 1.0.</p> <p>⁴ Adjustment applied in Table 3.7 to estimate total fee revenue. Acres subject to 10-acre cap are estimated at time of Plan adoption and will be refined during Plan implementation (see Periodic Fee Reviews section of this chapter).</p> <p>Sources: HCP/NCCP, Chapter 4, Table 4-1; HCP/NCCP, Appendix M (Growth Scenario Memo), Table 4; Placer County GIS; Table 3.1; Urban Economics.</p>					

Table 3.6: Valley Land Conversion Mitigation Cost per Acre of Direct Effect

Valley Costs (from cost model)	\$847,760,000
Valley Endowment Contribution	29,910,000
Valley Plan Preparation Reimbursement	<u>12,550,000</u>
Total Valley Plan Costs	\$890,220,000
Valley Special Habitat Costs	<u>(186,940,000)</u>
Costs Subject To Fair Share Allocation	\$703,280,000
Valley Mitigation Fair Share	<u>72.6%</u>
Valley Mitigation Cost Share (unadjusted)	\$510,580,000
Valley Share of Upper Salmonid Watersheds	<u>20,840,000</u>
Valley Mitigation Cost Share (adjusted)	\$531,420,000
Valley Direct Effect (acres)	<u>20,453</u>
Average Mitigation Cost per Acre of Direct Effect	\$25,983
Sources: Tables 3.2, 3.3, and 3.5.	

Total Plan costs are drawn from Table 3.3 and include the Valley's share of endowment contributions and Plan preparation costs. Special habitat costs are deducted because these costs are addressed in the special habitat fee nexus analysis described in Chapter 2. The net cost subject to the fair share allocation is multiplied by the Valley mitigation fair share from Table 3.2, and then added to the Valley share of upper salmonid watershed acquisition costs, to determine the total Valley mitigation cost share.⁴⁷ The mitigation cost share represents the amount to be funded by the Valley land conversion fee.

Valley Land Conversion Fee Schedule and Revenue

Table 3.7 shows how the Valley land conversion fee is determined and presents estimated revenue by fee category based on the growth scenario estimated for the permit term. Total estimated revenue is equal to the Valley mitigation cost share shown in Table 3.6.

⁴⁷ The upper salmonid watershed cost share is added after adjusting for the mitigation fair share because the upper salmonid watershed cost has already been adjusted for the mitigation cost share (see Table A.2).

Table 3.7: Valley Land Conversion Fee and Revenue by Category (2019 \$)

Fee Category		Average Mitigation Cost per Acre of Direct Effect	Relative Impact Factor ¹	Fee	Valley Growth Scenario (50-year permit term)		
					Dwelling Units	Parcel Area (acres)	Fee Revenue
1a ²	Covered activity on existing parcel greater than 20,000 square feet up to 1.0 acre	\$ 25,983	0.20	\$25,983 per parcel acre		53	\$ 280,000
1b ³	Single family residential on existing parcel greater than 1.0 acre or on any parcel created by subdivision of an existing parcel into four or fewer total parcels	\$ 25,983	0.15	\$25,983 per dwelling unit	214		\$ 830,000
		\$ 25,983	0.05	\$25,983 per parcel acre		1,225	\$ 1,590,000
1c	All other development	\$ 25,983	1.02	\$25,983 per parcel acre		19,972	\$528,720,000
		Total				21,250	\$531,420,000
		Valley Land Conversion Fee Cost Share					\$531,420,000
		Difference (due to rounding)					\$ -
<p>Notes: Existing parcel refers to a parcel at time of Plan adoption. Per acre fees apply to the entire parcel area excluding areas improved at time of Plan adoption and where avoidance occurs pursuant to Section 6.3.1.3, <i>General Condition 3, Land Conversion</i>, including land approved by the PCA set aside as habitat. For low density rural development, per acre fees apply only to the disturbed area footprint of covered activities unless the project includes a new dwelling unit (see Section 6.3.1.3.2, <i>Permanent Effect Avoidance for Low Density Rural Development</i>).</p> <p>¹ Relative impact factors based on guidance provided by Table 3.4 and derived from the HCP/NCCP effect model. Factor for fee 1a set to generate same fee as fee 1b for one-acre parcels to provide an equitable transition between the two fee categories.</p> <p>² Existing parcels 20,000 square feet or less are not covered activities and therefore not subject to HCP/NCCP development fees.</p> <p>³ Fee per acre capped at 10 acres per parcel. For purposes of calculating revenue, parcel area excludes acreage above this cap (see Table 3.6)</p> <p>Sources: Tables 3.5 and 3.6; Urban Economics.</p>							

As explained in more detail below, for each category the fee calculation adjusts the cost per acre of direct effect to account for the overall effect per parcel acre based on the guidance provided in Table 3.4. The resultant fee per parcel acre is lowest for low density rural residential (fee 1b), higher for small lots (fee 1a), and highest for all other development (fee 1c).

- ♦ **Small lots (fee 1a):** The fee is based on parcel size. The fee is set at 20 percent of the average mitigation cost per acre of direct effect to reflect the relatively lower level of impact associated with covered activities on existing small lots.
- ♦ **Low density rural residential (fee 1b):** This fee is applied both per dwelling unit and per parcel acre, so the combined fee declines on a per acre basis as parcel size increases to reflect declining direct effects per parcel acre. To provide for an equitable transition between fee 1a on small lots and fee 1b, fee 1b is set to equal 20 percent of the average mitigation cost per acre for a one-acre project. The relative impact per dwelling unit is assumed to be 15 percent of the average mitigation cost per acre, resulting in five percent of the average mitigation cost per acre being allocated to effects per parcel acre ($0.15 + 0.05 = 0.20$).

All other covered activities (fee 1c): The fee is based on parcel size. This category includes the large planned developments anticipated to generate much of the effects from covered activities in the Valley. The fee is set to ensure full funding of the Valley mitigation cost share after deducting revenue from fees 1a and 1b. Because fee 1c includes 94 percent of total parcel area subject to the fee (19,972 of 21,360 acres) the data and assumptions used to calculate fees 1a and 1b have little impact on the amount of fee 1c.

Foothills Land Conversion Fee

The following sections describe how the nexus analysis determined the Foothills land conversion fee schedule. The analysis captures the variation in overall effect per parcel acre by fee category (Table 3.4) to establish the necessary reasonable relationship between the amount of the fee and the type of development paying the fee.

Foothills Land Use Scenario

The nexus analysis further refined the Foothills land use scenario used to estimate effects by community type and establish permit term limits (see the *Mitigation Fair Share* section of this chapter, above). This effort involved analysis of existing parcelization and zoning to assign future development over the permit term to fee categories. The scenario for the Foothills showing covered activities and associated direct effects by fee category is shown in

Table 3.8. The Foothills has a significantly different land use scenario compared to the Valley because of (1) a lower level of total direct effect (see Table 3.1), and (2) a significant share of covered activity is low density rural residential development, accounting for about 68 percent of total direct effects. Lower growth is anticipated because of a lack of infrastructure, topographical constraints, and a lack of large developable parcels.

Of more significance to the nexus analysis and funding plan, 33 percent of all new dwelling units in the Foothills (4,597 out of 14,000) are anticipated to not be covered activities under the Plan and not subject to the Plan's development fees. Development that is not a covered activity under the Plan is anticipated to occur only on small lots (less than one acre, fees 2a and 2b) on urban land cover types. Under most scenarios, development activity on existing urban land cover is not covered under the Plan because of the lack of effect on habitat and related species covered by the Plan.

At the bottom of Table 3.8 are other data derived from the land use scenario and used in the nexus analysis:

- ◆ The 20-acre cap on the parcel area for the low density rural residential fee, fee 2c (see Table 3.13).
- ◆ The total estimated non-residential development parcel acres to estimate equivalent dwelling units for fees 2b and 2c (see next subsection and Appendix Table A.7).

Foothills Land Conversion Fee Approach

Foothills subarea development that is not a covered activity under the Plan benefits from the Plan's open space acquisition and fire hazard management. If the benefits and costs of these Plan actions are not spread fairly to all development in the Foothills the Plan's land conversion fee could unfairly burden covered activities.

The nexus analysis is based on an approach that integrates impacts from development not covered by the Plan with effects from the Plan's covered activities. This approach is summarized in **Table 3.9** and in the text that follows and is described in more detail in the following subsections. Key to this approach is breaking out the Foothills land conversion fee into two parts. The Part A component, complemented by an equivalent but separate open space and fire hazard management fee, applies to all Foothills subarea development whether or not a covered activity. The Part B component only applies to covered activities.

The approach is described in the steps, below:

- ◆ The cost of open space land acquisition and fire hazard management that benefit all new development are broken out from other Foothills costs.

Table 3.8: Foothills Land Use Scenario Allocated by Fee Category

Fee Category		Dwelling Units	Direct Effect (acres)	Parcel Area (acres)	Direct Effect per Parcel Acre
2a	Residential project on existing parcel up to 1.0 acre				
	Covered activities ¹	1,089	449	449	1.00
	Non-covered activities	4,597	1,303	1,303	1.00
	Subtotal	5,686	1,752	1,752	1.00
2b	Non-residential project on existing parcel up to 1.0 acre				
	Covered activities ¹		50	50	1.00
	Non-covered activities		50	50	1.00
	Subtotal		100	100	1.00
2c	Single family residential on existing parcel greater than 1.0 acre or on any parcel created by subdivision of an existing parcel into four or fewer total parcels	3,675	6,526	25,752	0.25
2d	Single family residential on any parcel created by subdivision of existing parcel into five or more total parcels and multi-family residential	4,639	2,429	4,520	0.54
2e	Non-residential project on existing parcel greater than 1.0 acre or on any parcel created by subdivision		193	193	1.00
	Subtotal (2c, 2d, 2e)	8,314	9,148	30,465	0.30
	Total	14,000	11,000	32,317	0.34
	Covered activities	9,403	9,647	30,964	0.31
	Non-covered activities	4,597	1,353	1,353	1.00
Adjustment for 20-acre Cap on Per Parcel Fee (for Table 3.13)²					
2c	Total			25,752	
	Acres Subject To 20-acre Cap (no fee)			(6,759)	
	Net parcel area subject to the fee			18,993	
Non-residential Development (for Table A.7)					
2b	Total			100	
2e	Total			193	
	Grand Total			293	
<p>Notes: Existing parcels refers to a parcel at time of Plan adoption. All data based on Foothills effect model (HCP/NCCP, Chapter 4) and based on data from County parcel database</p> <p>¹ Existing parcels 20,000 square feet or less are not covered activities and therefore not subject to HCP/NCCP development fees.</p> <p>² Adjustment applied in Table 3.13 to estimate total fee revenue. Acres subject to 20-acre cap are estimated at time of Plan adoption and will be refined during Plan implementation (see Periodic Fee Reviews section at end of this chapter).</p> <p>Sources: MIG TRA Environmental Sciences (HCP/NCCP Effects Model Output); HCP/NCCP, Chapter 4, Table 4-1, HCP/NCCP, Appendix M (Growth Scenario Memo), Table 4; Urban Economics.</p>					

