East Contra Costa County HCP / NCCP Mitigation Fee Audit

Prepared For:

East Contra Costa County Habitat Conservancy

Prepared By:

Robert D. Spencer, Urban Economics

Hausrath Economics Group

AECOM

Willdan Financial Services

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Table of Contents

Executive Summary iv
1. Introduction 1
Background 1
Plan Mitigation Fees 2
Audit Objectives and Scope 3
2. Impacts 7
Urban Development Area (UDA) 7
Development Fee Zones 8
Summary of Years 1-5 Impacts 9
Remaining Permanent Impacts Under The Plan 10
3. Cost Model 14
General Approach 14
Land Acquisition Costs 16
Habitat Restoration/Creation Costs 17
Summary of Cost Model Changes 20
4. Wetland Mitigation Fee 23
Updated Fee Schedule 23
Mitigation Fee Act Findings 26
5. Development Fee 29
Updated Fee Schedule 29
Comparison With Original and Current Fee 31
Mitigation Fee Act Findings 32
6. Rural Infrastructure and Temporary Impact Fees 36
Rural Infrastructure Fee 36
Temporary Impact Fee 38
7. Funding Plan 41
Appendix A: Development Impacts A-1
Appendix B: Land Acquisition Cost Analysis B-1
Appendix C: Habitat Restoration and Environmental Compliance Cost Analysis C-1

Appendix D: Initial UDA Cost Model Update D-1
Appendix E: Maximum UDA Cost Model Update E-1
Appendix F: Actual HCP/NCCP Plan Revenue F-1

List of Tables

Table E.1: Application of Mitigation Fees To Covered Activities iv
Table E.2: Development Fee Comparison v
Table E.3: Wetland Mitigation Fee Comparison vi
Table E.4: Comparison of Mitigation Costs To Date (Years 0-5) vii
Table 1.1: Application of Mitigation Fees To Covered Activities 3
Table 2.1: Covered Activities, Years 1-5 (acres, except streams) 10
Table 2.2: UDA Permanent Impacts - Nexus Analysis Update 11
Table 2.3: UDA Permanent Impacts - 2006 Plan Nexus Analysis 12
Table 2.4: Wetland Impacts 13
Table 3.1: Wetland Mitigation Costs 19
Table 3.2: Cost Model Comparison – Initial Urban Development Area 21
Table 3.3: Cost Model Comparison – Maximum Urban Development Area 22
Table 4.1: Wetland Mitigation Fee Schedule 24
Table 4.2: Wetland Mitigation Fee Comparison 25
Table 4.3: Wetland Mitigation Fee Revenue 26
Table 5.1: Development Fee Fair Share Analysis 30
Table 5.2: Development Fee Schedule 31
Table 5.3: Development Fee Comparison – Initial Urban Development Area 32
Table 5.4: Nexus Analysis Comparison – Initial Urban Development Area 33
Table 5.5: Nexus Analysis Comparison – Maximum Urban Development Area 34
Table 7.1: Funding Plan - Permit Term Only (2012$ rounded to nearest $10,000) 43
Table 7.2: Funding Plan Comparison - Permit Term Only (2012$ rounded to nearest $10,000) 44

EXECUTIVE SUMMARY

The purpose of this report is to present the findings, conclusions, and recommendations of an audit of mitigation fees that partially fund the *East Contra Costa Habitat Conservation Plan and Natural Community Conservation Plan* (the Plan). The purpose of this audit is to fulfill the requirements of the periodic audit requirements of the Plan. The audit also provides the basis for the five-year review findings required by the Mitigation Fee Act (MFA).

Revenue sources to fund estimated Plan costs during the 30-year permit term include four types of mitigation fees:

- Development Fee
- Wetland Mitigation Fee
- Rural Infrastructure Fee
- Temporary Impact Fee.

Covered activities that cause permanent impacts pay the development fee or rural infrastructure fee depending on location (inside or outside the Urban Development Area or "UDA"). Covered activities that cause temporary impacts pay the temporary impact fee regardless of location. All projects that cause impacts on aquatic land cover types pay the wetland mitigation fee in addition to the applicable development or rural infrastructure fee. **Table E.1** summarizes how the four types of mitigation fees are applied to covered activities based on location and type of impact.

Table E.1: Application of Mitigation Fees To Covered Activities

Type of Impact	Location of Impact	
	Inside UDA	Outside UDA
Permanent	• Development fee • Wetland mitigation fee (if applicable)	• Rural infrastructure fee • Wetland mitigation fee (if applicable)
Temporary	• Temporary impact fee (plus temporary wetland mitigation fee if applicable)	

Note: "UDA" is the urban development area.

This audit recognizes that post-permit term costs are currently an unfunded liability of the Plan. All cost estimates presented in this audit would be higher if post-permit term costs were included. Mitigation fees would be higher if the Conservancy included post-permit term costs in the fee calculation.

For the development fee the results of the audit are compared to the fees in the original Plan and the current adopted fees in **Table E.2**. The development fee is also the basis for the rural infrastructure and temporary fees so the same trends would apply to those fees as well. The recommended development fee is one percent less than current levels based on the results of this audit. The recommended fee is 12 percent below the fee originally calculated in the Plan primarily because of a decrease in land acquisition costs associated with the decline in real estate prices in East Contra Costa County since 2006. The impact of lower land prices more than offset a 14 percent increase in the consumer price index over the same period affecting other Plan costs.

Table E.2: Development Fee Comparison

	Plan	Current Fee	Nexus Analysis Update[1]	Nexus Analysis Update Compared To:	
	2006	2012	2012	Plan 2006	Current 2012
Zone 1	11,919	10,584	10,526	(12%)	(1%)
Zone 2	23,838	21,169	21,052	(12%)	(1%)
Zone 3	5,960	5,293	5,263	(12%)	(1%)

Note: Fees exclude post-permit costs. Fees would be higher if these costs were included in the analysis.

[1] Represents fee for initial urban development area. Fee for maximum urban development area is lower.

Sources: Table 5.3.

For the wetland mitigation fee the results of the audit are compared to the fees in the original Plan and the current adopted fees in **Table E.3**. The wetland mitigation fee is also the basis for the wetland mitigation component of the temporary fee so the same trends would apply to the wetland component of that fees as well.

The habitat restoration/creation costs shown in Table 3.1 are significantly higher than the 2006 Plan estimates for all aquatic land cover types except streams. Construction unit costs increased between 21 percent and 89 percent for the seven wetland and pond land cover types, and decreased 30 percent for stream projects. The reason for these changes is that estimates developed for the Plan did not have the benefit of actual project cost experience in Eastern Contra Costa County gained since year 1. These costs may change significantly in the future based on future project experience.

Table E.3: Wetland Mitigation Fee Comparison

		Plan	Current Cities/ County[1]	Nexus Analysis Update	Nexus Analysis Update Compared To:	
		2006	2012	2012	Plan 2006	Current Cities/ County[1]
Riparian	per acre	$58,140	$66,462	$87,978	51%	32%
Perennial Wetland	per acre	79,560	90,948	129,261	62%	42%
Seasonal Wetland	per acre	172,380	197,053	299,636	74%	52%
Alkali Wetland	per acre	163,200	188,559	302,668	85%	61%
Aquatic (Open Water)	per acre	86,700	99,110	163,972	89%	65%
Aquatic (Open Water)	per acre	43,860	50,138	81,986	87%	64%
Slough / Channel	per acre	98,940	113,102	119,488	21%	6%
Streams (<=25 ft. wide)	per linear foot	474	542	334	(30%)	(38%)
Streams (>25 ft. wide)	per linear foot	714	816	501	(30%)	(39%)

[1] The "Cities/County" fee applies to most covered activities at this time, those subject to city or county implementing ordinances, and represents the fee updated for inflation in 2012. The ECCC Habitat Conservancy currently uses an updated fee schedule based on the results of an audit completed in 2011. The fee schedule only applies to participating special entities and others who apply directly by the Conservancy for permit coverage because the cities and the County did not adopt it.

Sources: Table 4.2.

The increase in the wetland cover fee for a covered activity is typically not as large as indicated by the results in Table E.3. Wetland mitigation fees are calculated based on the surface area of the aquatic land cover type affected regardless of the total acres of impact of the covered activity. Aquatic land covers are typically small areas so wetland mitigation fees are typically applied to a small portion of the total acres of impact.

An example of the overall effect of the updated fees calculated in this audit on mitigation fee revenues is shown in **Table E.4**. The table uses the actual impact data for the years 1-5 to illustrate how total fee revenues would have varied under three fee schedules: (1) the original Plan fees, (2) the current fee schedule, and (3) the fees recommended by this audit. The results in Table E.4 indicate that based on the fee levels recommended by this audit:

- Total mitigation fee revenues decline to levels below both the original Plan fees and the current fees.
- Both development fee and wetland mitigation fee revenues decline to levels below both the original Plan fees and the current fees.
- Wetland mitigation fee revenue declines because the decrease in the stream fee more than offsets the increase in fees on other aquatic land cover types.

