12 ECONOMICS ANALYSIS AND FUNDING PROGRAM

12.1 Overview

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

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

Section 12.2 describes the approach to the cost analysis, including an overview of the methodology used, and data sources.

Section 12.3 presents planning-level cost estimates for the various actions and activities associated with implementation of the SSHCP.

Section 12.4 describes the funding program and quantifies the primary funding mechanism (development fees). This section also presents a mechanism to address cost changes over time.

12.2 Cost Analysis Methodology and Data

The SSHCP economic analysis and associated cost estimates are based on the best information available. Information used in this cost analysis includes, but is not limited to, the estimated acres of impact of future Covered Activities (Chapter 6), estimated costs of the SSHCP habitat preservation and implementing re-establishment/establishment requirements, costs of land by location of the proposed SSHCP Preserve System (Chapter 7), estimated costs of anticipated Preserve System management and monitoring activities (Chapter 8), the staffing and overhead costs of the proposed SSHCP implementation structure (Chapter 9), and estimated costs of addressing any future changed circumstances (Chapter 11). Estimated costs associated with

operating the SSHCP are organized into the following eight categories, which are further explained in Section 12.3:

- Land or Easement Acquisition for the Preserve System
- Habitat Re-establishment/Establishment Activities in the Preserve System
- Habitat Management, Monitoring, and Adaptive Management in the Preserve System
- Changed Circumstances
- Agricultural Enhancement in the Preserve System
- Plan Administration
- Endowment
- SSHCP Plan Development.

The SSHCP cost analysis relies on a detailed financial spreadsheet model (see Appendix I) to track costs and funding requirements associated with SSHCP implementation. The model assesses SSHCP conservation requirements and generates a set of cost estimates, organized by SSHCP land cover type categories. Based on the anticipated cost to acquire necessary land and to implement the Plan, the model estimates funding requirements and the required level of the development fees that will be imposed on Covered Activities to meet these funding requirements.

The SSHCP cost analysis relies on many data sources. Key steps taken were as follows:

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

Generally, estimates are informed by literature reviews, independent research, and input from land managers experienced with habitat preservation and re-establishment/establishment in Northern California, as well as a review of cost models in similar "regional" habitat conservation

plans (HCPs) that have already been permitted by the U.S. Fish and Wildlife Service (USFWS).[1] The values presented in this chapter represent the best available cost estimates based on the information currently available to the Plan Permittees. All costs are presented in 2015 dollars. Shortly after Plan implementation begins and actual cost data are available, the Implementing Entity will compare the cost assumptions made in this economic analysis with the cost of implementing the SSHCP. If actual costs of Plan implementation are inconsistent with the economic analysis, development fees will be adjusted to bring the development fees in line with the observed cost of implementing the SSHCP.

12.3 Costs Associated with Implementation of the SSHCP

This section discusses the assumptions that are made to estimate the cost associated with operating the SSHCP.

12.3.1 Land and Easement Acquisition Costs

Meeting the Plan's Biological Goals and Measurable Objectives for preservation of SSHCP land cover types requires acquisition of land or conservation easements on properties with suitable ecological characteristics (see Chapter 7). As discussed in the following paragraph, costs associated with the acquisition of land or conservation easements include the cost of the land itself, costs associated with a preliminary biological assessment of the land's habitat values, transaction-related expenses such as title and escrow fees and commissions, and initial site improvements.

The total cost of land to be acquired by fee tile and conservation easement under the SSHCP is estimated to be $487 million over the 50-year Permit Term, including the actual cost of the land or the easement as well as the transaction costs, Preserve Documentation Report (PDR) costs, and initial site improvement costs, as well as an overall 10% contingency, as discussed below. This estimate relies on the assumption that 31% of newly acquired lands will be acquired in fee title (as opposed to conservation easement), and that the cost of a conservation easement ranges from 70% to 80% of the cost of a fee title acquisition. Furthermore, it is assumed that 43% of fee title acquisitions will occur within the Urban Development Area (UDA) where land is more expensive.

12.3.1.1 Fee Title Land Value

Fee title land values are based on a review of comparable private market sales of lands in the Plan Area, data from the California Chapter of the American Society of Farm Managers and

[1] Cost models from the East Contra Costa County HCP/Natural Community Conservation Plan, the Natomas Basin HCP, the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan, the Sacramento Valley Open Space Conservancy, and the Central Valley Farmland Trust were used to inform the SSHCP cost model.

Rural Appraisers, and interviews with local land appraisers.[2] Values are distinguished by parcel size and parcel location within Preserve Planning Units. Land acquisition costs used in this cost estimate range from $9,000 per acre to $35,000 per acre for parcels located outside of the UDA and from $25,000 per acre to $150,000 per acre for parcels located inside of the UDA. Planning-level average fee title land value assumptions range from about $26,000 to $53,000 per acre in the UDA and $9,000 to $13,000 per acre outside the UDA, as shown in Table 12-1.

The price differences shown in Table 12-1 reflect the development potential of properties within and outside of the UDA and variation in parcel sizes. Assumptions concerning development potential in the Plan Area reflect land use policy from the existing General Plans of the three land use jurisdictions (the County of Sacramento, City of Rancho Cordova, and City of Galt) that are within the Plan Area. The UDA boundary roughly corresponds with the County's Urban Services Boundary that marks the anticipated extent of infrastructure (sewer and water supply) needed to support future urban development and corresponds with City of Galt's Sphere of Influence and city limit and the City of Rancho Cordova's city limit. Parcels of land that are within the UDA tend to have higher average per-acre values compared to parcels found outside of the UDA due to the potential for urban development. Parcels located outside of the UDA are generally characterized by a real estate market in which value is driven by agricultural and rural residential uses (and in some cases, mitigation bank uses) which have lower per-acre values compared to urban real estate markets.