Table 3.9: Foothill Land Conversion Fee Approach

	Foothills Land Conversion Fee	
	Part A All Development	Part B Covered Activities Only
Plan Actions Funded by Fee	<ul style="list-style-type: none"> • Foothills open space land acquisition • Foothills fire hazard management 	<ul style="list-style-type: none"> • All Foothills mitigation actions except those funded by Part A fee
Fee Categories Subject to Fee	<ul style="list-style-type: none"> • Small lots • Low density rural residential • All other development 	<ul style="list-style-type: none"> • Low density rural residential • All other development
Cost Allocation		
Land Use Scenario	All covered activities and other development not covered by the Plan	Covered activities only for categories subject to fee (low density rural residential and all other)
Measure of Impact	Service population (residents and workers) converted to equivalent dwelling units (EDUs)	Acres of direct effect
Application of Fee		
Residential	Per dwelling unit	Per acre
Non-residential	Per acre	Per acre
Sources: Urban Economics.		

- ◆ Part A of the Foothills land conversion fee allocates land acquisition and fire hazard management costs across all new development in the Foothills, both covered and non-covered activities.
- ◆ For the Part A fee, service population (the number of residents and workers) is the measure of need for the Plan’s open space acquisition and fire hazard management actions from all new development, whether a covered activity or not. Service population better reflects the level of need for these specific Plan actions than does acres of land conversion because residents and businesses are the primary beneficiaries of open space and fire hazard management. This approach allows the Part A fee (for covered activities) and the open space and fire hazard management fee (for non-covered activities) to be applied to development in the same manner.

- ◆ Service population is converted to “equivalent dwelling units” (EDUs)⁴⁸ to allocated costs for the Part A fee across both residential and non-residential development for covered and non-covered activities. The fee is applied per dwelling unit on residential development and per acre on nonresidential development.⁴⁹
- ◆ All Foothills covered activities pay the Part A fee to fund open space land acquisition and fire hazard management costs. All non-covered activities in the Foothills pay the same fee supported by a separate nexus analysis for an open space and fire hazard management fee.
- ◆ For covered activities on small lots (fees 2a and 2b) the Part A fee is assumed to be sufficient to reflect the overall effect per parcel acre for these fee categories based on the guidance provided in Table 3.4.
- ◆ Part B of the Foothills land conversion fee allocates the remaining mitigation cost share across covered activities in the low density rural residential and all other development fee categories.
- ◆ The Part B fee is applied per parcel acre in a manner similar to the Valley land conversion fee.

Foothills Land Conversion Mitigation Costs, Funding & Fee Schedule

Part A Fee

Table 3.10 shows the calculation of the 65.4% mitigation cost share for the Part A fee. After a series of adjustments to account for other funding sources and credits (see explanation in text following the table), Part A costs are allocated per equivalent dwelling unit across all covered and non-covered activities in the Foothills through the permit term.

Costs to establish the Foothills reserve system (land acquisition) in Table 3.10 are drawn from Table 3.3. Costs for fire hazard management are drawn from **Table A.5**. The total cost of these Plan actions is multiplied by the Foothills mitigation fair share from Table 3.2 to determine the cost share that could be funded by Part A of the Foothills land conversion fee. This subtotal is reduced based on funding from the following sources:

⁴⁸ “Equivalent dwelling unit” (EDU) is a concept commonly used in nexus studies to reflect the impact of one resident compared to one worker and convert both to the impact of one dwelling unit. This approach enables costs to be fairly allocated across both residential and non-residential development.

⁴⁹ Many nexus studies that use a service population approach apply the fee to non-residential development based on building square feet because as a metric it is more closely related to the number of workers than parcel acres. However, in the Foothills less than one percent of covered activities are anticipated to be non-residential development (based on parcel acreage). Given this small share, and to avoid further complicating the fee schedule by adding another metric (building square feet), non-residential EDUs are converted to parcel acres as a reasonable indicator of employment for application of the Part A Foothills land conversion fee.

Table 3.10: Foothills Land Conversion Mitigation Cost per Equivalent Dwelling Unit (EDU) (Part A)

Foothills Reserve System (land acquisition)	\$ 94,040,000
Foothills Fire Hazard Management	<u>6,920,000</u>
Part A Costs Subject To Fair Share Allocation	\$100,960,000
Foothills Mitigation Fair Share	<u>65.4%</u>
Subtotal	\$ 66,030,000
Bickford Ranch Open Space Funding ¹	(500,000)
Foothills Existing Reserve Credit	(11,980,000)
Valley Share of Upper Salmonid Watersheds	<u>(20,840,000)</u>
Foothills Mitigation Part A Cost Share	\$ 32,710,000
Equivalent Dwelling Units (EDU) ²	<u>14,354</u>
Average Mitigation Cost per EDU	\$ 2,279
<p>¹ Funding for open space provided by Bickford Ranch development agreement that supports reserve land acquisition in the Foothills based on a fee of \$265 per dwelling unit on 1,890 dwelling units.</p> <p>² Includes activities on small parcels in urban land cover types that have no direct effect and are not subject to the land conversion fee. As explained in the text, such activities are subject to an open space and fire hazard management impact fee.</p> <p>Sources: Michael J. Johnson, Director of Community Development, memorandum to Placer County Board of Supervisors regarding the Bickford Ranch Specific Plan, December 8, 2015, p. 20; Tables 3.2, 3.3, A.5, A.6, and A.7.</p>	

- ◆ Bickford Ranch is an approved development project in the Foothills that as a condition of development provides \$500,000 for open space funding for the PCA to use in reserve land acquisition.
- ◆ The County has already purchased substantial open space properties (for example, Harvego Bear River Preserve and Hidden Falls Regional Park) in the Foothills with funding from the County's Open Space Trust Fund that is credited to the reserve obligation under the Plan (see **Table A.6**).⁵⁰

⁵⁰ The existing reserve credit excludes lands purchased with funds that cannot be used to mitigate the effects of covered activities under the Plan. See HCP/NCCP, Chapter 5, *Existing Reserve Credit*, for more detail.

- ◆ The Valley share of upper salmonid watershed acquisition in the Foothills is subtracted because this land acquisition cost obligation is shifted to the Valley and included in the Valley land conversion fee (see Table 3.6).

The number of equivalent dwelling units (EDUs) shown in Table 3.10 is based on covered activities and all other development in the Foothills and drawn from **Table A.7**. One worker (and the associated business activity) is assumed to generate a need for and benefit from the open space acquisition and fire hazard management funded by the Plan at half (50 percent) of the level of one resident. This assumption reflects on average lower occupancy over a 24-hour period and fewer building square feet per occupant for non-residential compared to residential development.

Table 3.11 shows how Part A of the Foothills land conversion fee is determined and presents estimated revenue by fee category. For each category, the cost per EDU is adjusted for the relative effect per EDU. One dwelling unit equals one EDU and one acre of non-residential development equals 1.44 EDUs based on the analysis shown in Table A.7. At the bottom of the table is an estimate of revenue from the proposed open space and fire hazard management fee (see **Table A.8**), showing that the combined revenue from the two fees fully funds the Part A fee mitigation cost share.

Part B Fee

Part B of the Foothills land conversion fee is based on the mitigation share of total Plan costs allocated to the Foothills minus costs funded by the Part A fee as shown in **Table 3.12**. After adjusting total Foothills costs for funding from the Part A fee and special habitat costs, the mitigation cost per acre of direct effect is calculated using total acres of direct effect from those covered activities subject to the Part B fee (fees 2c, 2d, and 2e, see Table 3.8).⁵¹

Total Plan costs are drawn from Table 3.3 and include the Foothills share of endowment contributions and Plan preparation costs. Costs allocated to the Part A fee nexus are deducted as are special habitat costs addressed in the special habitat fee nexus analysis described in Chapter 2. The net cost subject to the fair share allocation is multiplied by the Foothills mitigation fair share from Table 3.2 to determine the Foothill mitigation cost share for Part B. The mitigation cost share represents the amount to be funded by Part B of the Foothills land conversion fee.

⁵¹ As explained in the *Foothills Land Conversion Fee Approach* section, the Part A fee is at a level sufficient to reflect the relative impact per acre of direct effect for small lots based on the guidance provided in Table 3.4. Thus, the Part B fee allocates the remaining mitigation cost share across covered activities subject to the two other major fee categories, low density rural residential and all other covered activities (fees 2c, 2d, and 2e).