Table E.4: Comparison of Mitigation Costs To Date (Years 0-5)

	Impact Years 1-5		Plan	Current Fee	Nexus Analysis Update
	2007-2012		2006	2012	2012
Non-Aquatic Fees					
Development Fee					
Zone 1	91	acres	$1,085,000	$963,000	$958,000
Zone 2	24	acres	572,000	508,000	505,000
Zone 3	3	acres	18,000	16,000	16,000
Rural Infrastructure Fee[1]	29	acres	691,000	614,000	611,000
Subtotal			$2,366,000	$2,101,000	$2,090,000
Wetland Mitigation Fee					
Riparian	0.30	acres	17,000	20,000	26,000
Perennial Wetland	0.03	acres	2,000	3,000	4,000
Seasonal Wetland	0.42	acres	72,000	83,000	126,000
Slough / Channel	0.07	acres	7,000	8,000	8,000
Streams (<=25 ft. wide)	348	linear ft.	165,000	189,000	116,000
Streams (>25 ft. wide)	173	linear ft.	124,000	141,000	87,000
Subtotal			$387,000	$444,000	$367,000
Total			$2,753,000	$2,545,000	$2,457,000

Note: Fees exclude post-permit costs. Fees would be higher if these costs were included in the analysis.

Note: Estimated fee revenues are similar to but do not equal actual revenues (see Appendix F) because of: (1) annual adjustments to fee levels, (2) adjustments to rural infrastructure fees for rural road impacts, and (3) adjustment to rural infrastructure fees for Antioch area impacts. Temporary fees are excluded.

[1] Based on zone 2 fee. Actual fee varies based on project location and impacts (see Chapter 6).

Sources: Tables 2.1, 4.2, 4.3, and 5.3.

1. INTRODUCTION

The purpose of this report is to present the findings, conclusions, and recommendations of an audit of mitigation fees that partially fund the *East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan* (the Plan). This introduction provides background on the Plan and the Mitigation Fee Act (MFA), the state enabling statute for mitigation fees. This chapter also describes the purpose and scope of this audit and explains the general approach taken to complete the audit.

The purpose of this audit is to fulfill the requirements of the periodic audit requirements of the Plan. [1] The audit also provides the basis for the five-year review findings required by the MFA.[2]

Background

The Plan was completed in 2006 after an extensive planning process initiated in 1999 that built on prior efforts begun in 1995.[3] The Plan enables the protection of natural resources in Eastern Contra Costa County while streamlining the environmental permitting process for impacts on endangered species covered by the Plan. Adoption of the Plan allowed state and federal wildlife agencies to issue various permits for a 30-year term (the permit) allowing the incidental take of endangered species by projects and activities covered by the Plan (covered activities). Covered activities include all ground- or habitat-disturbing activities, for example, urban development projects, public infrastructure projects, and ongoing infrastructure maintenance activities. Implementation of the Plan will preserve specified natural lands in Eastern Contra Costa County in perpetuity (the preserve system) to mitigate the impacts of covered activities on endangered species and contribute to their recovery.

The five local agencies responsible for implementing portions of the Plan that relate to the development entitlement process are the County of Contra Costa and the cities of Brentwood, Clayton, Oakley, and Pittsburg. The City of Antioch chose not to participate in the Plan and impacts within that city's boundaries are not covered by the Plan. The five participating local agencies

[1] Jones and Stokes, "East Contra Costa County Habitat Conservation Plan / Natural Community Conservation Plan", prepared for the East Contra Costa County Habitat Conservation Plan Association (hereafter referred to in footnotes as "2006 Plan"), p. 9-31.

[2] *California Government Code*, section 66001(d)(1).

[3] 2006 Plan, Chapter 1, pp. 1-1 to 1-2.

formed a joint powers authority in 2007 known as the East Contra Costa County Habitat Conservancy (the Conservancy) to perform the many implementation duties assigned to the "Implementing Entity" by the Plan. . The Conservancy requested this audit.

The Conservancy's fiscal year is from January 1 to December 31. The first (partial) year of operation was 2007. The Conservancy began collecting mitigation fees in 2008. Consistent with the financial planning presented in Chapter 9 of the Plan, 2007 is year 0, 2008 is year 1, 2012 is year 5, and the permit term would end in 2037, year 30.

Plan Mitigation Fees

Revenue sources to fund estimated Plan costs during the 30-year permit term include four types of mitigation fees:

- Development Fee
- Wetland Mitigation Fee
- Rural Infrastructure Fee[4]
- Temporary Impact Fee.

The type of mitigation fee paid by a covered activity depends on the location of the activity and the type of impact ("impact" and "covered activity" are used interchangeably in this report). Location depends on whether the impact is located inside or outside the urban development area (UDA). The UDA is defined as (1) the County of Contra Costa urban limit line, or (2) the boundaries of the four cities implementing the Plan whichever is larger.[5] Applicants can dedicate land for conservation in lieu of paying the fee subject to approval by the Conservancy.

Types of impacts are either permanent or temporary. Permanent impacts result in permanent habitat removal. Temporary impacts are impacts on vegetation or habitat that do not result in permanent habitat removal.

Covered activities that cause permanent impacts pay the development fee or rural infrastructure fee depending on location (inside or outside the UDA). Covered activities that cause temporary impacts pay the temporary impact fee regardless of location. All projects that cause impacts on aquatic land cover types (wetlands, ponds, and streams) pay the wetland mitigation fee in

[4] The 2006 Plan used the label "rural road fee". This audit uses the term "rural infrastructure fee" because fees on covered activities associated with both rural road and other infrastructure projects and activities outside the urban development area are based on application of the same fee.

[5] 2006 Plan, Chapter 2, pp. 2-16 to 2-18, Figure 2-3. Excludes City of Antioch that is not covered under the Plan.

addition to the applicable development or rural infrastructure fee. **Table 1.1** summarizes how the four types of mitigation fees are applied to covered activities based on location and type of impact.

Table 1.1: Application of Mitigation Fees To Covered Activities

Type of Impact	Location of Impact	
	Inside UDA	Outside UDA
Permanent	• Development fee • Wetland mitigation fee (if applicable)	• Rural infrastructure fee • Wetland mitigation fee (if applicable)
Temporary	• Temporary impact fee (plus temporary wetland mitigation fee if applicable)	

Note: "UDA" is the urban development area.

Audit Objectives and Scope

The objectives of this audit are defined by the requirements of the Plan. With the addition of actual data through the end of the current fiscal year (December 31, 2012) this audit could also meet the five-year requirements for findings under the state Mitigation Fee Act.

Periodic Audit Requirements of the Plan

The Plan calls for periodic audits of the mitigation fees in years 3, 6, 10, 15, 20, and 25. The purpose of the audit is "[t]o ensure that the fees generated by development and other covered activities are adequately covering their share of Plan costs." [6] The Plan calls for the audit to be completed by an outside independent financial auditor.

Audits must compare current actual costs to the cost assumptions used in the current mitigation fee calculation. The audit must review actual land acquisition costs as well as costs to operate, manage, and maintain the preserve system. The audit must recalculate fees based on this cost review to maintain mitigation fee funding as a share of total Plan costs based on the fair share allocation determined by the Plan.

In between periodic audits the Plan calls for automatic annual adjustments to the Plan's mitigation fees based on several inflation indices applied to appropriate cost components of the Plan.[7] The annual adjustment process

[6] 2006 Plan, Chapter 9, p. 9-31.

[7] 2006 Plan, Chapter 9, p. 9-30.

uses a separate land cost index to update land acquisition costs because these costs represent more than half of total plan costs.

This audit follows the periodic audit initiated in year 3 and completed in 2011. However, this audit bears no relationship to any prior audit work and is independent of prior work completed by Economic and Planning Systems.

Mitigation Fee Act Requirements

The mitigation fees collected pursuant to the Plan are authorized by California law under the Mitigation Fee Act (MFA) found in Sections 66000 through 66025 of the *California Government Code*. Following the fifth year after the first fee payment and every five years thereafter Section 66001(d)(1) of the MFA requires that the local agency implementing an impact fee program make certain findings with regards to any unexpended fund balance. The local agency, in this case the Conservancy, must make the following findings:

1. Identify the purpose to which the fee is to be put.
2. Demonstrate a **reasonable relationship** between the fee and the purpose for which it is charged.
3. Identify all sources and amounts of funding anticipated to complete financing of improvements to be funded by the fee.
4. Designate the approximate dates when funding is expected to complete financing of improvements to be funded by the fee.

Based on the first fee payment in 2008, the first five-year review of the Plan's mitigation fees would occur based on financial data through the end of the current 2012 fiscal year.

In summary this five-year review requires (1) affirmation that the fee still meets the "reasonable relationship" requirements of the MFA, and (2) confirmation any non-fee funding needed to complete improvements is still reasonably anticipated.

This audit interprets the MFA's "reasonable relationship" finding for the five-year review (#2, above) to incorporate the three reasonable relationship or "nexus" findings that the MFA requires when a fee is originally adopted:[8]

2a. **Impact:** Identify a reasonable relationship between the need for the fee and the type of development paying the fee.

2b. **Benefit:** Identify a reasonable relationship between the use of fee revenues and the type of development paying the fee.

[8] *California Government Code*, sections 66001(a)(3-4) and section 66001(b).

2c. **Proportionality:** Identify a reasonable relationship between the amount of the fee and the portion of public facility costs attributable to the type of development paying the fee.

Findings number 1, 2a, 2b, and 2c are presented in association with each fee in Chapters 4, 5, and 6. Findings number 3 and 4 are presented in association with the funding plan presented in Chapter 7.