Smaller parcels of land are typically more highly valued than larger parcels. This is due to the fact that smaller parcels are typically already entitled for some urban use where larger parcels are typically entitled for agricultural uses. Also, there is a smaller pool of buyers for large parcels of land and as a result, the cost analysis assumes that prices for large parcels will be lower on a per-acre basis.

Table 12-1
Average Per-Acre Fee Title Land Value Assumptions

PPU	UDA Relationship	2 to 10 acres	10 to 20 acres	20 acres +	Weighted Average
PPU 1	Inside UDA	$150,000	$50,000	$27,500	$28,000
PPU 2	Inside UDA	*No Acquisitions in PPU 2*			
PPU 3	Inside UDA	$150,000	$50,000	$27,500	$32,000
PPU 4	Inside UDA	$100,000	$40,000	$25,000	$26,000
PPU 5	Outside UDA	$35,000	$15,000	$10,000	$11,000
PPU 6	Outside UDA	$35,000	$15,000	$12,800	$13,000

[2] Sacramento County Assessor data and Trends in Agricultural Land & Lease Values (2014).

Table 12-1
Average Per-Acre Fee Title Land Value Assumptions

PPU	UDA Relationship	2 to 10 acres	10 to 20 acres	20 acres +	Weighted Average
PPU 7	Outside UDA	$25,000	$15,000	$9,000	$9,000
PPU 8	Inside UDA	$150,000	$50,000	$50,000	$53,000

Notes:
PPU = Preserve Planning Unit
UDA = Urban Development Area

12.3.1.2 Conservation Easement Values

Conservation easements generally cost less than fee title acquisition because the grantee of the easement is only acquiring an interest in the real property while the grantor of the easement retains ownership and control of the property consistent with the terms of the easement.

The scope of a conservation easement, and the restrictions it imposes on land use, determines the cost of the easement. For the SSHCP economic analysis, easement costs were developed based on assumptions related to the scope of the proposed easements and restrictions on land use that will be used by the Implementing Entity in acquiring preserve lands, with inputs from an appraiser experienced in easement valuation[3] (see Appendix D, Sample Easements). Generally, conservation easement values within the Plan Area, on average, are 70% to 85% of fee title value. For the SSHCP economic analysis, a weighted average of about 77% of fee title value was applied to land cover type values, with resulting per-acre easement costs shown in Table 12-2.

Table 12-2
Average Per-Acre Conservation Easement Costs

PPU	UDA Relationship	2 to 10 acres	10 to 20 acres	20 acres +	Weighted Average
PPU 1	Inside UDA	$120,000	$40,000	$22,000	$23,000
PPU 2	Inside UDA	*No Acquisitions in PPU 2*			
PPU 3	Inside UDA	$120,000	$40,000	$22,000	$25,000
PPU 4	Inside UDA	$80,000	$32,000	$20,000	$21,000
PPU 5	Outside UDA	$28,000	$12,000	$8,000	$8,000
PPU 6	Outside UDA	$25,000	$11,000	$9,000	$9,000
PPU 7	Outside UDA	$20,000	$12,000	$7,000	$7,000
PPU 8	Inside UDA	$120,000	$40,000	$40,000	$43,000

Notes:
PPU = Preserve Planning Unit
UDA = Urban Development Area

[3] Gregory A. House (House Agricultural Consultants), Accredited Farm Manager, Accredited Rural Appraiser, and Certified Professional Agronomist.

12.3.1.3 Land Transaction Costs

A number of transaction costs are associated with the land acquisition process, whether it be fee title or conservation easement. Typically, these costs are part of the due-diligence process and include commissions and legal fees, title searches and insurance, appraisals, legal boundary surveys, and Phase 1 Environmental Assessment costs. Because the results of the due-diligence process may cause the Implementing Entity to decide not to acquire certain properties, the economic model assumes that some transaction costs will be incurred on properties that are not acquired. The economic model assumes that transaction costs are 5% of the land or easement purchase price. This percentage is generally consistent with the transaction costs assumed in other HCP economic analyses. Assuming that the average property acquisition is 100 acres, it will require about 350 transactions to assemble the SSHCP Preserve System. It is likely that roughly 25% more properties will be investigated than will be acquired. The land acquisition process is discussed in detail in Chapter 9.

Preserve Documentation Report

A PDR (Appendix F) will be prepared by the Implementing Entity for all properties proposed for acquisition by the SSHCP and will identify existing physical and biological conditions on properties being considered for acquisition. As specified in Appendix F, each PDR will include information on the property location, physical condition of facilities such as fences, and biological setting, including documentation of special-status and other species on the property. The habitat assessment conducted as part of a PDR will require limited biological surveys, and the completed PDR will be a brief report with accompanying maps. Costs assumptions for completion of an average PDR are based on the estimate that it will require 22 hours at $150 per hour for contracted biological staff to complete required tasks. Also included in the PDR cost is a post-acquisition biological assessment, which is estimated to require 1 hour of biologist time per acre. Assuming there will be five PDRs for every four property acquisitions and that the average acquisition is 100 acres, PDR cost is estimated to be about $189 per acre.

Recordation of Easements

All lands acquired for the SSHCP Preserve System will need a conservation easement, even lands that are held in fee title by the Implementing Entity. Conservation easements will be negotiated individually between willing sellers and the Implementing Entity. The terms of the easement and prices paid for easements will be variable depending on the purpose of the easement and the degree to which the easement restricts land uses. Easements will be recorded for Stream Setbacks and Preserve Setbacks to provide the Implementing Entity with the ability to enforce the Avoidance and Minimization Measures that are expected to occur within the area of the setback (see Chapter 5). Costs for the preparation of a conservation easement are estimated as

part of total transaction costs, which are assumed to be 5% of the transaction value (including some costs attributable to parcels for which due diligence occurs but are not acquired).