Table 3.11: Foothills Land Conversion Fee and Revenue by Category (Part A)

Fee Category		Average Mitigation Cost per EDU	Relative Impact Factor ¹	Fee	Foothills Growth Scenario (50-year permit term)		
					Dwelling Units	Parcel Area (acres)	Fee Revenue
2a ²	Residential project on existing parcel greater than 20,000 square feet up to 1.0 acre	\$ 2,279	1.00	\$2,279 per dwelling unit	1,089		\$ 2,480,000
2b ²	Non-residential project on existing parcel greater than 20,000 square feet up to 1.0 acre	\$ 2,279	1.21	\$2,757 per parcel acre		50	\$ 140,000
2c	Single family residential on existing parcel greater than 1.0 acre or on any parcel created by subdivision of an existing parcel into four or fewer total parcels	\$ 2,279	1.00	\$2,279 per dwelling unit	3,675		\$ 8,380,000
2d	Single family residential on any parcel created by subdivision of existing parcel into five or more total parcels and multi-family residential	\$ 2,279	1.00	\$2,279 per dwelling unit	4,639		\$10,570,000
2e	Non-residential project on existing parcel greater than 1.0 acre or on any parcel created by subdivision	\$ 2,279	1.21	\$2,757 per parcel acre		193	\$ 530,000
Total					9,403	243	\$22,100,000
Open Space & Fire Hazard Management Fee							\$10,610,000
Total Fee Revenue							\$32,710,000
Foothills Land Conversion Fee (Part A) Cost Share							\$32,710,000
Difference							\$ -
<p>Notes: Existing parcel refers to a parcel at time of Plan adoption.</p> <p>¹ Relative impact factors based on one dwelling unit per EDU and one acre of non-residential development per 1.44 EDUs based on the analysis shown in Table A.7.</p> <p>² Existing parcels 20,000 square feet or less are not covered activities and therefore not subject to HCP/NCCP development fees.</p> <p>Sources: Urban Economics; Tables 3.8, 3.10, A.7, and A.8.</p>							

Table 3.12: Foothills Land Conversion Mitigation Cost per Acre of Direct Effect (Part B)

Foothills Costs (from cost model)	\$249,990,000
Foothills Endowment Contribution	11,690,000
Foothills Plan Preparation Reimbursement	<u>660,000</u>
Total Foothills Plan Costs	\$262,340,000
Foothills Land Conversion Fee Part A Costs	(100,960,000)
Foothills Special Habitat Costs	<u>(68,210,000)</u>
Part B Costs Subject To Fair Share Allocation	\$ 93,170,000
Foothills Mitigation Fair Share	<u>65.4%</u>
Foothills Mitigation Part B Cost Share	\$ 60,930,000
Foothills Direct Effect (fees 2d, 2e, 2e) (acres)	<u>9,148</u>
Average Mitigation Cost per Acre of Direct Effect	\$ 6,660
Sources: Tables 3.2, 3.3, 3.8, and 3.10.	

Table 3.13 shows how Part B of the Foothills land conversion fee is determined and presents estimated revenue by fee category. The relative impact factor for the low density rural residential category (fee 2c) reflects the guidance provided by Table 3.4 and the factor used for the Valley land conversion fee low density rural residential category. Total estimated revenue is equal to the Foothills Part B mitigation cost share shown in Table 3.12.

Table 3.14 shows the total Foothills land conversion fee based on the sum of the Part A and Part B fees.

The combined Part A and B Foothills land conversion fee reflects the overall effect per parcel acre based on the guidance provided in Table 3.4 and derived from the HCP/NCCP effect model:

- ◆ The total fee is lowest for low density rural residential (fee 2c), higher for small lots (fees 2a and 2b), and highest for all other development (fees 2d and 2e).
- ◆ The fee on low density rural residential development (fee 2c) is higher as a percent of the fee on all other development (fee 2d and 2e), versus comparable fees for the Valley (fee 1b compared to fee 1c), because of the increased effects of fragmentation in the Foothills.

Table 3.13: Foothills Land Conversion Fee and Revenue by Category (Part B)

Fee Category		Average Mitigation Cost per Acre of Direct Effect	Relative Impact Factor ¹	Fee	Foothills Growth Scenario (50-year permit term)	
					Parcel Area (acres)	Fee Revenue
2c ²	Single family residential on existing parcel greater than 1.0 acre or on any parcel created by subdivision of an existing parcel into four or fewer total parcels	\$ 6,660	0.20	\$1,332 per parcel acre	18,993	\$25,300,000
2d	Single family residential on any parcel created by subdivision of existing parcel into five or more total parcels and multi-family residential	\$ 6,660	1.14	\$7,560 per parcel acre	4,520	\$34,170,000
2e	Non-residential project on existing parcel greater than 1.0 acre or on any parcel created by subdivision	\$ 6,660	1.14	\$7,560 per parcel acre	193	\$ 1,460,000
Total					23,706	\$60,930,000
Foothills Land Conversion Fee (Part B) Cost Share						\$60,930,000
Difference						\$ -
<p>Note: Existing parcel refers to a parcel at time of Plan adoption.</p> <p>¹ Relative impact factors based on guidance provided by Table 3.4 and derived from the HCP/NCCP effect model. Factors also takes into account combined Part A and B fees for each fee category.</p> <p>² Fee per acre capped at 20 acres per parcel. For purposes of calculating revenue, parcel area excludes acreage above this cap (see Table 3.8).</p> <p>Source: Tables 3.8 and 3.12; Urban Economics.</p>						

Table 3.14: Foothills Land Conversion Fee (2019 \$)

Fee Category		Part A Fee	Part B Fee	Total Fee
2a	Residential project on existing parcel greater than 20,000 square feet up to 1.0 acre	\$2,279 per dwelling unit	NA	\$ 2,279 per dwelling unit (no per acre fee)
2b	Non-residential project on existing parcel greater than 20,000 square feet up to 1.0 acre	\$2,757 per acre	NA	\$ 2,757 per acre
2c	Single family residential on existing parcel greater than 1.0 acre or on any parcel created by subdivision of an existing parcel into four or fewer total parcels	\$2,279 per dwelling unit	\$1,332 per parcel acre	\$ 2,279 per dwelling unit plus
				\$ 1,332 per acre up to \$13,320 per parcel maximum amount ¹
2d	Single family residential on any parcel created by subdivision of existing parcel into five or more total parcels and multi-family residential	\$2,279 per dwelling unit	\$7560 per parcel acre	\$ 2,279 per dwelling unit plus \$ 7,560 per acre
2e	Non-residential project on existing parcel greater than 1.0 acre or on any parcel created by subdivision	\$2,757 per acre	\$7560 per parcel acre	\$10,317 per acre
<p>Note: Existing parcel refers to parcels at time of Plan adoption.</p> <p>Per acre fees apply to the entire parcel area excluding areas improved at time of Plan adoption and where avoidance occurs pursuant to Section 6.3.1.3, <i>General Condition 3, Land Conversion</i>, including land approved by the PCA set aside as habitat. For low density rural development, per acre fees apply only to the disturbed area footprint of Covered Activities unless the project includes a new dwelling unit (see Section 6.3.1.3.2, <i>Permanent Effect Avoidance for Low Density Rural Development</i>).</p> <p>For mixed use projects with multi-family residential, the project pays the higher fee of either category 2d or category 2e.</p> <p>¹ Maximum amount per parcel applies to per acre fee only. Dwelling unit fee is in addition to the per acre fee.</p> <p>Sources: Tables 3.11 and 3.13.</p>				

Land Conversion Fee Summary

The land conversion fee for both subareas and all fee categories are shown in **Table 3.15**.

Mitigation Fee Act Findings

Based on the nexus analysis presented in this chapter, below are the findings required by the MFA for adoption of the land conversion fee shown in Table 3.15. See Chapter 1 for more background on the MFA and these findings.

Purpose: The purpose of the fee is to mitigate the direct, indirect, and cumulative effects of land conversion on habitat, including natural, semi-natural, and agricultural communities, except effects mitigated by special habitat fees.

Use: Fee revenue will be used for the mitigation share of Plan costs except mitigation costs funded by other sources including special habitat and temporary effect fees.

Impact: There is a reasonable relationship between the need for mitigation and covered activities that cause land conversion because land conversion from covered activities results in permanent loss of habitat.

Benefit: There is a reasonable relationship between the use of fee revenue and covered activities paying the fee because fee revenue is restricted to the mitigation share of Plan costs except mitigation costs funded by other sources including special habitat and temporary effect fees.

Proportionality: There is a reasonable relationship between the amount of the fee and the proportionate cost of mitigating effects on habitat caused by covered activities paying the fee because (1) the fee amounts vary based on mitigation costs by subarea (Valley and Foothills), (2) the fee amounts vary across types of covered activities (small lots, low density rural residential, and all other development) based on level of effect from land conversion and fragmentation, and (3) the fee varies based on the size (measured by dwelling units and/or parcel acreage) and therefore effect of the project paying the fee.

Table 3.15: Land Conversion Fee Schedule (2019 \$)

Plan Area A – Valley		
1a	Covered activity on existing parcel greater than 20,000 square feet up to 1.0 acre	\$ 5,197 per acre
1b	Single family residential on existing parcel greater than 1.0 acre or on any parcel created by subdivision of an existing parcel into four or fewer total parcels	\$ 3,897 per dwelling unit plus
		\$ 1,299 per acre up to \$12,990 maximum amount ¹
1c	All other covered activities	\$26,473 per acre
Plan Area A - Foothills		
2a	Residential project on existing parcel greater than 20,000 square feet up to 1.0 acre	\$ 2,279 per dwelling unit
2b	Non-residential project on existing parcel greater than 20,000 square feet up to 1.0 acre	\$ 2,757 per acre
2c	Single family residential on existing parcel greater than 1.0 acre or on any parcel created by subdivision of an existing parcel into four or fewer total parcels	\$ 2,279 per dwelling unit plus
		\$ 1,332 per acre up to \$13,320 maximum amount ¹
2d	Single family residential on any parcel created by subdivision of existing parcel into five or more total parcels and multi-family residential	\$ 2,279 per dwelling unit plus
		\$ 7,560 per acre
2e	Non-residential project on existing parcel greater than 1.0 acre or on any parcel created by subdivision	\$10,317 per acre
Plan Area B		
Valley (Component B1: Roseville / Rocklin / Loomis area)		
3a	All covered activities	\$26,473 per acre
Foothills (Component B1: Auburn area and Component B2)		
3b	Covered activity on existing parcel up to 1.0 acre	\$ 2,757 per acre
3c	Covered activity on existing parcel greater than 1.0 acre	\$10,317 per acre
<p>Notes: Existing parcel refers to a parcel at time of Plan adoption.</p> <p>Per acre fees apply to the entire parcel area excluding areas improved at time of Plan adoption and where avoidance occurs pursuant to Section 6.3.1.3, <i>General Condition 3, Land Conversion</i>, including land approved by the PCA set aside as habitat. For low density rural development, per acre fees apply only to the disturbed area footprint of Covered Activities unless the project includes a new dwelling unit (see Section 6.3.1.3.2, <i>Permanent Effect Avoidance for Low Density Rural Development</i>).</p> <p>For mixed use projects with multi-family residential, the project pays the higher fee of either category 2d or category 2e.</p> <p>¹ Maximum amount per parcel applies to per acre fee only. Per dwelling unit fee is in addition to per acre fee.</p> <p>Source: Tables 3.7 and 3.14.</p>		

Periodic Fee Reviews

Under the HCP/NCCP, the PCA is required to conduct a comprehensive review of HCP/NCCP development fees every five years during Plan implementation.⁵² These periodic fee reviews will inform updates to this nexus analysis and the land conversion fee schedule shown in Table 3.15. Based on periodic fee reviews, the land conversion fee schedule will be adjusted to ensure that total fee revenue over the permit term fully fund the net cost of mitigation.