Post-Permit Term Costs Not Included

Chapter 9 of the Plan describes the funding sources and estimates the total revenue needed to fully fund Plan costs during the 30-year permit term. Following the end of the permit term the preserve system will need to be managed and monitored in perpetuity to comply with the permit. Chapter 9 does not include a funding plan for post-permit term costs, estimated at between $3 million and $3.3 million annually ($2006) though it does identify a range of potential funding sources.[9] The Plan requires the Conservancy to develop a detailed plan for long-term funding before half of all authorized impacts occur (measured in acres) or at the end of year 15 of implementation, whichever occurs first.

This audit recognizes that post-permit term costs are currently an unfunded liability of the Plan. All cost estimates presented in this audit would be higher to the extent this liability is funded. Mitigation fees would be higher to the extent that the Conservancy decides to include post-permit term costs in the fee calculation.

Objectives and Scope

The findings required by the MFA described above are similar in intent to the Plan's objectives for periodic audits. Both suggest the need to update the fee amount based on recent data and confirm the role of fee revenues in a reasonable funding plan. To address both the periodic audit requirements of the Plan and the five-year requirements of the MFA, the objectives and scope of this audit are:

1. Update cost assumptions underlying the mitigation fees.
2. Recalculate fee amounts.
3. Affirm the reasonable relationship between the fee, impacts, and the use of fee revenues.
4. Update the funding plan including sources and amounts of anticipated non-fee revenue.

[9] 2006 Plan, Chapter 9, pp. 9-40 to 9-42 and Table 9-9.

This audit uses the most recently available data on financial transactions and covered activities through October 31, 2012. In addition this audit estimates remaining financial transactions and covered activities through the end of December 31, 2012 to conduct a comprehensive review of Plan implementation for the years 0 through 5. The findings, conclusions, and recommendations from this audit are not likely to vary significantly once actual data for the last two months of the fiscal year is incorporated.

This audit is not a comprehensive audit of the Conservancy's finances. The Conservancy separately has an annual financial audit conducted by an outside auditor. The financial and other data compiled for this audit represents a level of accuracy sufficient to recalculate the mitigation fees and update the funding plan based on the reasonable relationship requirements of the MFA. Finally, as described above, this audit does not incorporate post-permit costs or revenue sources.

Organization of the Audit

Covered activities (impacts) under the Plan for years 1-5 are summarized in Chapter 2 as well as remaining impacts through the 30-year permit term.

The update to the cost model used to estimate implementation costs of the Plan is presented in Chapter 3.

Updates to the four fees are presented in Chapters 4 through 6. The wetland mitigation fee is calculated independently of the other fees based on estimated costs to restore/create wetlands in proportion to the amount of impact. The development fee is calculated based on urban development's fair share of total plan costs net of wetland mitigation costs. Thus the wetland mitigation fee analysis is presented in Chapter 4 and the development fee analysis is presented in Chapter 5. The other two fees, rural infrastructure and temporary impact, use the same rates as the development and wetland mitigation fees applied to rural infrastructure impacts and temporary impacts, respectively. Thus these fees require no additional fee calculation. These fees are discussed in Chapter 6.

The updated 30-year funding plan based on revised cost and revenue estimates is presented in Chapter 7.

2. IMPACTS

This section of the audit describes the impacts that have occurred to date during the years 0-5 of the Plan (2007-2012). This section also identifies the remaining impacts to be accommodated by the Plan's implementation based on the total amount of impacts covered by the Plan.

The Plan uses the amount of acreage from urban development and rural infrastructure projects and activities as the primary unit of measurement for impacts. The Plan uses linear feet to measure stream impacts.

Urban Development Area (UDA)

The boundaries of the UDA are subject to change over time based on local land use policy decisions by the five agencies implementing the Plan. Thus boundary changes could lead to changes in the land use capacity for, and eventual amount of, urban development.

To accommodate the uncertainty regarding the amount of urban development that would be covered under the Plan, the Plan uses two scenarios to "book end" the potential urban development levels:

- The initial UDA is defined by the County of Contra Costa urban limit line and the boundaries of the cities of Brentwood, Clayton, Oakley, and Pittsburg existing at the time the Plan was adopted.[10]
- The maximum UDA is the maximum development capacity for urban development under the terms of the permit. Although boundaries are not defined development capacity considers areas outside the initial UDA proposed for future development in the general plans of Brentwood, Clayton, Pittsburg, and the County. The maximum development capacity is consistent with the biological goals and objectives of the Plan.

The urban development area covered under the Plan at the end of the permit term could fall anywhere in the range defined by the initial urban development area and the maximum urban development area. The Plan does not define the precise boundaries of the maximum UDA because the ultimate boundaries depend on local land use decisions occurring during the permit term. Rather, the Plan defines the maximum number of acres under the maximum UDA covered under the Plan. The conservation requirements

[10] Excluding some areas within the County urban limit line surrounding the Byron Airport. See 2006 Plan, p. 2-17.

of the Plan are greater for the maximum UDA compared to the initial UDA to accommodate the greater impacts under the maximum UDA scenario.

Development Fee Zones

The development fee is implemented based on three fee zones defined by the Plan.[11] A map of the zones is provided in Figure 9-1 of the Plan. The zones represent varying levels of impacts on covered species and natural habitats caused by urban development and rural infrastructure activities and projects. The development fee is lowest in the zone where development would have the least impacts and highest in the zone where development would have the greatest impacts. The zones generally correspond to the dominant land cover type and habitat and open space value. Below is a summary of the zones:

- Zone I: Cultivated and disturbed lands, primarily areas in agricultural use and also some undeveloped areas within existing urban areas.
- Zone II: Natural areas where lands are dominated by natural land cover types.
- Zone III: Small vacant lots (less than 10 acres) within the initial UDA.

The lowest development fee is in Zone III because the habitat and open space value is lowest on vacant land within existing developed areas. As the Plan states in Chapter 4, "[d]evelopment of these areas will result in loss of open space and some habitat values, but impacts will be less than those in Zone I and substantially less then those in Zone II."[12] An acre of permanent impacts in Zone III is given a weight of **one** for the purposes of allocating the fair share of total plan costs to the development fee.

The highest fee is in Zone II because this predominantly natural area has the highest habitat value. The dominant land cover type is annual grassland that covers 34 percent of the land included in the Plan's inventory area, and the greatest impacts in Zone II are in this land cover type. Chapter 4 of the Plan references the importance of annual grassland throughout its detailed analysis of impacts on covered species and critical habitats.[13] An acre of permanent impacts in Zone II is given a weight of **four** for the purposes of allocating the fair share of total plan costs to the development fee (four times the weight of impacts in Zone 1).

[11] 2006 Plan, Chapter 9, pp. 9-20 to 9-21.

[12] Ibid.

[13] 2006 Plan, Chapter 4, pp. 4-14 to 4-22.

The amount of the Zone I fee is between the fees in the other two zones because cultivated and other disturbed uses have greater habitat value than vacant lots but less value than natural areas. Chapter 4 of the Plan includes several findings to support this approach. For example, the Plan notes the relatively lower level of impact from rural infrastructure projects on cultivated agricultural areas, and the secondary foraging areas provided by agricultural fields for the San Joaquin kit fox (a covered species).[14] An acre of permanent impact in Zone I is given a weight of **two** for the purposes of allocating the fair share of total plan costs to the development fee (twice the weight of impacts in Zone 1 and half the weight of impacts in Zone II).

The fee zone map in the Plan (Chapter 9, Figure 9-1) is the sole determination of the fee zone applicable to a project or other covered activity.[15] The zones represent predominant land cover types, as described above, and the relative level of impact per acre from covered activities within a zone. Individual parcels within a zone will have greater or lesser impact on covered species, natural communities, and open space. An individual parcel in zone A, for example, may have characteristics similar to land cover types in zone B. However, the parcel's location adjacent to lands within zone A combined with the benefits of contiguous open space to meeting the Plan's objectives, provides reasonable justification to include the parcel in zone A. The mapping of the zones was completed at a level of detail sufficient to provide a reasonable relationship between all land within a specific zone and the relative weight of impacts assigned to that zone.[16]

Summary of Years 1-5 Impacts

Impacts to date (2008-2012) are shown in **Table 2.1**. As explained in Chapter 1 (see Table 1.1) impacts fees were paid on these covered activities (impacts) as follows:

- Permanent impacts within the UDA paid the development fee on covered activities based on the three fee zones.
- Rural infrastructure impacts paid the rural infrastructure fee.
- Temporary impacts paid the temporary impact fee.
- Impacts to aquatic land cover types paid the wetland mitigation fee in addition to the applicable development, rural infrastructure, or temporary impact fee.

[14] 2006 Plan, Chapter 4, pp. 4-6, 4-15.

[15] 2006 Plan, Chapter 9, p. 9-20.

[16] See, for example, 2006 Plan, Chapter 3, pp. 3-2 to 3-5.

Table 2.1: Covered Activities, Years 1-5 (acres, except streams)

	2008	2009	2010	2011	2012	Total
Permanent Impacts						
Urban Development Area						
Zone 1		24.8	0.3	19.0	47.1	91.1
Zone 2		24.1				24.1
Zone 3				3.4		3.4
Rural Infrastructure		0.1	13.6	2.8	12.8	29.2
Aquatic						
Wetlands		0.2	0.4	0.0	0.2	0.8
Streams (linear feet)	0.3	-	138.0	59.0	324.0	521.3
Total (except streams)		49.1	14.3	25.1	60.1	148.6
Temporary Impacts						
Non-aquatic	5.6	37.9	48.7	57.8	47.3	197.3
Wetlands	0.0		0.5		0.3	0.9
Streams (linear feet)	38.7		348.5	155.0	24.0	566.2
Total (except streams)	5.6	37.9	49.2	57.8	47.6	198.2

Note: All data in acres except streams shown in linear feet.