Initial Site Improvements

The economic analysis assumes that most lands preserved in fee title will require varying levels of site improvements upon acquisition, such as removal of degraded facilities, repair and replacement of gates, and installation of signage and new fencing. The cost analysis assumes that conservation easements will require the same level of site improvements as properties acquired in fee title. Although the extent of the improvements needed is dependent on the condition of the property at the time it is acquired, the SSHCP's economic analysis assumes each preserved property will require initial site improvements averaging $257 per acre preserved, which reflects estimates of demolition, safety improvement, fencing, and signage for a typical property.

12.3.2 Habitat Re-establishment/Establishment

Habitat re-establishment/establishment costs are estimated to be approximately $183 million over the 50-year Permit Term. Estimates of re-establishment/establishment costs were developed for each of the land cover types that require re-establishment/establishment (i.e., Vernal Pool, Seasonal Wetland, Freshwater Marsh, Swale, Stream/Creek, Stream/Creek (Vernal Pool Invertebrate Habitat [VPIH]), Open Water, Riparian (including Mixed Riparian Woodland and Mixed Riparian Scrub), Mine Tailing Riparian Woodland, Blue Oak Woodland, and Blue Oak Savanna). Only costs associated with the re-establishment/establishment activities are addressed here. Cost to acquire land where re-establishment or establishment will occur is discussed in Section 12.3.1. It is important to note that re-establishment/establishment will, in most cases, take place within Preserve System lands that are acquired for purposes of meeting conservation requirements. Accordingly, it is not anticipated that additional lands will be needed to accommodate all the re-establishment/establishment required under this Plan. It should also be noted that the portion of the re-establishment/establishment fee to acquire land is to replace the upland land cover type that will be lost as a result of constructing re-established or established wetlands.

Cost estimates to re-establish/establish habitat are based on interviews with land management agencies active in the region that have engaged in habitat re-establishment/establishment; interviews with conservation banks; and cost estimates prepared for potential habitat re-establishment/establishment sites located within the Plan Area.[4]

[4] Interviews were conducted with staff from Westervelt Environmental Services, the Sacramento Valley Conservancy, and the Stone Lakes National Wildlife Refuge. Cost estimates to design, build, and monitor 50 acres of Vernal Pool re-establishment within the Plan Area were prepared by Dudek restoration experts for purposes of estimating potential re-establishment costs. Current bids to construct vernal pools within the Plan Area were used to estimate potential establishment costs.

Costs associated with habitat re-establishment/establishment include, but are not limited to, site reconnaissance, soil testing and other site feasibility studies as necessary, engineering design and preparation of construction drawings and specifications, land acquisition, staking, earthwork, plant and seed procurement, planting/seeding, and installation of irrigation system. Additionally, re-establishment/establishment projects are subject to additional costs associated with intensive short-term monitoring and maintenance activities for the first 5 years after re-establishment/ establishment is complete. Finally, estimates of habitat re-establishment/establishment costs assume that some portion of habitat re-establishment/establishment projects may not be successful. In particular, re-established/established vernal pool habitat projects have historically been challenging relative to other wetland projects (see Table 12-3 for assumed success rates).[5] In addition, a 10% contingency is applied to guard against shortfalls in planning and design costs, construction costs, and short-term monitoring and maintenance costs. Contingency funds can also be used to remediate re-establishment/establishment sites if the site is not functioning properly. Note that long-term monitoring and management costs for remediation sites are addressed in Section 12.3.7, Endowment.

It is anticipated that contractors will be hired by the Implementing Entity to design, build, and monitor habitat re-establishment/establishment projects. These projects require specialized equipment and technical knowledge to successfully implement habitat re-establishment/ establishment. It also is possible that the Plan will acquire credits from mitigation banks that are within the Plan Area. Staff time, equipment, and vehicles for the Implementing Entity to account for the time needed to hire and oversee contractor designs, specification, and construction are included in SSHCP Administration Cost, discussed in Section 12.3.6.

Table 12-3
Habitat Re-establishment/Establishment Costs

Re-establishment/ Establishment Type	Estimated Per-Acre Cost	Success Rate	Expected Per-Acre Cost	Per-Acre Cost with Contingency
Vernal Pool	$68,834	65%	$105,898	$116,488
Blue Oak	$30,000	50%	$60,000	$66,000
Riparian	$54,511	80%	$68,139	$74,953
Mine Tailing Riparian Woodland	$54,511	65%	$83,863	$92,249
Seasonal Wetland	$59,294	80%	$74,118	$81,529
Freshwater Marsh	$56,388	80%	$70,485	$77,533

[5] John Zanzi of Dudek has 30 years' experience with design, implementation and long-term monitoring of mitigation projects in California. Mr. Zanzi's professional experience informs the success rates used in this Plan by virtue of his firsthand experience that spans numerous similar mitigation projects including construction implementation and performance of 5-year monitoring programs that collect quantitative data to analyze the interim trajectory and final mitigation project performance.

Table 12-3
Habitat Re-establishment/Establishment Costs

Re-establishment/ Establishment Type	Estimated Per-Acre Cost	Success Rate	Expected Per-Acre Cost	Per-Acre Cost with Contingency
Swale	$53,130	75%	$70,840	$77,924
Stream/Creek (VPIH)	$53,130	80%	$66,412	$73,053
Open Water	$50,650	90%	$56,278	$61,906
Stream/Creek	$54,511	85%	$64,131	$70,544

12.3.2.1 Cost of Regulatory Compliance

Implementation of habitat re-establishment/establishment activities may require additional regulatory compliance. Costs of regulatory compliance for habitat re-establishment/ establishment are estimated to be about $31 million over the 50-year Permit Term.