Cost and Revenue Update

As shown in Tables 3.6, 3.10, and 3.12, the net cost of mitigation is based on the mitigation fair share of total Plan costs adjusted for special habitat costs and other mitigation revenues. Periodic fee reviews will include comprehensive updates to all Plan costs and any offsetting revenues that affect the land conversion fee nexus analysis.

Offsetting revenues will include revenue from (1) the two special habitat fees on indirect effects (fees 4b and 4e described in Chapter 2) and (2) the temporary effect fee (see Chapter 4). As explained in these chapters, revenue from these fees can fund a range of actions also funded by the land conversion fee. Revenue from these fees is not included in the land conversion fee nexus analysis because it could not be estimated at the time of Plan adoption.⁵³

To ensure that covered activities are fully credited for all fee revenue, periodic fee reviews will credit revenue from these fees against mitigation costs assigned to the land conversion fee (reducing the land conversion fee as a result). Revenue from these fees generated by covered activities located in the Valley will be credited against the Valley land conversion fee. Revenue from these fees generated by covered activities in the Foothills will be credited against Part A of the Foothills land conversion fee.

Land Use Scenario Update

Periodic fee revenues will be used to update the Valley and Foothills land use scenarios in Tables 3.5 and 3.8. The HCP/NCCP limits the level of direct effects (acres) over the permit term. The land conversion fee, however, is paid based on dwelling units and parcel acres. The PCA must track actual development patterns and the relationships between direct effects, dwelling

⁵² HCP/NCCP, Section 9.4.1.7.2, *Periodic Assessment and Adjustment of Fees*.

⁵³ The HCP/NCCP includes estimates for temporary effects that pay the temporary effect fee. However, the actual amount of temporary effects could vary substantially and be considerably less than estimated maximum levels (see HCP/NCCP, Section 4.3.2, *Methods for Assessing Temporary Direct Effects*, Section 4.3.3). The Plan does not include estimates of indirect effects that pay the two special habitat fees on indirect effects (fee 4b or fee 4e).

units, and parcel acres, and adjust as needed to ensure that the land conversion fee revenue will fully fund allocated costs by the end of the permit term (see revenue estimates by fee category in Tables 3.7, 3.11, and 3.13).

The Foothills scenario will be updated to reflect the extent of non-covered activities subject to the open space and fire hazard management fee over the permit term (see Table 3.8). The extent of non-covered activities subject to the fee affects the net mitigation costs for Part A of the Foothills land conversion fee (see Table 3.11).

Relative Impact Factors

The relative impact factors in Tables 3.7 and 3.13 convert mitigation costs per acre of direct effects into a fee applied per parcel acre and per dwelling unit. Likewise, the relative impact factors in Table 3.11 convert open space and fire hazard management costs per equivalent dwelling unit into benefits per parcel acre or per dwelling unit. The periodic fee reviews may require changes to the relative impact factors. Such changes need to consider:

- ◆ Land use scenario updates to direct effects, dwelling units, and parcel acres by fee category
- ◆ The guidance provided by Table 3.4 and the HCP/NCCP effect model regarding overall effect per parcel acre by fee category including per dwelling unit fees (lowest effect from low density rural residential, higher effects from small lots, and highest effects from all other development)
- ◆ The need to maintain full funding of the net mitigation cost share over the permit term assigned to the Valley land conversion fee and Parts A and B of the Foothills land conversion fee.

In the Valley, fee 1c represents nearly all of the direct effects allowed through the end of the permit term. Thus, the relative impact for this fee category is likely to remain very close to the average mitigation cost per acre shown in Table 3.7, regardless of changes to fees 1a and 1b.

4. TEMPORARY EFFECT FEE

This chapter documents the nexus analysis for the Plan's temporary effect fee. The fee is based on the special habitat and land conversion fees described in Chapters 2 and 3, respectively.

Temporary effects for purposes of the temporary effect fee are direct effects from covered activities that alter land cover for less than one year. The temporary effect fee is based on the amount of the land conversion or special habitat fee that otherwise applies, with the fee reduced to reflect the temporal aspect of the effect.

To qualify as a temporary effect, the disturbed area must recover or be restored to pre-project or ecologically improved conditions within one year. Examples of permitted temporary effects include routine maintenance in stream channels for flood control, maintenance along roadsides for highways, construction lay down areas, and short-term disturbance of the landscape for a linear project such as a pipeline. Most construction projects do not qualify as temporary effects due to their size and their level of land disturbance, which usually cannot conform to the required one-year time frame for complete restoration from time of groundbreaking.⁵⁴

Application of Fee

The temporary effect fee applies to most types of effects that, if permanent, would be subject to the land conversion and special habitat fees. In the case of special habitats, the temporary effect fee only applies to effects that if permanent would be subject to:

- ◆ Vernal pool direct effects fee (fee 4a)
- ◆ Aquatic/wetland fee (fee 4c)
- ◆ Riverine/riparian fee (fee 4d).

Covered activities that otherwise are subject to the land conversion fee and special habitat fees listed above, but for their temporary effect, pay a temporary effect fee.

There is no temporary effect fee for the following special habitat fees because temporary effects are not significant enough to warrant application of the fee:

- ◆ Vernal pool immediate watershed effects fee (fee 4b)

⁵⁴ For more detailed discussion of temporary effects, see HCP/NCCP, Section 4.3.2, *Methods: Temporary Direct Effects*.

- ◆ Riverine/riparian buffer fee (fee 4e)
- ◆ Stream System encroachment fee (fee 4f)
- ◆ Salmonid stream channel fee (fee 4g)

The land conversion temporary effect fee is also not assessed on any covered project with temporary effects of less than 0.10 acre because the effects are not significant enough to warrant application of the fee and to reduce administrative costs. This exception is not applicable to effects on special habitats subject to the temporary effect fee.

Determination of Fee

Projects subject to the temporary effect fee pay the fee in one of two ways, as selected by the project applicant:

- ◆ For activities that occur once or infrequently, the project proponent pays a fee equal to two percent of the fee that otherwise applies to that project footprint for each year in which the activity occurs. Two percent represents one year out of the 50-year permit term. Failure to complete the project and return the site to pre-project conditions within one year of groundbreaking due to delays in construction or for any other reason result in application of the full fee.
- ◆ For activities that meet the technical requirement of restoration within one year but occur frequently, the project proponent may elect to pay a one-time fee equal to 100 percent of the fee that otherwise applies to that project footprint and therefore covers repeated implementation of the activity for the entire permit period.

Temporary effects that occur in the same location repeatedly during the permit term and that pay the full fee for permanent effects that otherwise applies are counted and tracked as a permanent effect. Temporary effect fees paid on a site can be credited toward any permanent effect fees that may be required on the same affected area in the future.

Use of Revenue

Temporary effects and consequent fee revenue are likely to be quite small relative to permanent effects and are difficult to forecast.⁵⁵ Therefore,

⁵⁵ The HCP/NCCP includes estimates for temporary effects that pay the temporary effect fee. However, the actual amount of temporary effects could vary substantially and be considerably less than estimated maximum levels (see HCP/NCCP, Section 4.3.2, *Methods for Assessing Temporary Direct Effects*, Section 4.3.3).

temporary effect fee revenue could not be estimated at the time of Plan adoption and is not included in the funding plan (see Chapter 5).

Revenue from the temporary effect fee can fund a range of actions also funded by the land conversion fee. To ensure that covered activities are fully credited for all fee revenue as described in Chapter 3, periodic fee reviews will use the nexus analysis to credit temporary effect fee revenue against mitigation costs assigned to the land conversion fee.⁵⁶ Revenue from the temporary effect fee generated by covered activities located in the Valley will be credited against the Valley land conversion fee. Revenue from this fee generated by covered activities in the Foothills will be credited against Part A of the Foothills land conversion fee.

Mitigation Fee Act Findings

Based on the nexus analysis presented in this chapter, below are the findings required by the MFA for adoption of the temporary effect fee. See Chapter 1 for more background on the MFA and these findings.

Purpose: The purpose of the fee is to mitigate the temporary effects of land conversion on habitat, including natural, semi-natural, and agricultural communities.

Use: Fee revenue will be used for the mitigation share of Plan costs assigned to the land conversion fee by subarea (Valley and Foothills).

Impact: There is a reasonable relationship between the need for mitigation and covered activities that cause temporary effects because temporary ground disturbance from covered activities results in temporary loss of habitat.

Benefit: There is a reasonable relationship between the use of fee revenue and covered activities paying the fee because fee revenue is restricted to costs assigned to, and credited against revenue generated by, the land conversion fee that funds a range of actions to mitigate temporary effects.

Proportionality: There is a reasonable relationship between the amount of the fee and the proportionate cost of mitigating effects on habitat caused by covered activities paying the fee because (1) the fee varies based on the cost of mitigating permanent effects, and (2) the fee reflects mitigation costs based on the duration of the temporary effect.

⁵⁶ HCP/NCCP, Section 9.4.1.7.2, *Periodic Assessment and Adjustment of Fees*, and the section *Periodic Fee Reviews* in Chapter 3 of this Nexus Study.

5. FUNDING PLAN

This chapter describes the HCP/NCCP funding plan and demonstrates that anticipated revenues are sufficient to fund all Plan costs. Sources of funding for mitigation of effects have been described in the preceding chapters, primarily consisting of special habitat fees and the land conversion fee. This chapter describes sources restricted to funding the conservation component of Plan actions and other sources that may be used to fund any Plan action. A summary of all funding sources and uses is provided at the end of this chapter.

Conservation Funding

Funding restricted to the conservation component of Plan actions is described in this section, focusing on the most significant source of funding which is from state and federal grants. No source discussed in this section may be used to fund the mitigation component of Plan actions.

State and Federal Grants

State and federal funding sources that are reasonably anticipated to provide funding for the HCP/NCCP are summarized in this subsection. More detail can be found in the HCP/NCCP, Chapter 9, Section 9.4.3, *State and Federal Funding*.