Note: Data includes impacts from participating special entities because these covered activities are part of the total amount of covered activities anticipated by the Plan and count against the Plan's impact limits.

Note: Includes actual data through October 31, 2012 plus two activities anticipated to occur from November 1 through December 31, 2012.

Sources: Appendix A, Table A.1.

See **Table A.1** in **Appendix A** for a detailed list of covered activities to date.

Remaining Permanent Impacts Under The Plan

The Plan allows for a fixed amount of permanent impacts within the UDA and from rural infrastructure. Permanent impacts are used to calculate and update the development fee. The remaining permanent impacts allowed under the Plan in years 6-30 are summarized in **Table 2.2** by subtracting impacts to date (Table 2.1) from the total impacts allowed for the 30-year permit term. The table applies the weighting factors by zone discussed above. The result is the total acreage of permanent impacts with the UDA remaining under the Plan weighted by the relative impact in each zone. This total for the maximum and initial UDAs is used to allocate costs to the development fee in Chapter 4.

Table 2.2: UDA Permanent Impacts - Nexus Analysis Update

	Zone 1	Zone 2	Zone 3	Total
Total Plan Impacts (Years 1-30) (acres)				
Initial UDA	6,212	2,306	166	8,684
Maximum UDA	7,533	4,180	166	11,879
Actual Impacts To Date (Years 1-5) (acres)				
Initial UDA	91	24	3	118
Maximum UDA	91	24	3	118
Remaining Impacts (Years 6-30) (acres)				
Initial UDA	6,121	2,282	163	8,566
Maximum UDA	7,442	4,156	163	11,761
Impact Weighting Factor	*2*	*4*	*1*	
Remaining Impacts - Weighted (Years 6-30) (equivalent acres)				
Initial UDA	12,242	9,128	163	21,533
Maximum UDA	14,884	16,624	163	31,671

Note: UDA is the urban development area.

Note: Excludes rural infrastructure impacts (impacts outside the urban development area) and all temporary impacts. Includes acreage with aquatic (wetlands, ponds, and streams) impacts. See Chapter 4, Table 4.3, for detailed data on aquatic impacts with in the UDA,

Note: The nexus analysis update assumes that implementation of the Plan will result in total impacts as estimated by the Plan without any discount for non-developable land within the Plan's allowable development capacity. See Table 2.3 for comparison to the nexus analysis in the 2006 Plan.

Sources: 2006 Plan, Appendix H, Table 1; ECCC Habitat Conservancy.

The Plan included an additional factor before calculating weighted impacts for the development fee calculation. The Plan reasoned that impacts within the UDA would be constrained by fixed boundaries (e.g. city and county urban development limits). The analysis assumed that a portion of the potentially developable land within these fixed boundaries would never cause any impacts under the Plan due to typical development constraints that result in the amount of future development being below total available capacity. Consequently the analysis adjusted downward total impacts by 10 percent to estimate total acreage actually subject to the development fee, that is, 10 percent of the available development capacity within the UDA would never be developed and therefore never cause permanent impacts.

This audit and nexus analysis update does not take the same approach. Rather, this update assumes that impact limits set by the Plan for the UDA equal either 11,879 acres under the maximum UDA or 8,684 under the initial UDA (Table 2.2). A discount factor for developable land is unwarranted

under this assumption. This assumption is reasonable because the Plan is designed to accommodate a flexible UDA.

The original estimates from the Plan of impacts, including the discount factor for developable land and the same weighting factors by zone, are shown in **Table 2.3**. These estimates are used in Chapter 4 to compare results of the Plan and the nexus analysis update.

Table 2.3: UDA Permanent Impacts - 2006 Plan Nexus Analysis

	Zone 1	Zone 2	Zone 3	Total
Total Plan Impacts (Years 1-30) (acres)				
Initial UDA	6,212	2,306	166	8,684
Maximum UDA	7,533	4,180	166	11,879
Impact Weighting Factor	*2*	*4*	*1*	
Adjustment For Non-Developed Land[1]	10%	10%	10%	
Remaining Impacts - Weighted (Years 1-30) (equivalent acres)				
Initial UDA	11,182	8,302	149	19,633
Maximum UDA	13,559	15,048	149	28,756

Note: "UDA" is the urban development area.

Note: Excludes rural infrastructure impacts (impacts outside the urban development area) and all temporary impacts. Includes acreage with aquatic (wetlands, ponds, and streams) impacts. See Chapter 4, Table 4.3, for detailed data on aquatic impacts with in the UDA,

[1] The 2006 Plan nexus analysis assumed that impacts within the urban development area (maximum or initial) would be constrained by fixed boundaries (e.g. city and county urban development limits). The analysis assumed that a portion of the potentially developable land within these fixed boundaries would never cause any impacts under the Plan due to typical development constraints that result in the amount of future development area being below total available capacity. The analysis thus adjusted total impacts downward to estimate total acreage actually subject to the development fee.

Sources: 2006 Plan, Appendix H, Table 1.

Impacts to aquatic land cover types (wetlands, ponds, and streams) are shown in **Table 2.4**.

Table 2.4: Wetland Impacts

	Estimated Impacts (Years 1-30)[1] *(acres or linear feet)*		Actual Wetland Impacts (Years 1-5)[2]	Estimated Impacts (Years 6-30) *(acres or linear feet)*	
	Initial UDA	**Maximum UDA**		**Initial UDA**	**Maximum UDA**
Riparian	30.00	35.00	0.30	29.70	34.70
Perennial Wetland	22.20	22.50	0.03	22.17	22.47
Seasonal Wetland	12.60	16.80	0.42	12.18	16.38
Alkali Wetland	8.40	9.30	-	8.40	9.30
Pond	7.00	8.00	-	7.00	8.00
Aquatic (Open Water)	12.00	12.00	-	12.00	12.00
Slough / Channel	72.00	72.00	0.07	71.93	71.93
Subtotal (acreage impacts)	164.20	175.60	0.82	163.38	174.78
Streams (<=25 ft. wide)[3]	21,120	26,400	348	20,772	26,052
Streams (>25 ft. wide)[3]	3,168	4,224	173	2,995	4,051

Note: "UDA" is the urban development area.

[1] Discrepancies in the 2006 Plan in Appendix G, Wetland Fee Worksheet are corrected to be consistent with Chapter 5, Tables 5-16 and Table 5-17. Perennial, Seasonal, and Alkali wetland impacts reduced by 70 percent to account for overestimates in mapping analysis (see Tables 5-16 and 5-17, footnote 2, and the original Wetland Fee Worksheet in the Plan, footnotes 12 and 13), Ephemeral stream impacts are added that were not included in the Wetland Fee Worksheet.

[2] Includes rural infrastructure wetland impacts (outside the UDA) because these impacts are counted against the estimates of permanent impacts in the 2006 Plan (see Tables 5-16 and 5-17). Data based on ECCC Habitat Conservancy, *2011 Annual Report*, Table 4. See Appendix A, Table A.1 for additional detail.

[3] To allocate years 1-30 impacts, ephemeral streams assumed to be less than or equal to 25 feet wide and perennial and seasonal streams assumed to be more than 25 feet wide. Actual impacts (years 1-5) based on actual stream width.

Sources: 2006 Plan, Chapter 5, Tables 5-16 and 5-17; ECCC Habitat Conservancy, East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan 2011 Annual Report, Table 4, Appendix A, Table A.1.

3. COST MODEL

This chapter presents a summary of the updated cost models for the 30-year permit term. As shown in Appendix G of the Plan a separate cost model is used for the initial and maximum UDAs to account for the difference in preserve system size and other differences in the conservation requirements of the Plan. The two models are identical in structure. The difference in cost between the two models is primarily related to the effect of different land acquisition requirements for the preserve system under each scenario.

General Approach

The cost model was updated based on provisions in the Plan for periodic audits:

- Use actual land acquisition costs to date to adjust the land acquisition budget.
- Use actual costs to date for operating, maintaining, and managing the preserve system to adjust non-land acquisition budgets.
- Re-calculate the mitigation fees based on the revised budget and the fair share ratio calculated in the Plan
- Adjustments to estimated non-mitigation fee funding from federal, state, and other local sources are not to be considered when re-calculating the mitigation fees. For example, mitigation fees cannot make up for shortfalls in other funding.

Cost model revisions were made using the original model documented in Appendix G of the Plan. The model for each scenario (initial and maximum UDA) includes approximately 30 pages of linked spreadsheets. The models provide budgets for the following nine cost categories related to Plan implementation:

1. Program administration
2. Land acquisition
3. Planning and design
4. Habitat restoration/creation
5. Environmental compliance
6. HCP/NCCP preserve management and maintenance
7. Monitoring, research, and adaptive management

8. Remedial measures
9. Contingency fund.

The cost model update used the following approach for all cost categories:

- Actual costs and land acquisition data for years 0-5 were obtained from the Conservancy and input into the model. The Conservancy provided actual data through October 31, 2012 and estimated costs and land acquisition for the final two months of the 2012 fiscal year.
- Remaining land acquisitions necessary to meet preserve system requirements were spread across the remaining 25-year time period of the 30-year permit term.
- Unless actual cost experience indicated otherwise, unit costs for materials and supplies (vehicles, equipment, etc.) were inflated from 2005(the year cost factors were originally estimated) using the consumer price index for the San Francisco Bay Area, as required for the annual inflation updates. Inflation from 2005 to 2012 was 17 percent. Unit costs for services of contractors or other labor were inflated from 2005 using the employment cost index for professional, scientific, and technical services. The change in this index from 2005 to 2012 results in a 21 percent increase in these costs.
- The original model estimated staff costs based on direct salary costs plus benefits. Conservancy staff costs are actually budgeted based on a fully burdened hourly rate that includes benefits. The cost model was revised to reflect staff costs based on current hourly rates.
- The original model itemized support staff and other overhead costs for human resources, information technology support (IT), office space, and office equipment. The Conservancy uses County office space and administrative support. The staff hourly rate mentioned above includes overhead costs provided by the County. The cost model no longer provides separate cost estimates for these functions.
- Other overhead costs such as travel, insurance, legal, and financial audits that are not included in Conservancy staff hourly rates were updated based on actual costs and projected needs.