The SSHCP economic analysis assumes that CEQA, NEPA, Sections 401 and 404 of the Clean Water Act, Section 106 of the National Historic Preservation Act, Sections 1600–1607 of the California Fish and Game Code, and other miscellaneous requirements (e.g., county grading permits, road encroachment permits, stormwater pollution prevention plans) will be required for SSHCP habitat re-establishment/establishment activities. Estimated costs reflect the costs for contracting the preparation and submittal of compliance documents and permit applications.

All regulatory compliance costs are expected to be incurred during the Permit Term and will not be required for ongoing management and monitoring activities. Based on input from consultant firms familiar with projects in the region and based on expert opinion from the Plan Permittees local jurisdictions, it is estimated that regulatory compliance will add about 20% to the cost of the re-establishment/establishment activities, with the additional costs attributed to preparing regulatory compliance documents for habitat re-establishment/establishment actions.

12.3.3 Habitat Management, Monitoring, and Adaptive Management Costs

12.3.3.1 Habitat Management Costs

All land that is part of the SSHCP Preserve System must be managed according to the Preserve System Monitoring and Management Program and SSHCP Conservation Strategy. As discussed in Section 8.2, all Preserve lands acquired in fee title will be subject to active land management by the Implementing Entity. Preserve lands acquired by conservation easement will primarily be managed by individual landowners according to a Preserve Management Plan prepared by the Implementing Entity. Habitat management costs are estimated to be approximately $15 million over the 50-year Permit Term.

Costs associated with management of the SSHCP Preserve System include upfront capital expenditures on equipment, materials, and infrastructure improvements; construction of field facilities; and installation of water wells and pumping equipment. Ongoing management costs include invasive species control and other maintenance activities during the Permit Term. An overall average cost per acre of $500 was applied for the upfront management costs, while $15 per acre per year is assumed for ongoing management activities.[6] Management costs were assumed to apply to all Preserve land owned in fee title as well as to 5% of the conservation easement lands. As mentioned earlier, all of the land that makes up the SSHCP Preserve System will be managed, and property that is encumbered by an easement will primarily be managed by the landowner. However, up to 5% of properties encumbered by an easement will require specialized management that will be conducted and paid for by the SSHCP Implementing Entity. Specialized management may include management techniques that are designed to enhance habitat for individual species such as, but not limited to, unconventional crop rotations or fallowing of fields.

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

Cost of Preparing Preserve Management Plans

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

[6] The analysis assumes that all management requirements would be satisfied by the per-acre fixed and annual cost estimates, either directly by the Implementing Entity or through vendor/contractors hired by the Implementing Entity. If management activities are executed by the Implementing Entity, a variety of facility, vehicle, and other equipment costs would be incurred, consistent with the per-acre management cost estimate.

estimated that about 3% ($400,000 before contingency) of the overall cost of habitat management can be attributed to the preparation of Preserve Management Plans.

Species Enhancement Measures

In addition to basic management activities, as part of the proposed Conservation Strategy the SSHCP includes Measurable Objectives that will benefit target species (see Chapter 7), rather than the more general species benefits provided by the Preserve System as a whole. These include planting hedgerows to benefit Swainson's hawk (*Buteo swainsoni*) and greater sandhill crane (*Grus canadensis;* Objective AG3), preparation of targeted species mobility studies for California tiger salamander (*Ambystoma californiense;* Objective CTS3), and others. Cost estimates were developed for each measure and distributed across land cover types. It is estimated that about 12% ($1.7 million before contingency) of the overall cost of habitat management can be attributed to Species Enhancement Measures.

12.3.3.2 Habitat Monitoring Costs

As discussed in Section 8.3, all Preserve lands acquired in fee title or by conservation easement will be monitored by the Implementing Entity or consultants that are hired to complete monitoring tasks. Costs associated with monitoring of the SSHCP Preserve System include planning, conducting, analyzing, and reporting on presence/absence or status and trends of Covered Species and SSHCP land cover types within the Preserve System; and planning, conducting, analyzing, and reporting on compliance and effectiveness of AMMs and measurable objectives. Refer to Chapter 8 for details on monitoring requirements.

An overall average cost per acre of $50 was applied for the upfront monitoring costs. Ongoing monitoring is assumed to be $13 to $50 per acre per year, with agricultural lands assumed to require significantly less monitoring work than other land cover types. Lower levels of monitoring are required for row crop and irrigated pasture so monitoring of row crop and irrigated pastures was set at 25% of the annual per-acre cost of monitoring for all other land cover types.

Habitat monitoring costs (including Adaptive Management, discussed in Section 12.3.3.3) are estimated to be about $45 million over the 50-year Permit Term. While all SSHCP Preserves are monitored as part of implementation, the intensive monitoring of re-establishment/establishment projects during the post construction period are not included in this cost category, but are included in the re-establishment/establishment cost category in Section 12.3.2. At the end of the 50-year Permit Term, monitoring costs are expected to decline to about 50% relative to the annual cost in year 50.

12.3.3.3 Adaptive Management Costs

Costs associated with adaptive management are included in habitat management costs category. Adaptive management activities within the Preserve System will include any change in the management of the Preserve System necessary to meet the Biological Goals and Measurable Objectives described in Chapter 7. These changes will be informed by monitoring described in Chapter 8. Adaptive management tasks are described in Section 8.3.4.2.