The U.S. Congress and the California Legislature have determined that conserving species and their natural habitats is an issue of both national and state importance. The federal and state governments will strive to provide the funding anticipated in the funding plan. Existing state and federal sources are mostly restricted to land acquisition and special habitat restoration capital costs. Funding could come from a variety of sources, including several sources administered by the Wildlife Agencies. See Table 9-9, *Likely Federal and State Funding Sources for HCPs and NCCPs in California*, in Chapter 9 of the HCP/NCCP for a detailed list of existing funding sources that could support the funding plan.

The record of state and federal funding for approved HCP/NCCPs in California provides reasonable assurance that state and federal grants to the HCP/NCCP, though significant, are anticipated to be fulfilled over the 50-year permit term. New funding sources are expected to arise, increasing the likelihood of achieving this goal.

State and federal funding for the HCP/NCCP is based on the cost of the conservation component for:

1. Special habitat restoration and enhancement (the mitigation component is funded by special habitat fees)
2. All other Plan actions (the mitigation component funded by the land conversion fee).

To estimate state and federal funding, the nexus analysis had to determine the appropriate unit cost per reserve acre for each of these two conservation components. The cost per acre had to be limited to those cost line items that are eligible for funding given restrictions on the use of funds associated with existing state and federal funding sources.

Table 5.1 provides the unit costs used to estimate state and federal funding based on eligible costs and reserve acres. For special habitat restoration and enhancement, existing state and federal sources can only fund direct capital costs and not shared costs (see Table 2.3 in Chapter 2). For all other Plan actions, existing state and federal sources can only support the purchase costs associated with land acquisition to establish the reserve system, but not other related costs. Ineligible costs include pre-acquisition surveys, due diligence, and capital costs for fencing and other site improvements. The land acquisition contingency cost is included in the unit cost because it relates to potential variability in purchase costs. Costs for the endowment contribution and plan preparation reimbursement are assumed to be ineligible for state and federal funding.

Table 5.2 presents the estimate of state and federal funding for conservation, based on the unit costs from Table 5.1. For restoration and enhancement funding estimates, unit costs are multiplied by the conservation component of related Plan actions (measured in acres for each special habitat, see Table 2.2 in Chapter 2), plus direct costs for the conservation component of salmonid stream channel enhancements (see Table 2.3 in Chapter 2). State and federal funding for land acquisition is based on the 29.4 percent share of the reserve system (equivalent to 13,905 acres) that represents the conservation component of the Plan (see Table 3.1 in Chapter 3). In sum, state and federal funding is estimated to provide \$151 million.

Table 5.1: Unit Costs for State and Federal Funding (2019 \$)

State & Federal Funding Analysis for Special Habitat Restoration & Enhancement			
Special Habitat	Costs Eligible for State & Federal Funding¹	Restoration (acres)	Eligible Cost per Acre Restored
Vernal Pool	\$ 93,330,000	900	\$ 103,700
Aquatic/Wetland	29,980,000	410	73,122
Riverine/Riparian	91,450,000	1,425	64,175
State & Federal Funding Analysis for Reserve Acquisition			
	Valley	Foothills	Total
Land Acquisition Eligible for State & Federal Funding ²			
Acquisition	\$ 363,500,000	\$ 86,180,000	\$ 449,680,000
Contingency	19,170,000	4,490,000	23,660,000
Total	\$ 382,670,000	\$ 90,670,000	\$ 473,340,000
Reserve (acres)	34,000	13,300	47,300
Average Cost per Acre	\$ 11,255	\$ 6,817	\$ 10,007
Note: All costs exclude and all operating, endowment contribution, and plan preparation reimbursement costs that are assumed to be ineligible for state and federal funding.			
¹ Combined Valley and Foothills direct capital costs for habitat restoration and enhancement. Excludes shared costs. See Table 2.3.			
² Land purchase costs only plus contingency. Excludes pre-acquisition surveys, due diligence, and capital costs for fencing and other site improvements. See Table A.1.			
Sources: Tables 2.2, 2.3, 3.2, and A.1.			

Estimates of state and federal funding are based on current sources that are generally limited to land acquisition and direct stream, wetland, and riparian restoration or enhancement costs. Current funding restrictions generally exclude reserve assembly costs associated with pre-acquisition surveys, due diligence, and site improvements, ongoing costs for management, monitoring, and program administration, and one-time costs for endowment and plan preparation.⁵⁷ As state and federal funding sources evolve over the 50-year permit term, the PCA expects these funding sources to become more flexible in terms of the types of costs they can cover. For the time being, the PCA will identify other funding for costs associated with the conservation component of the Plan but not funded by state and federal sources.

⁵⁷ State and federal funding can pay for some limited management or monitoring costs if these funds represent a minority of the project's costs and are spent within the three-year term of the grant award. To be conservative, this potential funding is not included in the state and federal funding estimate but could be added when the nexus analysis is periodically updated during Plan implementation.

Table 5.2: State and Federal Funding (2019 \$)

State & Federal Funding for Special Habitat Restoration & Enhancement			
	Valley	Foothills	Total
Vernal Pool			
Conservation (acres)	30	\$ -	30
Eligible Cost per Acre	\$ 103,700	\$ 103,700	\$ 103,700
Subtotal	\$ 3,110,000	\$ -	\$ 3,110,000
Aquatic/Wetland			
Conservation (acres)	10	10	20
Eligible Cost per Acre	\$ 73,122	\$ 73,122	\$ 73,122
Subtotal	\$ 730,000	\$ 730,000	\$ 1,460,000
Riverine/Riparian			
Conservation (acres)	18	14	32
Eligible Cost per Acre	\$ 64,175	\$ 64,175	\$ 64,175
Subtotal	\$ 1,160,000	\$ 900,000	\$ 2,050,000
Salmonid Stream Channel	<u>5,460,000</u>	<u>3,180,000</u>	<u>8,640,000</u>
Total	\$ 10,460,000	\$ 4,810,000	\$ 15,260,000
State & Federal Funding for Reserve Acquisition			
	Valley	Foothills	Total
Average Cost per Acre	\$ 11,255	\$ 6,817	\$ 10,007
Conservation Share	<u>9,303</u>	<u>4,602</u>	<u>13,905</u>
Conservation Funding	\$ 104,710,000	\$ 31,370,000	\$ 136,080,000
Total State & Federal Funding			
	Valley	Foothills	Total
Special Habitat Restoration & Enhancement	\$ 10,460,000	\$ 4,810,000	\$ 15,270,000
Reserve Acquisition	<u>104,710,000</u>	<u>31,370,000</u>	<u>136,080,000</u>
Total	\$ 115,170,000	\$ 36,180,000	\$ 151,350,000

Sources: Tables 2.2, 2.3, 3.2, and 5.1.

Existing Reserve Credit

The County has already acquired substantial open space properties (Doty Ravine Preserve, Harvego Bear River Preserve, Hidden Falls Regional Park, and Swainson's Preserve) that are credited to the reserve acquisition obligation under the Plan. As explained in Chapter 3, some of these lands were purchased with County Open Space Trust funds that can be used for mitigation and were credited to the Foothills land conversion fee (Part A). Lands purchased with funds that must be used for conservation purposes are shown separately in the funding plan. The credit to the funding plan is based on the cost model's land acquisition cost assumptions and is assumed to be \$21.0 million for 2,047 acres, as shown in **Table A.6**.

Other Funding

Other funding sources for the Plan are not restricted to either mitigation or conservation purposes and may be used for any Plan cost. Because mitigation funding sources fully fund the mitigation component of Plan actions, these other funding sources are allocated to the Plan's conservation component plus building the endowment. These other sources include:

- ♦ **Operating interest income:** Interest on operating fund balances equal to half of the average annual development fee revenue (land conversion and special habitat fees) that is assumed to be maintained as working capital. See **Table A.9** for more details.
- ♦ **Agricultural leases:** Based on estimated reserve lands that remain in rice production following the end of the permit term.⁵⁸
- ♦ **Other local, state, and federal:** Estimate of new sources of funding from a combination of local, state, and federal sources, including nonprofits and foundations, reasonably anticipated during the 50-year permit term.
- ♦ **Endowment investment earnings:** earnings on endowment fund balances through the end of the permit term when the endowment is used for ongoing post-permit costs in perpetuity. Although the PCA has access to these earnings to fund Plan costs during the permit term, the funding plan assumes that all earnings are reinvested in the endowment (see **Table A.4**) until needed post-permit.

Funding Plan Summary

The funding plan for the HCP/NCCP is shown in **Table 5.3**. Revenues in Table 5.3 are balanced to costs with revenue from “Other Local, State & Federal” sources representing eight percent of total plan revenues. This amount of revenue is reasonable to anticipate given the 50-year permit term, the potential expansion of uses of state and federal grants (see *State and Federal Grants* section, above), and the potential for new revenue sources such as local tax measures and private foundations. In addition, the nexus approach to development fees could be revised during Plan implementation to incorporate the cost of providing additional benefits to covered activities through implementation of the conservation component of the Plan (see the *Mitigation and Conservation Cost Shares* section in Chapter 1).

⁵⁸ See HCP/NCCP, Appendix L (Cost Estimates and Assumptions), Table 4a.