The EBRPD has not yet implemented a system to break out operational (non-land acquisition) costs for preserve system lands from costs associated with their other regional park holdings. For the purposes of this audit an estimate of $1,320,000 for actual EBRPD operational costs through 2012 is added to the years 0-5 cost data received from the Conservancy. This estimate is based on average cost of $86 per acre derived from the maintenance of effort estimate in the 2006 Plan (Appendix H) and applied to actual acres acquired and managed during the 2008 – 2012 period. This amount is reduced 50 percent to reflect the lag between the rapid land

acquisition of this initial period and the allocation of operational resources associated with those land acquisitions.

The two largest cost categories by budget size are land acquisition and habitat restoration/creation. For these two areas significant changes made to the 2006 Plan are discussed in individual sections, below. The remaining cost categories are discussed at the end of this chapter.

Land Acquisition Costs

Land acquisition is the Plan's largest cost category representing 56 to 58 percent of total costs depending on the scenario (initial UDA or maximum UDA). Substantial effort was expended during the audit to update costs to reflect current market conditions and Conservancy experience.

The Conservancy, working with East Bay Regional Park District, has been very successful in acquiring preserve system lands over the past five years and taking advantage of the recent depressed real estate market in East Contra Costa County. Through year 5 (2012) the Conservancy has acquired approximately 7,400 acres, or 31 and 25 percent and of the preserve system required under the initial and maximum UDA scenarios, respectively.[17]

A database of over 50 land transactions in East Contra Costa County, most within the past five years, was compiled from a variety of sources to estimate costs per acre for future preserve system acquisitions. This database included 23 East Bay Regional Park District acquisitions (most of which were performed in partnership with the Conservancy), plus acquisitions by Save Mount Diablo (local nonprofit land trust organization), the Contra Costa Water District, and land transactions identified in the County Assessor's database. Land costs for developable parcels within the Urban Limit Line were updated based on current housing values. Detailed data on the transactions used to update the cost model is provided in **Appendix B**.

As shown in **Table B.2** in Appendix B estimated land costs per acre have generally declined between 5 and 42 percent outside the Urban Limit Line. Inside the Urban Limit Line, where a small fraction of the acquisition will occur, estimated land costs have declined between 40 and 55 percent. Per acre prices did increase 11 percent on parcels with steep slopes but these lands constitute only three to four percent of total acreage to be acquired.

[17] The Conservancy has actually acquired 9,099 acres but 1,682 acres cannot be credited towards the preserve system so the net acquisition credited towards the preserve system is 7,417 acres. The 1,682 acres cannot be credited because portions of several acquisitions contained pre-existing conservation easements established to mitigate earlier projects. The Plan provides such lands cannot be counted unless the associated impacts are also counted and deducted from Plan's impact limits.

Finally, several minor changes were made in addition to updating land acquisition costs. Based on experience to date, due diligence costs were changed from detailed cost factor estimates for various types of transaction costs to a flat three percent charge on total `acquisition costs. Also based on experience, the cost of pre-acquisition surveys was changed from a contractor to a staff cost. There is no contingency applied to land acquisition costs.

Habitat Restoration/Creation Costs

Habitat restoration/creation is the second largest cost category of Plan implementation based on cost. Unit costs are also a major basis for the wetland mitigation fee. Consequently the audit allocated substantial effort to updating these costs.

The primary cost is for contract services to restore or create habitat on nine land cover types of which eight are aquatic types. This audit includes an update to these unit costs based on a detailed review of actual wetland and stream restoration projects completed by the Conservancy and other restoration efforts. Costs for each of the nine land cover types were updated to 2012 dollars and reflect the types of restoration/creation projects necessary to implement the Plan.

Unit costs for restoration/creation construction were augmented by three other costs:

- Construction-related costs (seven different line item costs such as plans and specifications, environmental compliance, and oversight and monitoring).
- Conservancy staff and related costs.
- Contingency.

The original cost model estimated all seven construction-related line item costs based on a lump sum amount. This update changed four line items to a percent of the construction cost based on experience with how contractors structure their bids. Staff and related costs were updated based on experience with allocation of staff time for these projects.

Total acres of restoration/creation were adjusted to be consistent with Tables 5-16 and 5-17 in Chapter 5 of the Plan. Estimated compensatory restoration/creation acreage for seasonal wetlands under the maximum UDA scenario was adjusted to match the 2:1 mitigation ratio applied to the acres of impact shown in the tables. Also, consistent with Plan assumptions, a 30 percent reduction was made to the estimate of compensatory restoration/creation acreage (not contribution to recovery acreage) for the

perennial, seasonal, and alkali wetlands to reflect overestimates due to mapping of these areas.[18]

The contingency of 20 percent on habitat restoration/creation construction cost was unchanged. The contingency applies to habitat construction costs only and not operational costs or other capital costs (vehicle purchase) associated with habitat restoration/creation. The contingency is higher than for other Plan implementation activities because of the high degree of cost uncertainty associated with these types of projects.

Habitat restoration/creation mitigation unit costs for aquatic land cover types estimated for this audit are shown in **Table 3.1**. The cost for open water is the same as the cost for ponds because the Plan calls for open water impacts to be mitigated by the creation of ponds. The table includes two costs for stream restoration, one based on stream widths of 25 feet or less, and one based on steam widths of greater than 25 feet. A detailed explanation of the update approach and methodology is included in **Appendix C**.

The habitat restoration/creation costs shown in Table 3.1 are significantly higher than the 2006 Plan estimates. Construction unit costs increased between 21 percent and 89 percent for the seven wetland and pond land cover types, and decreased 30 percent for stream projects (see Chapter 4, Table 4.2). The reason for these changes is that estimates developed for the Plan did not have the benefit of actual project cost experience in Eastern Contra Costa County gained since year 1. Habitat restoration/creation costs are highly variable, explaining the 20 percent contingency mentioned above. These costs may change significantly in the future based on future project experience.

[18] For seasonal wetlands, the total restored acreage for the initial [maximum] UDA scenario equals 45.2 [53.6] acres based on: (42 [56] impact acres x 2:1 mitigation ratio x 30 percent adjustment for mapping overestimate) + 20 acres contribution to recovery. See Tables 5-16 and 5-17 and Appendix G of the Plan.

Table 3.1: Wetland Mitigation Costs

Cost Category	Cost Factor	Riparian (per acre)	Perennial Wetland (per acre)	Seasonal Wetland (per acre)	Alkali Wetland (per acre)	Pond (per acre)	Open Water (per acre)	Slough/ Channel (per acre)	Stream[2] (per linear foot)
Construction		$38,800	$63,300	$75,500	$76,400	$83,900	$83,900	$57,500	$164
Construction-related costs									
Plans, specs., allowance for remedial measures[1]	30%	11,640	18,990	22,650	22,920	25,170	25,170	17,250	49
Bid assistance[1]	1.5%	582	950	1,133	1,146	1,259	1,259	863	2
Construction oversight[1]	7%	2,716	4,431	5,285	5,348	5,873	5,873	4,025	11
Post-construction maint.[1]	10%	3,880	6,330	7,550	7,640	8,390	8,390	5,750	16
Environmental compliance[2,3]	5,200	5,200	5,200	5,200	5,200	5,200	5,200	5,200	13
Pre-construction surveys[2,4]	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	3
Construction monitoring[2,4]	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	7
Staff and related costs[2,5]	13,800	$13,800	$13,800	$13,800	$13,800	$13,800	$13,800	$13,800	36
Subtotal		$80,218	$116,601	$134,718	$136,054	$147,192	$147,192	$107,988	$301
Contingency[1]	20%	7,760	12,660	15,100	15,280	16,780	16,780	11,500	33
Total Unit Cost		$87,978	$129,261	$149,818	$151,334	$163,972	$163,972	$119,488	$334
Adjustment Factor For Streams >25 Feet Wide									1.50
Total Unit Cost (Streams >25 feet wide)									$501

[1] Percentage applied to construction costs.

[2] Amount applied per acre of impact. Stream costs based on average of per acre costs as a percent of construction costs for all other aquatic land cover types.

[3] Based on CEQA, CWA 401, CDFG 1602, and other permit costs for "small" project, divided by two (assume a two-acre project). NHPA permit unlikely to be applicable.

[4] Cost model estimate divided by two (assume a two-acre project).

[5] Midpoint of staffing costs per acre (all costs except construction and contractors) between initial and maximum UDA cost models for habitat restoration/creation cost category.

Sources: Appendices D and E, pp. 16, 18, 20, and 26 of 29.