12.3.4 Cost of Remediating Changed Circumstances

The SSHCP funding program is required to account for costs associated with the Plan's defined changed circumstances (see Chapter 11). Costs of remediating changed circumstances are estimated to be about $8 million over the 50-year Permit Term. Due to the uncertainty inherent in changed circumstances, it is not possible to forecast the prevalence and extent of these events in the Plan Area with precision. It was assumed that the cost of remedial measures to address changed circumstances will add 10% to management costs and 15% to monitoring costs of the total management budget. Contingency funds can also be used to remediate changed circumstances if necessary.

The Implementing Entity will maintain sufficient financial reserves to fund remedial actions described in Chapter 11 when they arise. As discussed in Section 12.4, the Implementing Entity will annually assess its funding reserves and supplement those reserves if necessary to fund implementation of the most expensive remedial actions that might occur. Funds used to supplement these financial reserves could come from outside the Implementing Entity or from within the Implementing Entity budget (i.e., funds shifted from other SSHCP uses). This approach will ensure that adequate funds are available immediately in the event of a changed circumstance occurring.

Annual funding for remedial measures will accrue each year, and annual funding for remedial measures will grow each year in proportion of the size of the Preserve System. The combination of these two factors will lead to substantial remedial measures funding reserves generated later in the Permit Term. Changed circumstances described in Chapter 11 are more likely to occur on a larger scale later in the Permit Term due to the greater size of the Preserve System and the expected effects of climate change.

As described in Chapter 11, the Implementing Entity is required to implement remedial action if any of the changed circumstances occur. The cost assumptions are made for planning purposes and will not limit the Implementing Entity's obligation to respond to these changed circumstances. Remedial measures for the Preserve System are not required after the Permit Term so these costs are assumed to apply only during the Permit Term.

12.3.5 Agricultural Enhancement Funding

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

12.3.6 SSHCP Administration Cost

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

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

It is important to note that labor and equipment costs associated with many SSHCP implementation activities are not included under the SSHCP administration cost category. For example, labor and other costs associated with most habitat establishment and re-establishment, management, and monitoring activities are excluded from staffing costs, as

these activities are likely to be undertaken primarily by outside contractors and are captured in the separate cost estimates for these categories.

In addition, administrative costs incurred by Plan Permittees other than the Implementing Entity to fulfill their own responsibilities under the Plan are not included in the cost estimates. For example, each Plan Partner will incur costs when reviewing applications for take authorization from various project proponents (see Chapter 10). The participating cities and the County might recover these costs from applicants according to the policies in place at each local jurisdiction. The development fee amounts specified in the Plan do not reflect the costs of application review by the local jurisdictions, and revenues from the development fees will not be used to cover these costs. Similarly, the cost of all conditions on Covered Activities described in Chapter 5 will be borne by the project proponents, either public agencies or private developers.

Staff

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

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

Other staffing mixes could be used by the Implementing Entity to fulfill the obligations of the Plan; but for the purposes of the cost analysis, the staffing mix described in the preceding paragraphs was used. Costs for personnel to monitor and manage the Preserve System and to re-establish/establish habitat are included in the monitoring, management, and habitat re-establishment/establishment cost categories. It is assumed that habitat re-establishment/establishment, management and monitoring will mainly be provided by consultants. Costs to staff the Implementing Entity are estimated to be about $23 million over the 50-year Permit Term.

Governing Board

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

Insurance

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

12.3.7 Endowment

The development fees include a contribution to a non-wasting endowment fund designed to generate sufficient interest to cover the ongoing annual costs beyond the 50-year Permit Term. The endowment needs are based on estimates of the long-term average real interest rate. The periodic audits of the funding program will review the accrual of the endowment and the long-term interest rates and determine if any adjustments are required.

As noted in the preceding sections, only a few activities including management and monitoring, agricultural enhancement, and plan administration will continue in perpetuity beyond the end of the 50-year Permit Term. Due to the reduced levels of activity at the end of the land-acquisition process and the completion of habitat re-establishment construction, costs are assumed to be reduced by 50% during the post-Permit Term, except for Agricultural Enhancement which continues at the same level as during the Permit Term. The post-permit SSHCP budget provides an additional allowance for legal defense equal to 7.5% of other post-permit costs. The annual cost of ongoing activities is about $1.6 million.

The SSHCP cost analysis includes a non-wasting endowment from which the real interest earned is sufficient to cover average annual post-permit costs. Based on Plan Permittee research of real interest rates as well as a review of interest rate assumptions in other regional HCPs, a real interest rate of 3% is assumed (i.e., net interest over-and-above inflation). This assumption is consistent with the endowment requirements maintained by the California Department of Fish and Wildlife and the endowment program operated by the National Fish and Wildlife Foundation.

A non-wasting endowment of about $52 million is required at the end of the Permit Term. This includes the additional cost (7.5% of the base endowment), about $3.6 million, as a legal endowment. Assuming an even distribution of development and development fee payment over the 50-year Permit Term, interest revenues accruing to the endowment during the Permit Term are estimated to cover about 42 percent of the endowment need.

12.3.8 SSHCP Development and Preparation Cost Recovery

The development and preparation of the SSHCP documents entailed a significant amount of Permittee and consultant time and costs. Taking into account labor costs and expenditures, the Plan Permittees estimate that their direct contributions total about $6 million. These are contributions that were paid using City and County General Funds and from contributions provided by the Sacramento County Water Agency, Sacramento Regional County Sanitation District, and the Southeast Connector Joint Powers Authority. These contributions do not include grant awards. The costs of Plan development have already been incurred. In addition, the Plan Partners will fund the Implementing Entity operations, including the executive director, program manager, administrative assistant, and other staff, as well as legal, real estate, accounting, and other functions for the first 2 years of implementation. This is necessary as the Plan will not have collected enough development fees within the first 2 years to be self-sustaining. Recovery of plan development costs are spread over the 50-year Permit Term, which with interest brings total plan development cost to about $10 million. The Plan Partners will not pay the Plan preparation cost recovery component of the development fee for their Covered Activities.