Table 5.3: Funding Plan (2019 \$)

	Valley		Foothills		Total	
PLAN FUNDING						
Mitigation Funding						
Land Conversion Fee	\$531,420,000	56%	\$ 83,030,000	32%	\$ 614,450,000	51%
Special Habitat Fees	172,840,000	18%	60,770,000	23%	233,610,000	19%
Temporary Effect Fees	negligible	<1%	negligible	<1%	negligible	<1%
Open Space & Fire Hazard Mgt. Fee	-	<1%	10,610,000	4%	10,610,000	<1%
Existing Reserve Credit ¹	9,830,000	1%	11,980,000	5%	21,810,000	2%
Bickford Ranch Open Space	-	<1%	500,000	<1%	500,000	<1%
Subtotal	\$714,090,000	75%	\$166,900,000	65%	\$ 880,980,000	73%
Conservation Funding						
State & Federal Grants	\$115,170,000	12%	\$ 36,180,000	14%	\$ 151,350,000	12%
Existing Reserve Credit ¹	12,230,000	1%	8,790,000	3%	21,020,000	2%
Subtotal	\$127,400,000	18%	\$ 44,970,000	27%	\$ 172,370,000	20%
Other Funding						
Opr. Interest Income	2,100,000	<1%	400,000	<1%	2,500,000	<1%
Agricultural Leases	7,990,000	<1%	-	<1%	7,990,000	<1%
Other Local, State & Federal ²	59,480,000	6%	29,240,000	11%	88,720,000	7%
Endowment Investment Earnings	43,950,000	5%	17,180,000	7%	61,130,000	5%
Subtotal	\$240,920,000	25%	\$ 91,790,000	35%	\$ 332,710,000	27%
Total PCCP Funding	\$955,010,000	100%	\$258,680,000	100%	\$1,213,690,000	100%
PLAN COSTS						
Plan Implementation	\$868,600,000	91%	\$229,150,000	89%	\$1,097,750,000	90%
Endowment Fund Balance, Year 50	73,860,000	8%	28,870,000	11%	102,730,000	8%
Plan Preparation	12,550,000	1%	660,000	<1%	13,210,000	1%
Total PCCP Costs	\$955,010,000	100%	\$258,680,000	100%	\$1,213,690,000	100%
PLAN NET REVENUE						
Surplus/(Deficit)	-	0%	-	0%	-	0%

¹ Existing reserve credit is an in-kind (non-cash) contribution to the Plan. Land value allocated to "Mitigation Funding" if original funding was not restricted to conservation purposes, otherwise allocated to "Conservation Funding".

² Estimate of new sources of funding from a combination of local, state, and federal sources, including nonprofits and foundations, reasonably anticipated during the 50-year permit term.

Sources: HCP/NCCP, Appendix L (Cost Estimates and Assumptions), Table 4a; Tables 2.6, 3.3, 3.6, 3.10, 5.2, A.6, A.8, and A.11.

“Mitigation Funding” in the table are revenue sources restricted to mitigation of effects from covered activities. “Conservation Funding” are revenue sources restricted to the conservation component of the Plan. “Other Funding” are revenue sources that could be used for either the Plan’s mitigation or conservation components. **Table A.10** in the appendix provides guidance to the PCA regarding restrictions on the sources and uses of funds.

APPENDIX A: ADDITIONAL DOCUMENTATION

This appendix provides additional documentation for the tables included in the nexus analysis.

Cost Model

Table A.1 provides the cost detail used in Tables 2.3, 3.3, 5.1, A.2, and A.5. All data is drawn directly from the cost model shown in Appendix L of the HCP/NCCP.

Upper Watershed Salmonid Costs

Table A.2 shows how certain costs shown in Table 3.3 are re-allocated to reflect the benefit of upper watershed protection for salmonids to the entire Plan area. The upper half of the table determines what portion of land acquisition costs are associated with the salmonid benefits provided by upper watershed protection. All upper watersheds are in the Foothills subarea. Total land acquisition costs include only capital costs associated with land acquisition and exclude site improvements and transaction costs. Sixty-five percent of these costs are associated with mitigation of effects (see Table 3.1). Of these upper watersheds, 93 percent provide salmonid spawning and rearing habitat. These watersheds also provide habitat for other species protected by the Plan, so 50 percent of this mitigation share is allocated to the benefits of salmonid protection, or \$28 million.

The bottom half of the table allocates the \$28 million associated with upper watershed protection for salmonids between the Valley and Foothills subareas based on the mitigation share of the reserve allocated to each subarea (see Table 3.2). These mitigation shares reflect the relative effects of land conversion in each subarea. Land conversion is used to allocate costs by subarea because salmonids are negatively affected by runoff from nearly all covered activities.

Table A.1: Cost Model Estimates for Permit Term Costs (50 yrs.) (2019 \$)

Cost Category	Valley Cost Share	Foothills Cost Share	Total	Source (HCP/NCCP Appendix L)
Establish Reserve System				
Land Acquisition ¹	\$357,804,000	\$ 86,184,000	\$443,988,000	Table 1e
Other Capital and Operating Costs	<u>33,982,166</u>	<u>7,716,084</u>	<u>41,698,249</u>	Residual ²
Subtotal – Reserve System	\$391,786,166	\$ 93,900,084	\$485,686,249	Tables 1c & 1d
Restore, Manage & Monitor Natural Communities				
Capital				
Vernal Pool Complex	\$ 93,330,000	\$ -	\$ 93,330,000	Table 3
Aquatic/Wetland Complex	14,985,500	14,985,500	29,971,000	Table 3
Riverine/Riparian Complex	51,023,100	40,433,400	91,456,500	Table 3
Other Actions	<u>17,487,954</u>	<u>1,839,678</u>	<u>19,327,632</u>	Residual ²
Subtotal	\$176,826,554	\$ 57,258,578	\$234,085,132	Table 3
Shared Capital Costs ³	<u>2,541,627</u>	<u>911,092</u>	<u>3,452,720</u>	Residual ²
Subtotal – Capital	\$179,368,181	\$ 58,169,671	\$237,537,852	Tables 1c & 1d
Operating				
Vegetation and Fuels Management	3,633,778	1,848,883	5,482,661	Table 3
Other Actions	<u>19,333,003</u>	<u>4,740,257</u>	<u>24,073,260</u>	Residual ²
Subtotal	\$ 22,966,781	\$ 6,589,140	\$ 29,555,921	Table 3
Shared Operating Costs ³	<u>17,521,714</u>	<u>5,869,373</u>	<u>23,391,087</u>	Residual ²
Subtotal – Operating	<u>\$ 40,488,495</u>	<u>\$ 12,458,513</u>	<u>\$ 52,947,008</u>	Tables 1c & 1d
Subtotal – Restoration	\$219,856,676	\$ 70,628,184	\$290,484,860	Tables 1c & 1d
Reserve Management & Enhancement				
Capital				
Fish Barrier Removal/Modification	\$ 2,877,000	\$ 1,846,000	\$ 4,723,000	Table 4
Other Actions	1,911,948	351,625	2,263,573	Table 4
Shared Capital Costs ³	<u>8,322,520</u>	<u>1,934,227</u>	<u>10,256,747</u>	Residual ²
Subtotal – Capital	\$ 13,111,468	\$ 4,131,852	\$ 17,243,320	Tables 1c & 1d
Operating				
In-channel Enhancement Activities	4,303,072	2,209,928	6,513,000	Table 4
Vegetation and Fuels Management	26,079,147	2,863,867	28,943,013	Table 4
Other Actions	<u>15,946,955</u>	<u>3,328,273</u>	<u>19,275,227</u>	Residual ²
Subtotal	\$46,329,173	\$ 8,402,068	\$ 54,731,241	Table 4
Shared Operating Costs ³	<u>23,082,973</u>	<u>5,520,509</u>	<u>28,603,482</u>	Residual ²
Subtotal – Operating	<u>\$ 69,412,146</u>	<u>\$ 13,922,576</u>	<u>\$ 83,334,722</u>	Tables 1c & 1d
Subtotal – Management & Enhancement	\$ 82,523,614	\$ 18,054,428	\$100,578,042	Tables 1c & 1d

**Table A.1: Cost Model Estimates for Permit Term Costs (50 yrs.) (2019 \$)
(continued)**

Cost Category	Valley Cost Share	Foothills Cost Share	Total	Source (HCP/NCCP Appendix L)
Monitoring, Research, & Scientific Review	\$ 41,528,273	\$ 18,308,582	\$ 59,836,855	Tables 1c & 1d
Environmental Compliance	\$ 18,212,730	\$ 9,541,135	\$ 27,753,865	Tables 1c & 1d
Plan Administration	\$ 60,157,709	\$ 32,072,797	\$ 92,230,506	Tables 1c & 1d
Contingency Fund				
Land Acquisition Contingency	\$ 19,169,010	\$ 4,493,738	\$ 23,662,748	Table 1e
Operating Contingency	<u>7,832,854</u>	<u>2,857,436</u>	<u>10,690,290</u>	Table 1f
Subtotal – Contingency	\$ 27,001,864	\$ 7,351,174	\$ 34,353,038	Tables 1c & 1d
Total	\$847,762,966	\$249,998,175	\$1,097,761,141	Tables 1c & 1d
<p>¹ Land acquisition only. Excludes fencing, other one-time site improvements, due diligence, other transaction costs, and contingency.</p> <p>² Residual calculation based on subtotal immediately below.</p> <p>³ Shared costs are field and technical staff and related costs allocated across multiple cost categories.</p> <p>Source: HCP/NCCP, Appendix L (Cost Estimates and Assumptions), Tables 1c, 1d, 1e, 1f, 3, and 4.</p>				

Table A.2: Upper Watershed Acquisition Allocated Based on Effects to Salmonids

Salmonid Benefits of Upper Watershed Acquisition & Protection			
Foothills Land Acquisition (capital costs only)	\$86,180,000		
Foothills Mitigation Fair Share	<u>65.4%</u>		
Mitigation Fair Share Cost	\$56,360,000		
Cost Share Allocated To Salmonid Benefits ¹	<u>50.0%</u>		
Costs Allocated To Salmonid Benefits	\$28,180,000		
Valley / Foothills Allocation	Valley	Foothills	Total
Reserve Allocation for Mitigation (acres)	24,697	8,698	33,395
Share	74.0%	26.0%	100.0%
Upper Watershed Acquisition Fair Share Allocation	\$20,840,000	\$ 7,340,000	\$28,180,000
Share of Foothills Reserve (acres)	2,103	741	2,844
<p>¹ Approximately 93 percent of upper watersheds benefit salmonids (see HCP/NCCP, Chapter 4, Table 4-4A and Figure 4-1). Allocate only 50 percent of upper watershed mitigation costs for the benefit of salmonids to recognize other Plan benefits provided by protecting upper watersheds.</p> <p>Source: Urban Economics; Tables 3.1, 3.2, and Appendix Table A.1.</p>			

Endowment

Table A.3 shows the net annual costs that require funding from an endowment. The offsetting lease revenue from rice lands anticipated in perpetuity is based on the average annual amount estimated for the final five years of the permit term.

Table A.3: Annual Post-permit Revenues & Costs (2019 \$)

Annual Post-permit Term Costs		\$3,680,000
Rice Lands Lease Revenue, Years 45-50	\$1,720,000	
Years in Period	<u>5</u>	
Annual Rice Lands Lease Revenue		<u>340,000</u>
Net Annual Post-Permit Term Costs		\$3,340,000
Sources: HCP/NCCP, Chapter 9, Table 9-3 and Appendix L (Cost Estimates and Assumptions), Table 4a.		