Summary of Cost Model Changes

Cost model changes to the other cost categories besides land acquisition and habitat restoration/creation are summarized below:

- Program administration. Staffing plan updated to reflect experience with staff allocation by function and the ability to rely on fractions of a full-time employee. Other cost areas were simplified and adjusted based on actual experience.
- Planning and design. Estimates adjusted to reflect experience with labor costs and with level of effort to plan and design restoration projects.
- Environmental compliance. More fine-grained approach to estimating costs (see Appendix C).
- HCP/NCCP preserve management and maintenance. Removed recreation facilities and maintenance costs because EBRPD expected to fund. Though the pace of land acquisition to date has exceeded original projections, the model for this and other cost categories assumes the original, slower pace of implementing preserve operations (e.g., it assumes operations will lag acquisitions).

  Substantially all management and maintenance costs to date have been covered by EBRPD and have not been direct costs to the Conservancy.
- Monitoring, research, and adaptive management. Assumptions on number of acres that could be monitored per field visit increased based on experience. Estimated contractor expenses reduced based on various factors. Staff costs increased based on experience with labor costs.
- Remedial measures. Costs affected by changes in habitat restoration/creation costs.
- Contingency. Costs affected by changes in other cost categories (rate remained at five percent applied to total Plan costs net of total land acquisition and total habitat restoration/creation costs).

Table 3.2 and **Table 3.3** summarize changes in total costs by cost category for the Plan for the initial and maximum UDA, respectively. For ease of comparison the tables show the original 2006 Plan costs as shown in the Plan in 2006 dollars. The tables compare these costs to the results of this audit that are shown in 2012 dollars. Total costs decrease by three and five percent for the initial and maximum UDA scenarios, respectively, before taking inflation into account. Inflation since 2006 based on the San Francisco Bay Area consumer price index used to adjust the development fees (except the land component) has been 14 percent from 2006 to 2012.

Table 3.2: Cost Model Comparison – Initial Urban Development Area

Cost Category	2006 Plan (2006$)	Nexus Analysis Update (2012$)	Change Update vs. Original (2012$) Amount	Percent
Program Administration	$18,150,000	$19,930,000	$1,780,000	10%
Land Acquisition	191,640,000	162,570,000	(29,070,000)	(15%)
Planning and Design	6,150,000	7,690,000	1,540,000	25%
Habitat Restoration/Creation	20,390,000	37,560,000	17,170,000	84%
Environmental Compliance	2,340,000	2,780,000	440,000	19%
HCP/NCCP Preserve Management & Maintenance	33,040,000	33,580,000	540,000	2%
Monitoring, Research, & Adaptive Management	18,780,000	16,450,000	(2,330,000)	(12%)
Remedial Measures	1,580,000	2,360,000	780,000	49%
EBRPD Initial Operational Costs (est.)[1]	NA	1,320,000	NA	NA
Contingency Fund	5,020,000	4,640,000	(380,000)	(8%)
Total	$297,090,000	$288,880,000	$(8,210,000)	(3%)

Note: Costs exclude post-permit costs. Amounts would be higher if these costs were included in the analysis.

Note: Table does not take into account 14 percent cumulative inflation from 2006 through 2012. Inflating 2006 Plan costs to 2012$ would show a decline of 15 percent in constant 2012$ compared to the nexus analysis update.

[1] Estimated East Bay Regional Park District operational costs to date (years 1-5). These costs are spread across all cost categories except program administration and land acquisition. See Appendix G, p. 1 of 1.

Sources: 2006 Plan, Appendix G; Appendix D , p. 2 of 29.

Besides the effect of cost inflation, the major causes for changes in costs from the Plan to this audit include:

- Program administration. Changes in staffing levels and other cost factors result in an estimated increase that is less than the rate of inflation.
- Land acquisition. Current depressed real estate market conditions. Land acquisition costs decrease more under the maximum UDA scenario compared to the initial UDA scenario. This difference is caused by the higher share of land in cost categories with larger decreases in estimated costs under the maximum UDA scenario compared to the initial UDA scenario.
- Planning and design. Increased costs reflect greater than anticipated level of effort to plan and design habitat restoration/creation.
- Habitat restoration/creation. Changes in construction unit costs (see above and Appendix C). Also, original cost model did not include the cost of mitigating impacts to ephemeral streams.

Table 3.3: Cost Model Comparison – Maximum Urban Development Area

Cost Category	2006 Plan (2006$)	Nexus Analysis Update (2012$)	Change Update vs. Original (2012$) Amount	Percent
Program Administration	$18,230,000	$19,990,000	$1,760,000	10%
Land Acquisition	235,680,000	192,030,000	(43,650,000)	(19%)
Planning and Design	6,230,000	7,790,000	1,560,000	25%
Habitat Restoration/Creation	22,890,000	41,890,000	19,000,000	83%
Environmental Compliance	2,340,000	2,780,000	440,000	19%
HCP/NCCP Preserve Management & Maintenance	36,440,000	40,260,000	3,820,000	10%
Monitoring, Research, & Adaptive Management	21,080,000	18,520,000	(2,560,000)	(12%)
Remedial Measures	1,700,000	2,680,000	980,000	58%
EBRPD Initial Operational Costs (est.)[1]	NA	1,320,000	NA	NA
Contingency Fund	5,450,000	5,170,000	(280,000)	(5%)
Total	$350,040,000	$332,430,000	$(17,610,000)	(5%)

Note: Costs exclude post-permit costs. Amounts would be higher if these costs were included in the analysis.

Note: Table does not take into account 14 percent cumulative inflation from 2006 through 2012. Inflating 2006 Plan costs to 2012$ would show a decline of 15 percent in constant 2012$ compared to the nexus analysis update.

[1] Estimated East Bay Regional Park District operational costs to date (years 1-5). These costs are spread across all cost categories except program administration and land acquisition. See Appendix G, p. 1 of 1.

Sources: 2006 Plan, Appendix G; Appendix E , p. 2 of 29.

- Environmental compliance. More fine-grained approach to estimating costs documented higher permitting costs for restoration projects than originally projected (see Appendix C).
- HCP/NCCP preserve management and maintenance. Estimated costs do not keep pace with inflation, in part because recreation costs have been removed.
- Monitoring, research, and adaptive management. Costs below original cost model estimates in years 0-5 due to estimated decreases in the need for various contractor services.
- Remedial measures. Increased habitat restoration/creation costs.
- Contingency. Costs in years 0-5 deleted due to use of actual instead of estimated budget data. Also, lower overall program costs reduced the contingency.

4. WETLAND MITIGATION FEE

This chapter presents the updated wetland mitigation fee schedule and the reasonable relationship findings required by the MFA and explained in Chapter 1. Unless the applicant chooses to perform their own restoration or creation, the wetland mitigation fee is applied to covered activities that generate permanent impacts on aquatic land cover types whether inside or outside the UDA.[19] Wetland mitigation fees are calculated based on the surface area of the aquatic land cover type impacted, regardless of the size of the covered activity or the total amount of impacts. The wetland mitigation fee is therefore typically applied to small portion of the total impacts of a covered activity.

Updated Fee Schedule

The wetland mitigation fee is based on the unit costs (cost per acre or cost per linear foot for streams) presented in the prior chapter multiplied by a mitigation ratio established by the Plan. The mitigation ratio represents the restoration area needed to mitigate one acre (or one linear foot in the case of streams) of impact. Most mitigation ratios are one-to-one, that is one acre of impact requires one acre of wetland restoration/creation to mitigate impacts. Several land cover types require a higher or lower mitigation ratio to adjust for the relative ability of restoration projects to mitigate the types of impacts associated with a given land cover type. The updated wetland mitigation fees based on mitigation ratios by land cover type are shown in **Table 4.1**.

Consistent with the habitat restoration/creation cost estimates explained in Chapter 3, above, the wetland mitigation fee is only related to the one-time activity of restoration or creation of aquatic land cover types. The three other fees presented in the following two chapters of this report address the other Plan costs to mitigate the impacts of covered activities on aquatic land cover types. These other costs include, for example, acquisition of sites for wetland, pond, and stream restoration/creation, preservation of existing wetland, pond, and stream habitat and long-term management, maintenance, and monitoring of habitat restoration/creation sites.

[19] 2006 Plan, Chapter 9, pp. 9-23 to 9-24 and Table 9-5.

Table 4.1: Wetland Mitigation Fee Schedule

	Habitat Restoration / Creation Cost		Mitigation Ratio	Wetland Impact Fee	
Riparian	$ 87,978	per acre	1:1	$ 87,978	per acre
Perennial Wetland	129,261	per acre	1:1	129,261	per acre
Seasonal Wetland	149,818	per acre	2:1	299,636	per acre
Alkali Wetland	151,334	per acre	2:1	302,668	per acre
Pond	163,972	per acre	1:1	163,972	per acre
Aquatic (Open Water)	163,972	per acre	0.5:1	81,986	per acre
Slough / Channel	119,488	per acre	1:1	119,488	per acre
Streams (<=25 ft. wide)	334	per linear foot	1:1	334	per linear foot
Streams (>25 ft. wide)	501	per linear foot	1:1	501	per linear foot

Sources: 2006 Plan, Tables 5-16 and 5-17; Table 3.1.