12.3.9 Summary of HCP Costs and Funding Requirements

A summary of SSHCP implementation costs is presented in Table 12-4. The costs presented in Table 12-4 also represent the total funding requirements for implementation of the SSHCP. The cost estimates include all costs associated with SSHCP implementation during the Permit Term as well as establishing the non-wasting endowment (including legal endowment) required at the end of the Permit Term to cover costs that extend beyond the Permit Term in perpetuity.

Table 12-4
Summary of Plan Costs

Cost Category	Cost Estimate	Average Annual Cost	Distribution of Costs
Land and Easement Acquisition Costs	$427,854,000	$8,557,000	55.8%
Habitat Re-establishment/Establishment	$183,098,000	$3,662,000	23.9%

Table 12-4
Summary of Plan Costs

Cost Category	Cost Estimate	Average Annual Cost	Distribution of Costs
Habitat Management, Monitoring, and Adaptive Management	$59,995,000	$1,200,000	7.8%
Changed Circumstances	$8,231,000	$165,000	1.1%
Agricultural Enhancement	$6,015,000	$120,000	0.8%
Plan Administration	$42,171,000	$843,000	5.5%
Endowment	$30,039,000	$601,000	3.9%
SSHCP Development	$9,547,000	$191,000	1.2%
Total	**$766,948,000**	**$15,339,000**	**100.0%**

12.3.9.1 Contingency Cost

The Plan costs presented in this section are planning-level estimates. To account for uncertainties in costs, contingencies have been added to the costs to help protect against short-term cost overruns. A general contingency of 10% is included in the cost model for land and easement acquisition, habitat re-establishment/establishment, habitat management, and plan administration. The contingency for monitoring activities is set at 15% to account for easement enforcement actions. Contingency costs are reported in the total cost estimate for each SSHCP cost element. A contingency fund will be used to offset any program costs that are higher than predicted by this Plan. Contingency funds have been set at modest levels because the SSHCP has a development fee adjustment program that allows for adjustments to cover changing economic conditions (see Automatic Adjustment of Development Fees to Account for Inflation in Section 12.4.3.2). In total, about 8% of the total plan cost ($64 million) is a direct contingency cost.

12.4 SSHCP Funding Program (Sources and Assurances)

Long-term viability of the SSHCP requires adequate funding to cover the Plan's implementation costs. Funding to implement the SSHCP is expected to come predominantly from development fees charged on future development.

This section outlines the key parameters of the SSHCP funding program, which include:

- SSHCP Development Fee Concept
- SSHCP Development Fee Structure
- SSHCP Development Fee Program and Schedule
- Funding Adequacy and Assurances.

12.4.1 SSHCP Development Fee Concept

The SSHCP development fees are set at levels that fully offset the cost of compensating for the species take and habitat loss authorized by the SSHCP Incidental Take Permits and the loss of aquatic features protected under the Clean Water Act.

The SSHCP includes a development fee structure that is based on the land cover types impacted by a SSHCP Covered Activity. This approach accounts for variations in costs that are associated with conservation requirements for each different land cover type. Each new development project will pay development fees based on the land cover types affected by the development. The SSHCP development fees were estimated on a per-acre-of-development basis.

The per-acre development fee is calculated by summing the total HCP implementation costs associated with mitigating the impacts of each SSHCP natural land cover type and then dividing that total cost by the number of acres of impact (direct and indirect).

Because the SSHCP implementation cost includes both costs during the Permit Term and the cost of establishing the required endowment to cover costs of managing the SSHCP Preserve System after the end of the 50-year Permit Term, a project's one-time development fee must be adequate to cover all SSHCP implementation costs for each land cover type preserved.

As discussed in Chapters 7 and 9 and in the following sections, some urban development projects will be required to dedicate SSHCP Preserve System lands on site. For these developers and potentially others who agree to on-site dedications with the SSHCP Implementing Entity, these on-site land dedications will act to reduce the number of acres on which the land component of the development fee will need to be paid. As also indicated in the development fee schedule, all new developments/impacts will be required to make contributions towards a range of other costs, though the re-establishment/establishment component of the development fee only applies to the land cover types where such mitigation actions are required.

12.4.2 SSHCP Development Fee Structure

The SSHCP employs a development fee structure, where covered projects and activities incur different development fees based on the types of habitat and amount of habitat impacted. The underlying principle for the development fee structure is that land preservation and conservation requirements, and therefore costs, vary by habitat type. For example, per-acre land costs will vary by land cover type depending on the need to mitigate the loss of land covers inside the UDA where land is more expensive. Similarly, annual monitoring costs are assumed to differ by land cover, while land management costs apply to fee title acquisitions. Re-establishment/ establishment mitigation requirements only apply to certain types of land covers.

More specifically, the SSHCP development fees are separated into twelve land cover groupings, including: (1) Agriculture, (2) Valley Grassland, (3) Vernal Pool, (4) Blue Oak Savanna and Woodland, (5) Riparian, (6) Mine Tailing Riparian Woodland, (7) Seasonal Wetland, (8) Freshwater Marsh, (9) Swale, (10) Stream/Creek (VPIH), (11) Open Water, and (12) Stream/Creek. The SSHCP Conservation Strategy (Chapter 7) includes re-establishment/ establishment objectives for all but two of these land cover types: Agriculture and Valley Grassland.

This Plan uses development impact fees to fund mitigation that will offset losses of land cover types, Covered Species habitat, and other biological values. These one-time development fees pay for the full cost of mitigating project effects on the Covered Species. Once paid, applicants do not need to find their own mitigation to satisfy state and federal endangered species or Clean Water Act laws. In addition, these development fees should also satisfy all or most of the CEQA mitigation needs for biological resources, as discussed in Chapter 1.