Table A.4 shows the endowment funding model used to estimate required contributions from Plan funding sources to fund the costs shown in Table A.3 in perpetuity. Funding is projected at constant rate with average annual earnings net of administrative fees, investment management fees, and inflation is estimated to be 3.25 percent on the fund balance. This real rate of return is consistent with assumptions used in other regional HCP/NCCPs recently adopted in Northern California. Total contributions to the endowment from fee revenue are used in Table 3.3, allocated to subarea based on each subarea’s share of the total reserve.

Fire Hazard Management Costs

Table A.5 shows how fire hazard management costs, used to calculate Part A of the Foothills land conversion fee in Table 3.10, were broken out from the cost model table (Table A.1). These costs are referred to as “Vegetation and Fuels Management” in the cost model.

Table A.4: Endowment Fund Cash Flow (2019 \$)

Year	2020	2021	2022	2023	2024	2025	2026	2027	2028
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>
Fee Revenue	831,905	831,905	831,905	831,905	831,905	831,905	831,905	831,905	831,905
Investment Earnings ¹	<u>13,518</u>	<u>40,995</u>	<u>69,364</u>	<u>98,655</u>	<u>128,898</u>	<u>160,124</u>	<u>192,365</u>	<u>225,654</u>	<u>260,025</u>
Total Revenues	845,423	872,900	901,269	930,560	960,803	992,029	1,024,270	1,057,559	1,091,930
Ending Fund Balance	845,423	1,718,323	2,619,592	3,550,152	4,510,955	5,502,984	6,527,254	7,584,813	8,676,743
Year	2029	2030	2031	2032	2033	2034	2035	2036	2037
	<i>10</i>	<i>11</i>	<i>12</i>	<i>13</i>	<i>14</i>	<i>15</i>	<i>16</i>	<i>17</i>	<i>18</i>
Fee Revenue	831,905	831,905	831,905	831,905	831,905	831,905	831,905	831,905	831,905
Investment Earnings ¹	<u>295,513</u>	<u>332,154</u>	<u>369,986</u>	<u>409,047</u>	<u>449,378</u>	<u>491,020</u>	<u>534,015</u>	<u>578,407</u>	<u>624,242</u>
Total Revenues	1,127,418	1,164,059	1,201,891	1,240,952	1,281,283	1,322,925	1,365,920	1,410,312	1,456,147
Ending Fund Balance	9,804,161	10,968,220	12,170,111	13,411,063	14,692,346	16,015,271	17,381,191	18,791,503	20,247,650
Year	2038	2039	2040	2041	2042	2043	2044	2045	2046
	<i>19</i>	<i>20</i>	<i>21</i>	<i>22</i>	<i>23</i>	<i>24</i>	<i>25</i>	<i>26</i>	<i>27</i>
Fee Revenue	831,905	831,905	831,905	831,905	831,905	831,905	831,905	831,905	831,905
Investment Earnings ¹	<u>671,567</u>	<u>720,430</u>	<u>770,881</u>	<u>822,971</u>	<u>876,755</u>	<u>932,286</u>	<u>989,622</u>	<u>1,048,822</u>	<u>1,109,946</u>
Total Revenues	1,503,472	1,552,335	1,602,786	1,654,876	1,708,660	1,764,191	1,821,527	1,880,727	1,941,851
Ending Fund Balance	21,751,122	23,303,457	24,906,243	26,561,119	28,269,779	30,033,970	31,855,497	33,736,224	35,678,075
Year	2047	2048	2049	2050	2051	2052	2053	2054	2055
	<i>28</i>	<i>29</i>	<i>30</i>	<i>31</i>	<i>32</i>	<i>33</i>	<i>34</i>	<i>35</i>	<i>36</i>
Fee Revenue	831,905	831,905	831,905	831,905	831,905	831,905	831,905	831,905	831,905
Investment Earnings ¹	<u>1,173,056</u>	<u>1,238,217</u>	<u>1,305,496</u>	<u>1,374,962</u>	<u>1,446,685</u>	<u>1,520,739</u>	<u>1,597,200</u>	<u>1,676,146</u>	<u>1,757,657</u>
Total Revenues	2,004,961	2,070,122	2,137,401	2,206,867	2,278,590	2,352,644	2,429,105	2,508,051	2,589,562
Ending Fund Balance	37,683,036	39,753,158	41,890,559	44,097,426	46,376,016	48,728,660	51,157,765	53,665,816	56,255,378

Table A.4: Endowment Fund Cash Flow (2019 \$) (continued)

Year	2056	2057	2058	2059	2060	2061	2062	2063	2064
	37	38	39	40	41	42	43	44	45
Fee Revenue	831,905	831,905	831,905	831,905	831,905	831,905	831,905	831,905	831,905
Investment Earnings ¹	<u>1,841,818</u>	<u>1,928,714</u>	<u>2,018,434</u>	<u>2,111,070</u>	<u>2,206,717</u>	<u>2,305,472</u>	<u>2,407,437</u>	<u>2,512,716</u>	<u>2,621,416</u>
Total Revenues	2,673,723	2,760,619	2,850,339	2,942,975	3,038,622	3,137,377	3,239,342	3,344,621	3,453,321
Ending Fund Balance	58,929,101	61,689,720	64,540,059	67,483,034	70,521,656	73,659,033	76,898,375	80,242,996	83,696,317
Year	2065	2066	2067	2068	2069	Total	Ongoing		
	46	47	48	49	50	Year 1 - 50	51+		
Fee Revenue	831,905	831,905	831,905	831,905	831,905	41,595,250	-		
Investment Earnings ¹	<u>2,733,649</u>	<u>2,849,529</u>	<u>2,969,176</u>	<u>3,092,711</u>	<u>3,220,261</u>	<u>61,125,918</u>	<u>3,338,438</u>		
Total Revenues	3,565,554	3,681,434	3,801,081	3,924,616	4,052,166	102,721,168	3,338,438		
Net Post-Permit Costs ²	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>3,338,438</u>		
Net Cash Flow	3,565,554	3,681,434	3,801,081	3,924,616	4,052,166	102,721,168	0		
Ending Fund Balance	87,261,871	90,943,305	94,744,386	98,669,002	102,721,168	102,721,168	102,721,168		
¹ Return on investments (ROI) = (Prior Year Closing Fund Balance + (Annual Fee Revenue / 2) x (Average Annual ROI). Average annual ROI equals 3.25% and is real rate of return net of inflation, investment management, and administrative fees for similar land conservation endowments.									
² Annual post-permit costs are net of ongoing lease revenue from rice farming.									
Sources: HCP/NCCP, Chapter 9, Table 9-2; HCP/NCCP, Appendix L (Cost Estimates and Assumptions), Table 4a; National Fish and Wildlife Foundation; Table A.3; Urban Economics.									

Table A.5: Cost Allocation of Fire Hazard (Vegetation and Fuels) Management Activities (2019 \$)

	Valley			Foothills			Total
	Direct	Shared ¹	Subtotal	Direct	Shared ¹	Subtotal	
Restore, Manage, and Monitor Natural Communities							
Vegetation & Fuels Management	\$ 3,630,000	\$ 360,000	\$ 3,990,000	\$ 1,850,000	\$ 200,000	\$ 2,050,000	\$ 6,040,000
Special Habitat Restoration	159,340,000	16,000,000	175,340,000	55,420,000	5,880,000	61,300,000	236,640,000
Other Restoration Activities	<u>36,820,000</u>	<u>3,700,000</u>	<u>40,520,000</u>	<u>6,580,000</u>	<u>700,000</u>	<u>7,280,000</u>	<u>47,800,000</u>
Total	\$199,790,000	\$20,060,000	\$219,850,000	\$63,850,000	\$ 6,780,000	\$70,630,000	\$290,480,000
Reserve Management & Enhancement							
Vegetation & Fuels Management	\$ 26,080,000	\$16,020,000	\$ 42,100,000	\$ 2,860,000	\$ 2,010,000	\$ 4,870,000	\$ 46,970,000
Salmonid Stream Channel	7,180,000	4,420,000	11,600,000	4,060,000	2,850,000	6,910,000	18,510,000
Other Management Activities	<u>17,860,000</u>	<u>10,970,000</u>	<u>28,830,000</u>	<u>3,680,000</u>	<u>2,590,000</u>	<u>6,270,000</u>	<u>35,100,000</u>
Total	\$ 51,120,000	\$31,410,000	\$ 82,530,000	\$10,600,000	\$ 7,450,000	\$18,050,000	\$100,580,000
Total Vegetation & Fuels Management	\$ 29,710,000	\$16,380,000	\$ 46,090,000	\$ 4,710,000	\$ 2,210,000	\$ 6,920,000	\$ 53,010,000
¹ Includes capital and operating costs that are shared among multiple cost categories. Allocated based on direct costs. Sources: Tables 2.3 and A.1.							

Existing Reserve Credit

Detail regarding the existing reserve credit shown in Tables 3.10 and 5.3 is shown below in **Table A.6**. Only credits associated with the properties located in the Foothills and purchased with the County's Open Space Trust Fund are allocated to offset Foothills mitigation costs before calculating the Foothills land conversion fee (Part A). The other properties are located in the Valley and/or were purchased with funds that cannot be used to mitigate the effects of covered activities under the Plan.

The acreage amounts shown in Table A.6 are less than the total amounts shown in Appendix H (Existing Open Space Lands) of the Plan because not all acreage within a given property is eligible for inclusion in the reserve.

Table A.6: Existing Reserve Credit (2019 \$)

	Valley	Foothills	Total
	<i>Acres</i>		
<i>Funded by County Open Space Trust Fund</i>			
Bruin Ranch (aka Harvego Bear River Preserve)	-	745.58	745.58
Hidden Falls Regional Park	-	827.00	827.00
Bradley Property	399.71	-	399.71
Markham Ravine Ranch	297.22	-	297.22
Subtotal (acres)	696.93	1,572.58	2,269.51
Subtotal Value	\$ 9,830,000	\$11,980,000	\$21,810,000
<i>Funded by Other Non-Mitigation Sources</i>			
Doty Ravine Preserve	405.47	-	405.47
Bruin Ranch (aka Harvego Bear River Preserve)	-	833.91	833.91
Hidden Falls Regional Park	-	355.80	355.80
Swainson's Preserve	452.00	-	452.00
Subtotal (acres)	857.47	1,189.71	2,047.18
Subtotal Value	\$12,230,000	\$ 8,790,000	\$21,020,000
<i>All Funding</i>			
Total (acres)	857.47	2,762.29	3,619.76
Total Value	\$22,060,000	\$20,770,000	\$42,830,000
Sources: HCP/NCCP, Appendix L (Cost Estimates and Assumptions), Tables E, H.1, H.2, I.1, and I.2.			