Table 4.2 compares the updated wetland mitigation fee to the fee in the 2006 Plan, the adopted fees for year 1 in 2007, and the current fee. The current fee has two levels. The "Cities/County" level applies to covered activities subject to city or county implementing ordinances. The "Conservancy" level represents the results of an audit completed in 2011 but not adopted by the cities and the County and therefore only applies to participating special entities who apply directly by the Conservancy for permit coverage. Most covered activities are currently paying the "Cities/County" fee.

Estimated restoration costs and revenues associated with aquatic land cover impacts are shown in **Table 4.3**. The table multiplies the aquatic land cover acreage impacts from Table 2.4 by the update fee schedule in Table 4.1. The 30-year revenue estimates in the table are used in the development fee calculation presented in Chapter 5.

The reasons for the significant increase in fees on wetland and pond (non-stream) land cover types were explained in Chapter 3. These fees only apply to the actual surface area of wetland on the site of a covered activity and typically are significantly less than one acre. Of the 10 covered activities that paid a wetland mitigation fee in years 1-5, impacts subject to the fee were typically less than 0.20 acres and stream impacts were typically less than 50 linear feet (see Table A.1 in Appendix A).

Table 4.2: Wetland Mitigation Fee Comparison

		Plan	Initial Adopted	Current Cities/ County[1]	Current Conser-vancy[1]	Nexus Analysis Update	Nexus Analysis Update Compared To:		
		2006	2007	2012	2012	2012	Plan 2006	Current Cities/ County[1]	Current Conser-vancy[1]
Riparian	per acre	$58,140	$60,004	$66,462	$69,992	$87,978	51%	32%	26%
Perennial Wetland	per acre	79,560	82,111	90,948	120,428	129,261	62%	42%	7%
Seasonal Wetland	per acre	172,380	177,908	197,053	252,178	299,636	74%	52%	19%
Alkali Wetland	per acre	163,200	168,433	188,559	234,680	302,668	85%	61%	29%
Aquatic (Open Water)	per acre	86,700	89,480	99,110	120,428	163,972	89%	65%	36%
Aquatic (Open Water)	per acre	43,860	45,266	50,138	59,699	81,986	87%	64%	37%
Slough / Channel	per acre	98,940	102,113	113,102	127,633	119,488	21%	6%	(6%)
Streams (<=25 ft. wide)	per linear foot	474	489	542	419	334	(30%)	(38%)	(20%)
Streams (>25 ft. wide)	per linear foot	714	737	816	631	501	(30%)	(39%)	(21%)

Note: Fees and revenues exclude post-permit costs. Amounts would be higher if these costs were included in the analysis.

[1] The "Cities/County" fee applies to most covered activities at this time, those subject to city or county implementing ordinances, and represents the fee updated for inflation in 2012. The "Conservancy" fee represents the results of an audit completed in 2011. The fee schedule only applies to participating special entities and others who apply directly by the Conservancy for permit coverage because the cities and the County did not adopt it.

Sources: 2006 Plan, Table 9-5; , ECCC Habitat Conservancy, "Annual Adjustment of East Contra Costa County Habitat Conservation Plan / Natural Community Conservation Plan ("HCP/NCCP") Mitigation Fees" (table); Table 4.1.

Table 4.3: Wetland Mitigation Fee Revenue

	Wetland Mitigation Impact Fee		Estimated Wetland Mitigation Fee Revenue (Year 6-30) Initial UDA	Maximum UDA
Riparian	$87,978	per acre	$2,610,000	$3,050,000
Perennial Wetland	129,261	per acre	2,870,000	2,900,000
Seasonal Wetland	299,636	per acre	3,650,000	4,910,000
Alkali Wetland	302,668	per acre	2,540,000	2,810,000
Pond	163,972	per acre	1,150,000	1,310,000
Aquatic (Open Water)	81,986	per acre	980,000	980,000
Slough / Channel	119,488	per acre	8,590,000	8,590,000
Subtotal			$22,390,000	$24,550,000
Streams (<=25 ft. wide)	334	per linear foot	6,940,000	8,700,000
Streams (>25 ft. wide)	501	per linear foot	1,500,000	2,030,000
Total			$30,830,000	$35,280,000
			Estimated Wetland Mitigation Fee Revenue (Year 1-30) Initial UDA	**Maximum UDA**
Actual (Year 0-5)			$640,000	$640,000
Estimated (Year 6-30)			30,830,000	35,280,000
Total (Year 0-30)			$31,470,000	$35,920,000

Note: "UDA" is the urban development area.

Sources: Tables 2.4 and 4.1; Appendix F, Table F.1.

Mitigation Fee Act Findings

The following findings are required by the MFA and were presented in Chapter 1.

Purpose: Identify the purpose to which the fee is to be put.

The wetland mitigation fee is intended to pay the full cost of restoration or creation of aquatic land cover types, including design, implementation, post-construction monitoring, and remediation. The development fee described in

the next chapter will fund acquisition of the site for the restoration or creation and the management and monitoring after the wetland is fully functioning. Restoration of oak savanna is also required by the Plan, but the cost of this restoration is included in the development fee because it is not associated with jurisdictional wetlands and waters.

Impact: ***Identify a reasonable relationship between the need for the fee and the type of development paying the fee.***

A reasonable relationship exists between the need for the wetland mitigation fee and covered activities that would pay the fee. Chapter 3 of the Plan explains the relationship between the 17 animal and 11 plant species covered under the Plan and aquatic land cover types (see Table 3-9 in Chapter 3 of the Plan). Chapter 4 of the Plan explains the impacts of covered activities on these animal and plant species, and more broadly on natural communities. The importance of aquatic land cover types is demonstrated by:

- The eight aquatic land cover types provide habitat for all 17 animal species covered under the Plan.
- Individual aquatic land cover types provide habitat for at least three and, in the case of seasonal wetlands, as many as 11 covered animal species.
- Vernal pools are an essential habitat for four covered species and 11 covered plants.

Benefit: ***Identify a reasonable relationship between the use of fee revenues and the type of development paying the fee.***

A reasonable relationship exists between the use of wetland mitigation fee revenue and covered activities that would pay the fee. Chapter 5 of the Plan explains the conservation strategy and Chapter 9 explains the costs associated with implementing the strategy. The conservation strategy is designed to mitigate the impacts on species and natural communities within aquatic land cover types summarized in the finding, above.

Specific elements of the strategy from Chapter 5 of the Plan that relate to the restoration or creation of wetlands, ponds, and streams include:

- Conservation methods include:
  - Biological goals and objectives that include the restoration and creation of wetlands, ponds, and streams.
  - Mitigation of impacts on state and federal jurisdictional wetlands and waters.
- Conservation measures including:

- Conservation Measure 2.3. Restore Wetlands and Create Ponds
- Conservation Measure 2.10. Restore Streams and Riparian Woodland/Scrub to Compensate for Habitat Loss and to Increase Biodiversity.

The cost model summarized in Chapter 9 and presented in detail in Appendix G of the Plan explains the costs associated with the restoration or creation of wetlands, ponds, and streams. Updated costs are shown in Table 3.1 in the prior chapter of this report and include:

- All costs associated with the habitat restoration/creation cost category (includes construction costs and staff-related costs)
- The share of environmental compliance costs associated with one-time costs for habitat restoration/creation
- The share of monitoring, research, and adaptive management costs associated with habitat restoration/creation, specifically costs for pre-construction surveys and construction monitoring.

Proportion-ality: ***Identify a reasonable relationship between the amount of the fee and the portion of public facility costs attributable to the type of development paying the fee.***

A reasonable relationship exists between the amount of the wetland mitigation fee on a specific covered activity and the proportionate share of Plan costs based on the fee schedule shown in Table 4.2. The fee schedule reflects the type of land cover that is affected because mitigation costs vary by land cover. The total fee for a covered activity is proportional to the amount of the impact based on the number of acres of wetland or pond, or linear feet of stream affected.

5. DEVELOPMENT FEE

This chapter presents the updated development fee schedule and the reasonable relationship findings required by the MFA and explained in Chapter 1. The development fee is applied to covered activities that generate permanent impacts inside the UDA.[20] Applicants also have the option of dedicating land for conservation subject to approval by the Conservancy.

Updated Fee Schedule

The development fee is based on covered activities related to urban development (all covered activities within the UDA) funding a fair share of total Plan implementation costs. The fair share is based on the total amount of lands dedicated to habitat preservation in Eastern Contra Costa County, both lands existing prior to the Plan and lands added by the preserve system through implementation of the Plan. The Plan apportioned this total land area for habitat preservation between urban development existing prior to the Plan and urban development anticipated to occur during the 30-year permit term of the Plan. The fair share of costs allocated to the development fee under the maximum UDA scenario is 52 percent as documented in Appendix H of the Plan. The Plan requires that the periodic audit use this fair share amount to update the development fee.[21]

As explained in Chapter 1, all covered activities pay the development fee unless the applicant provides their own mitigation. In cases where aquatic land cover types are affected, the wetland mitigation fee is also paid. As explained in Chapter 3, the wetland mitigation fee will fund costs of habitat restoration/creation associated with impacts on wetlands, ponds, and streams. Therefore total Plan costs subject to the fair share calculation are calculated net of wetland mitigation fee revenue. This approach avoids double-charging covered activities for the same Plan costs.

Table 5.1 shows that share of total Plan costs allocated to the development fee. Costs are shown net of estimated wetland mitigation fee revenue drawn from Table 4.3 in the prior chapter. Fee revenue to date (years 0-5) is deducted from the fair share allocated to the development fee to calculate the net revenue still required from the development fee for the remaining 25 years of the permit term. Using this approach in future periodic audits will

[20] 2006 Plan, Chapter 9, pp. 9-17 to 9-22, Figure 9-1, Table 9-4.