Methods for calculating development fees are explained in Chapter 10. As described there, applicants must submit an SSHCP land cover type map, wetland delineation (if applicable), and a map depicting modeled species habitat found on the project site (if applicable). The Land Use Authority Permittee or the Implementing Entity will use these reports to finalize the site-specific land cover type map to be used for calculating impacts to SSHCP land cover types and for calculating SSHCP development fees. The underlying analysis for the development fee calculations is provided in the *SSHCP Nexus Study*.

12.4.3 SSHCP Development Fee Program and Schedule

The development fees used in the SSHCP economic model are presented in Table 12-5. Development fees are shown by land cover, with the preservation component of the fee distinguished from the re-establishment/establishment fee. Appendix I includes additional detail concerning the cost components that comprise the fee.

Table 12-5
Development Fees Used in the SSHCP Economic Model

	Preservation Fees		Re-Establishment/Establishment Fees		
Land Cover	*Land*	*Other*	*Re-Establishment/ Establishment and Land*	*Other*	**Total**
Agriculture	$13,244	$2,968	$0	$0	$16,212
Valley Grassland	$12,940	$4,764	$0	$0	$17,704
Vernal Pool - Direct	$23,853	$9,469	$152,844	$5,138	$191,304
Vernal Pool - Indirect	$23,853	$9,469	$0	$0	$33,322
Blue Oak	$16,285	$4,764	$92,258	$5,138	$118,445
Riparian	$25,238	$9,239	$103,001	$5,138	$142,617

Table 12-5
Development Fees Used in the SSHCP Economic Model

Land Cover	Preservation Fees		Re-Establishment/Establishment Fees		Total
	Land	*Other*	*Re-Establishment/ Establishment and Land*	*Other*	
Mine Tailing Riparian Woodland	$9,398	$4,583	$123,757	$5,138	$142,876
Seasonal Wetland	$17,401	$4,788	$110,893	$5,138	$138,220
Freshwater Marsh	$22,828	$5,023	$106,098	$5,138	$139,088
Swale - Direct	$14,399	$4,868	$106,566	$5,138	$130,972
Swale - Indirect	$14,399	$4,868	$0	$0	$19,267
Streams/Creeks (VPIH) - Direct	$33,569	$5,310	$100,722	$5,138	$144,739
Streams/Creeks (VPIH) - Indirect	$33,569	$5,310	$0	$0	$38,879
Open Water	$16,349	$4,811	$87,345	$5,138	$113,643
Streams/Creeks	$11,978	$4,614	$97,710	$5,138	$119,441

12.4.3.1 Land Dedication In lieu of Development Fees

The implementation strategy outlined in Chapter 9 describes a land dedication process where project proponents can dedicate land towards satisfying their mitigation requirements and thereby reduce their development fees. When the dedication of land (or a re-establishment/establishment site) is accepted into the SSHCP Preserve System, development fees will be adjusted by reducing the appropriate portion(s) of the development fee (e.g., the "land" component of the SSHCP development fee) at a 1:1 ratio. It should be noted that some components of the proposed SSHCP development fees (i.e., "Other" fees shown in Table 12-5) will remain unchanged, as these fee revenues are used to fund SSCHP requirements for management and monitoring, changed circumstances, plan administration, plan development, and endowment). Land dedication in lieu of paying the land purchase component of the SSHCP development fee is only awarded after the Implementing Entity has approved the land dedication and recordation of a conservation easement or transfer of fee title to the Implementing Entity has occurred.

As described in Chapter 10, if an applicant proposes to dedicate land or an easement in lieu of paying part of the required SSHCP development fees, then the Implementing Entity must review the proposed land dedication or the easement to ensure that it is consistent with the SSHCP Conservation Strategy. The SSHCP has strict criteria for siting Preserves, and not all land within the SSHCP Plan Area is suitable for establishing SSHCP Preserves. The Implementing Entity must determine whether the proposed land dedication is consistent with SSHCP AMMs described in Chapter 5, Section 5.4, Conditions on Covered Activities, and with the biological

goals and objectives described in Chapter 7 (Table 7-1, Biological Goals, Measurable Objectives, and Conservation Actions). An applicant must provide information in support of a land dedication proposal as detailed in Chapter 10. Mitigation Fee implementation will be covered in more detail in the Mitigation Fee Ordinances.

12.4.3.2 Development Fee Adjustment Program

The funding program must ensure that the SSHCP remains solvent in perpetuity. SSHCP funding will never lag behind increasing costs, and Plan implementation will never be compromised. Therefore, the SSHCP funding program is able to respond to changing economic conditions, including inflation and a dynamic real estate market. It is able to respond to any unexpected funding shortfalls over the Permit Term.

The SSHCP economic model predicts future changes in costs and revenues using the best available information. To ensure that SSHCP funding never lags behind increasing costs, the SSHCP includes automatic development fee adjustments and periodic development fee audits.

Automatic Adjustment of Development Fees to Account for Inflation

The proposed SSHCP development fees will be automatically adjusted annually for inflation. For purposes of development fee adjustments, the SSHCP development fees are organized into two categories: (1) land acquisition and (2) all other costs of implementing the SSHCP. These two categories are subject to differing rates of inflation. Therefore, an inflation index that is appropriate to each category has been selected.

The SSHCP cost analysis assumes that the cost of land acquisition is tied directly to real estate values in the Plan Area. All other costs are tied more generally to changes in the cost of labor/personnel, services, and goods and materials. Therefore, it is anticipated that different rates of inflation could apply to land acquisition and other costs over time and require different inflation indices.