Foothills Equivalent Dwelling Units

Table A.7 shows the calculation of equivalent dwelling units for the Foothills land use scenario and establishes the relative effect per EDU (direct effect per acre) for non-residential development. This data is used in Table 3.10 to determine the Foothills Part A fee. As explained in Chapter 3, this scenario includes a substantial amount of development that not covered under the Plan. Household population and employment are drawn from the growth scenario presented in Appendix M of the HCP/NCCP.

Table A.7: Foothills Equivalent Dwelling Units

	Growth Scenario¹	Relative Effect/ Benefit²	Service Population
Household Population	37,900	1.0	37,900
Employment	<u>2,000</u>	0.5	<u>1,000</u>
Total	39,900		
Total Service Population			38,900
Persons per Equivalent Dwelling Unit (EDU) ³			<u>2.71</u>
Total EDU			14,354
Residential EDU			<u>14,000</u>
Nonresidential EDU			354
Nonresidential (parcel acres)			<u>293</u>
Nonresidential EDU / Acre			1.21
¹ Includes both covered and non-covered activities in the Foothills subarea. ² Relative effect on and benefit from HCP/NCCP open space land acquisition and fire hazard management. Per worker weight reflects lower occupancy on a daily basis and fewer building square feet per occupant relative to residential development. ³ Based on 37,900 household population divided by 14,000 projected dwelling units. Sources: HCP/NCCP, Appendix M (Growth Scenario Memo), Table 3; Table 3.8 (this report)			

The lower per worker weight (0.5) for the relative need for and benefit from HCP/NCCP land acquisition and fire hazard management reflects two factors. First, occupants benefit from open space and fire hazard management so the less a property is occupied on a daily basis the lower the potential for benefit. Second, tangible property benefits from fire hazard management so the fewer building square feet per occupant the lower the potential benefit. Both these factors tend to be lower for non-residential development.

Open Space and Fire Hazard Management Fee

Determination of revenue from the open space and fire hazard management fee used in Table 3.13 is shown in **Table A.8**. The approach used to estimate revenue is the same as that used for Part A of the Foothills land conversion fee, applied to all other Foothills development that is not expected to be a covered activity under the Plan.

Operating Interest Income

Operating interest income represents interest on working capital over the permit term. As shown in **Table A.9**, interest revenue assumes that half of average annual development fee revenue (land conversion and special habitat fees) is maintained as an interest-bearing fund balance. The annual rate of interest earnings will be updated as part of the periodic fee review for the land conversion fee (see Chapter 3).

Sources and Uses of Funds

Table A.10 provides guidance to the PCA on the sources and uses of funds based on restrictions on certain sources such as special habitat fees and state and federal grants. Types of Plan actions are listed across the top of the table and funding sources are listed in the left column. In the table:

- ◆ "Ineligible" means that the funding source is restricted from being used for the type of Plan actions indicated.
- ◆ "Possible" means that uses indicated in the table for this funding source may be shifted to other Plan actions.
- ◆ "Not Applicable" means that the funding source is an in-kind contribution and does not support the type of Plan actions indicated.

Because of its flexibility as a revenue source, land conversion fee revenue is treated as a residual in this table and is allocated to fund costs not otherwise funded by a restricted source. Land conversion fee revenue may be used for special habitat restoration and enhancement and the conservation component of Plan actions as long as other funding sources offset this by funding an equal amount of the mitigation component of the Plan.

Table A.8: Foothills Open Space & Fire Hazard Management Impact Fee Revenue (2019 \$)

Fee Category	Average Mitigation Cost per EDU	Relative Impact	Fee	Dwelling Units	Parcel Area (acres)	Revenue
Residential project on existing parcel greater than 20,000 square feet up to 1.0 acre	\$ 2,279	1.00	\$ 2,279 per dwelling unit	4,597		\$10,476,563
Non-residential project on existing parcel greater than 20,000 square feet up to 1.0 acre	\$ 2,279	1.21	\$ 2,757 per parcel acre		50	\$ 137,850
Total (rounded)				4,597	50	\$10,610,000
Sources: Tables 3.8, 3.10, and 3.11.						

Table A.9: Operating Fund Interest Income (2019 \$)

Land Conversion Fee	\$614,450,000
Special Habitat Fees	<u>233,610,000</u>
Total Mitigation Fee Funding ¹	\$848,060,000
Permit Term (years)	<u>50</u>
Average Annual Funding (50-year permit term)	\$ 16,960,000
Share Maintained as Fund Balance ²	<u>50%</u>
Average Fund Balance	\$ 8,480,000
Interest Earnings Annual Rate ³	<u>0.62%</u>
Annual Interest Income	\$ 50,000
Permit Term (years)	<u>50</u>
Total Interest Income	\$ 2,500,000
<p>¹ Only mitigation fee funding included in analysis of fund balance because substantially all other funds are likely to be grants for land acquisition received as reimbursement for prior expenditures or expended concurrent with receipt.</p> <p>² Assume implementing agency maintains a fund balance equal to half of average annual mitigation fee funding.</p> <p>³ Based on 2014-2018 average annual return from the California Pooled Money Investment Fund managed by the California State Treasurer's Office.</p> <p>Sources: California State Treasurer's Office, retrieved from http://www.treasurer.ca.gov/pmia-laif/historical/annual.asp; Table 4.2; Urban Economics.</p>	

For example, in Table A.10 other local, state, and federal funding is shown to fund \$6.3 million of shared costs for special habitat management and enhancement. These costs are associated with the conservation component of those Plan actions that cannot be funded by more restrictive existing state and federal grants (see the *State and Federal Grants* section in Chapter 5). Although unknown at the time of Plan adoption, other local, state, and federal funding may be applicable only to land acquisition. If so, the land conversion fee could fund the \$6.3 million shown in Table A.10 for special habitat restoration and enhancement, offset by an equal amount of funding from other local, state, and federal sources for land acquisition.

The percentage allocation of land conversion fee revenue shown immediately below the revenue line is used in the text in Chapter 9 of the HCP/NCCP. For example, the 35 percent of the fee allocated to land acquisition is used in Table 9.8, *Development Fee Adjustment Indices*, in Chapter 9 to indicate the share of the land conversion fee that should be adjusted annually based on land cost inflation.

Table A.10: Sources and Uses of Funds (2019 \$)

Funding Source	Land Acquisition & Contingency ¹	Special Habitat Restoration & Enhancement	Plan Preparation Reimbursement	Endowment Fund Balance (Yr. 50)	All Other Permit Term Plan Costs	Total Funding
Mitigation Funding						
Land Conversion Fee	\$200,880,000	Possible	\$ 13,210,000	\$ 41,600,000	\$358,760,000	\$ 614,450,000
<i>Land Conversion Fee Uses</i>	<i>33%</i>	<i>0%</i>	<i>2%</i>	<i>7%</i>	<i>58%</i>	<i>100%</i>
Special Habitat Fees	Ineligible	\$233,610,000	Ineligible	Ineligible	Ineligible	233,610,000
Open Space & Fire Hazard Mgt. Fee	10,610,000	Ineligible	Ineligible	Possible ²	Possible ²	10,610,000
Existing Reserve Credit ³	21,810,000	Not Applicable	Not Applicable	Not Applicable	Not Applicable	21,810,000
Bickford Ranch Open Space	<u>500,000</u>	<u>Ineligible</u>	<u>Ineligible</u>	<u>Ineligible</u>	<u>Ineligible</u>	<u>500,000</u>
Subtotal	\$233,800,000	\$233,610,000	\$ 13,210,000	\$41,600,000	\$358,770,000	\$ 880,980,000
Conservation Funding						
State & Federal Grants	\$136,080,000	\$ 15,270,000	Ineligible	Ineligible	Possible	\$ 151,350,000
Existing Reserve Credit ³	<u>21,020,000</u>	<u>Not Applicable</u>	<u>Not Applicable</u>	<u>Not Applicable</u>	<u>Not Applicable</u>	<u>21,020,000</u>
Subtotal	\$157,100,000	\$ 15,270,000	\$ -	\$ -	\$ -	\$ 172,370,000
Other Funding						
Operating Interest Income	Possible	Possible	Possible	Possible	\$ 2,500,000	\$ 2,500,000
Agricultural Leases	Possible	Possible	Possible	Possible	7,990,000	7,990,000
Other Local, State & Federal	\$ 82,450,000	\$ 6,270,000	Possible	Possible	Possible	88,720,000
Endowment Fund Earnings	<u>Ineligible</u>	<u>Ineligible</u>	<u>Ineligible</u>	<u>\$ 61,130,000</u>	<u>Ineligible</u>	<u>61,130,000</u>
Subtotal	<u>\$ 82,450,000</u>	<u>\$ 6,270,000</u>	<u>\$ -</u>	<u>\$ 61,130,000</u>	<u>\$ 10,490,000</u>	<u>\$ 160,340,000</u>
Total Costs	\$473,350,000	\$255,150,000	\$ 13,210,000	\$102,730,000	\$369,260,000	\$1,213,690,000

Note: "Ineligible" means the funding is restricted from being used for these types of Plan action. "Possible" means that the funding source may be used for these types of Plan actions. "Not Applicable" means that the funding source is an in-kind contribution and does not support these types of Plan actions.

¹ Only includes cost of land purchase and land acquisition cost contingency. Excludes all other reserve assembly costs such as fencing, site improvements, pre-acquisition surveys, and due diligence costs.

² Foothills open space and fire hazard management fee may be used for fire hazard management costs associated with the Foothills subarea during the permit term and post-permit (share of endowment costs).

³ Existing reserves are an in-kind (non-cash) contribution to the Plan. Land value allocated to "Mitigation Funding" if original funding was not restricted to conservation purposes, otherwise allocated to "Conservation Funding".

Sources: Tables 2.3, 3.3, 5.2, 5.3, and A.1.