For land acquisition costs, the index to adjust the land acquisition cost portion of development fees will be the annual Home Price Index for the Sacramento–Arden–Arcade–Roseville, California Metropolitan Statistical Area from the Office of Federal Housing Enterprise Oversight. This index is selected because it is a well-regarded public data source with relevant geographic coverage. The development fee adjustment index will be based on the change in the average annual Home Price Index (Quarter 1 through Quarter 4) for the prior calendar year. The "other costs" will be indexed using the California Construction Cost Index (CCCI). The CCCI is the most applicable index as it tracks labor and materials costs that are relevant to other SSHCP costs.

Periodic Audit and Adjustment of SSHCP Development Fees

In addition to annual development fee adjustments, the SSHCP will conduct periodic comprehensive reviews of the SSHCP funding program and development fees to ensure that the development fees generated by Covered Activities are adequately covering Plan implementation costs. A comprehensive development fee audit will be completed at least every 3 years for the first 15 years of the Plan (i.e., years 3, 6, 9, 12, and 15) and at least every 5 years thereafter (i.e., years 20, 25, 30, 35, 40, and 45), where year 1 is the first full calendar year of SSHCP implementation. This minimum frequency of development fee audits was established to avoid cost-related uncertainties in early years of Plan implementation and to allow time to accumulate sufficient data to analyze the relationship between costs and development fee revenues. The audit process will include a detailed review of implementation costs and how actual costs compare to the cost assumptions in the original economic model (see Appendix I). Following completion of the independent development fee audits, SSHCP development fees may be adjusted to reflect refined cost estimates.

12.4.4 Funding Adequacy and Assurances

The SSHCP funding program is designed so that mitigation-based funding sources will meet all expected costs of the Plan. It is acknowledged that future costs of conservation are difficult to predict. Therefore, the SSHCP development fee adjustment program will be used to address any funding shortfalls, which help ensure funding adequacy over the Permit Term and in perpetuity. As discussed in Section 12.3.4, a contingency fund will be maintained to address any unexpected funding shortfalls, associated primarily with higher-than-expected land management and monitoring costs. Contingency funding is included in the economic model.

12.4.4.1 Catch-Up Fee Ordinance

As discussed in Chapter 9, each Land Use Authority Permittee will adopt a catch-up-fee ordinance. This ordinance requires third-party project applicants to pay a catch-up-fee in the unusual circumstance that a third-party project proponent pays required SSHCP development fees prior to receiving Land Use Authority Permittee issuance of a local permit and the SSHCP development fee is thereafter increased.

12.4.4.2 Short-Term Funding Shortfalls

As described in Chapter 9, the SSHCP has a robust Jump-Start Stay-Ahead program that ensures that progress toward assembling the SSHCP Preserve System will always stay ahead of Covered Activity impacts. This is accomplished by requiring that the SSHCP maintain enough Preserve land to be at least 2% ahead of the remaining preservation needed for each SSHCP land cover type as required by the SSHCP Conservation Strategy. To ensure that the 2% stay-ahead

requirement is always maintained, the Plan Partners must first check with the Implementing Entity prior to extending take coverage to Third-Party Project Proponents or prior to using take coverage for their own projects to ensure that there is enough habitat available to mitigate project impacts and to maintain a 2% cushion. If the Implementing Entity determines that the amount of impact that is anticipated to occur will exceed the stay-ahead provision's 2% threshold for any land cover group, then fees cannot be used to satisfy mitigation requirements (see Chapter 9 for alternatives to paying a fee).

Over the entire Permit Term, fee revenue may fall short of expectations if fewer Covered Activities occur than assumed under the Plan. Although unlikely, this shortfall will make it difficult for the Permittees to meet their conservation obligations. If it appears that take authorized under the permits will fall short of expectations, substantially reducing fee revenue, the Implementing Entity and other Permittees will work with the Wildlife Agencies to extend the term of the permits to allow the use of the authorized take and allow full implementation of the Plan. As described above, the Local Partners are not expected to, nor are they required to, utilize local general funds for Habitat Plan implementation in the event of funding shortfalls as a result of less fee revenue than expected, either in the short term or the long term.

Alternatively, if revenues fall far short of expectations and it is unlikely that the Permittees will meet their permit obligations, they may apply to reduce the authorized take and reduce the permit obligations. Any Permit Term extension or request for reductions in Plan obligations will follow the requirements for a major amendment described in Chapter 9.

12.4.4.3 Post-Permit Management and Monitoring

The Plan Permittees are obligated to continue to protect, manage, and maintain the Preserve System after the end of the 50-year permit period. As noted in Section 12.3.8, only a few activities including management and monitoring, agricultural enhancement, and plan administration will continue in perpetuity beyond the end of the 50-year Permit Term. Funding obligations such as land acquisition, habitat re-establishment/establishment, remedial measures and contingency, will not continue post-permit.

Due to the reduced levels of activity at the end of the land acquisition process, the completion of habitat re-establishment construction and the absence of the need to fund contingency and remedial measures, costs are assumed to be reduced by 50% during the post-Permit Term.

Funding provided by interest on the endowment is expected to fully fund post-permit costs. Any shortfalls in the endowment during the Permit Term will be identified by the comprehensive development fee audit to be completed at least every 3 years for the first 15 years and at least every 5 years thereafter. If the endowment is not growing fast enough to reach its target size,

then the endowment fee portion of the development fees will be increased to make up the shortfall. With these built-in safeguards in the endowment, post-permit funding is expected to be adequate to fully offset post-permit costs of management and monitoring.

Five years prior to the termination of the permit, the Plan Permittees will determine how to handle the continuing obligations of the Implementing Entity with the approval of the Wildlife Agencies. Cost assumptions regarding post-permit costs are presented in Section 12.3.8.