[21] 2006 Plan, Chapter 9, p. 9-31.

ensure that at the end of the permit term covered activities would have paid the fair share of plan costs as calculated in the Plan.

Table 5.1: Development Fee Fair Share Analysis

	Maximum Urban Development Area		Initial Urban Development Area	
	Formula	Amount	Formula	Amount
Total Plan Cost (Year 0-30)	*a*	$332,430,000	*g*	$288,880,000
Wetland Mitigation Cost (Year 0-30)	*b*	35,920,000	*h*	31,470,000
Net Cost Subject To Fair Share Allocation (Year 0-30)	*c = a - b*	$296,510,000	*i = g - h*	$257,410,000
Development Fair Share Allocation[1]	*d*	52%	*k = j / i*	45%
Development Fair Share Costs (Year 0-30)[2]	*e = c * d*	$154,190,000	*j = i - h*	$115,090,000
Development Fee Revenue (Year 0-5)	*f*	1,770,000	*f*	1,770,000
Development Fair Share Costs Allocated To Development Fee (Year 6-30)	*g = e - f*	**$152,420,000**	***i = j - f***	**$113,320,000**
Remaining Costs Funded By Other Federal, State, and Local Funds (Year 0-30)	*h = c - e*	$142,320,000	*h = c - g*	$142,320,000

Note: Costs exclude post-permit costs. Amounts would be higher if included in the analysis.

[1] Fair share allocation for maximum UDA based on 2006 Plan, Appendix H, Table 1 consistent with procedures required for periodic audit (2006 Plan, Chapter 9, p. 9-31). Consistent with the 2006 Plan approach the initial UDA fair share is based on holding remaining costs funded by other federal, state, and local funds constant with the maximum UDA scenario. This approach reasonably assumes that other federal, state, and local funding over the permit term will not be affected by the amount of urban development area impacts.

Sources: Tables 3.2, 3.3, and 4.3; Appendix F, Table F.1.

A range of federal, state, and local sources fund the remaining costs for Plan implementation. Fair share costs allocated to the development fee under the initial UDA scenario are calculated by holding constant total funding from these other sources. It is reasonable to assume that the level of development under the Plan would not affect the level of funding from these other sources.

The updated development fee is shown in **Table 5.2**. The fee is based on the fair share costs calculated in Table 5.1 divided by the equivalent acres of impact remaining under each scenario from Table 2.2. As explained in Chapter 2 these equivalent acres do not discount for undevelopable land as was done in the Plan to calculate the original development fee. The bottom of Table 5.2 shows the fee per acre by zone based on the weighting factors explained in Chapter 2.

Table 5.2: Development Fee Schedule

		Initial Urban Development Area	Maximum Urban Development Area
Development Fee Fair Share Costs (total, years 6-30)		$113,320,000	$152,420,000
Estimated Impact (Years 6-30) (equivalent acres)		21,533	31,671
Development Fee Fair Share Costs (per equivalent acre)		$5,263	$4,813
	Weighting Factor	*Fee per Acre*	
Zone 1	2	$10,526	$9,626
Zone 2	4	21,052	19,252
Zone 3	1	5,263	4,813

Note: Costs exclude post-permit costs. Fees would be higher if these costs were included in the analysis.

Sources: Tables 2.2 and 5.1.

Comparison With Original and Current Fee

In **Table 5.3** the updated fee based on the initial UDA scenario is compared with the original fee in the Plan, the initial adopted fee in 2007 (year 1), and the current fee as of 2012. The fee for the initial UDA scenario is used because it is the higher of the two fees under each scenario shown in Table 5.2. This approach ensures adequate funding to implement the Plan regardless of which UDA scenario is ultimately implemented. In the Plan the higher fee was also for the initial UDA scenario and this fee was the one adopted by the cities and County in year 1.

As shown in Table 5.3 the updated fee is 11 percent lower than the original fee in the Plan. The primary reason is the decrease in land acquisition costs shown in Tables 3.2 and 3.3 and explained in Chapter 3. The fee is nearly equal to the current fee that has been annually adjusted based on changes in home prices (applied to land acquisition costs in the Plan) and inflation (applied to all other Plan costs).

Table 5.3: Development Fee Comparison – Initial Urban Development Area

	Plan	Initial Adopted[1]	Current	Nexus Analysis Update	Nexus Analysis Update Compared To:		
	2006	2007	2012	2012	Plan 2006	Adopted 2007	Current 2012
Zone 1	11,919	12,457	10,584	10,526	(12%)	(16%)	(1%)
Zone 2	23,838	24,914	21,169	21,052	(12%)	(16%)	(1%)
Zone 3	5,960	6,229	5,293	5,263	(12%)	(16%)	(1%)

Note: Fees exclude post-permit costs. Fees would be higher if these costs were included in the analysis.

[1] Adopted fees based on fees calculated for the initial urban development area (UDA) because these fees were higher than those calculated for the maximum UDA.

Sources: 2006 Plan, Table 9-4; ECCC Habitat Conservancy, "Annual Adjustment of East Contra Costa County Habitat Conservation Plan / Natural Community Conservation Plan ("HCP/NCCP") Mitigation Fees" (table); Table 5.2.

Table 5.4 and **Table 5.5** provide a line-by-line comparison of changes to the development fee calculation between the Plan and the update. After adjusting for changes in total Plan costs, total wetland mitigation fee revenue, and development fee revenue collected to date, the net amount allocated to the development fee declined by four percent and ten percent under the initial and maximum UDA scenarios, respectively. The actual fee declines by 12 and 18 percent for the initial and maximum UDA scenarios, respectively, because costs are spread across more acres are used in the calculation. of the change in how weighted equivalent acres are calculated. The fee under the maximum UDA scenario declines more than the fee under the initial UDA scenario primarily because estimated land acquisition costs decline more under the maximum UDA scenario as explained in Chapter 3.

Mitigation Fee Act Findings

The following findings are required by the MFA and were presented in Chapter 1.

Purpose: Identify the purpose to which the fee is to be put.

The development fee is intended to pay the fair share cost of the Plan associated with permanent impacts from urban development excluding habitat restoration/creation costs for aquatic land cover types funded by the wetland mitigation fee.

Table 5.4: Nexus Analysis Comparison – Initial Urban Development Area

Cost Category	2006 Plan	Nexus Analysis Update	Change Update vs. Original Amount	Change Update vs. Original Percent
Total	$297,090,000	$288,880,000	$(8,210,000)	(3%)
Wetland Mitigation Fee Revenue	22,240,000	31,470,000	9,230,000	42%
Net Cost Subject To Fair Share Allocation	$274,850,000	$257,410,000	(17,440,000)	(6%)
Fair Share Allocation	43%	45%		
Fair Share Costs	$118,180,000	$115,090,000	(3,090,000)	(3%)
Fee Revenue To Date (2012$)	-	1,770,000	1,770,000	NA
Fair Share Costs Allocated To Development Fee	$118,180,000	$113,320,000	(4,860,000)	(4%)
Estimated Impact (equivalent acres)	19,633	21,533	1,900	10%
Impact Costs (per equivalent acre)	$5,960	$5,263	(697)	(12%)

Note: Costs exclude post-permit costs. Amounts would be higher if these costs were included in the analysis.

Sources: 2006 Plan, Chapter 9, Table 9-8 and Appendix H, Table 1; Tables 2.2, 2.3, and 5.1.

Impact: ***Identify a reasonable relationship between the need for the fee and the type of development paying the fee.***

A reasonable relationship exists between the need for the development fee and covered activities that would pay the fee. Chapter 3 of the Plan explains the relationship between the 17 animal species, 11 plant species, and associated habitats covered under the Plan and terrestrial land cover types (see Table 3-9 in Chapter 3 of the Plan). Chapter 4 of the Plan explains the impacts of covered activities by land cover type on these animal and plant species, and more broadly on their habitats and natural communities.

Benefit: ***Identify a reasonable relationship between the use of fee revenues and the type of development paying the fee.***

A reasonable relationship exists between the use of development fee revenue and covered activities that would pay the fee. Chapter 5 of the Plan explains the conservation strategy and Chapter 9 explains the costs associated with implementing the strategy.

Table 5.5: Nexus Analysis Comparison – Maximum Urban Development Area

Cost Category	2006 Plan	Nexus Analysis Update	Change Update vs. Original Amount	Change Update vs. Original Percent
Total	$350,040,000	$332,430,000	$(17,610,000)	(5%)
Wetland Mitigation Fee Revenue[1]	24,010,000	35,920,000	11,910,000	50%
Net Cost Subject To Fair Share Allocation	$326,030,000	$296,510,000	(29,520,000)	(9%)
Fair Share Allocation	52%	52%		
Fair Share Costs	$169,720,000	$154,190,000	(15,530,000)	(9%)
Fee Revenue To Date (2012$)	-	1,770,000	1,770,000	NA
Fair Share Costs Allocated To Development Fee	$169,720,000	$152,420,000	(17,300,000)	(10%)
Estimated Impact (equivalent acres)	28,756	31,671	2,915	10%
Impact Costs (per equivalent acre)[2]	$5,843	$4,813	(1,030)	(18%)

Note: Costs exclude post-permit costs. Amounts would be higher if these costs were included in the analysis.

[1] 2006 Plan wetland mitigation fee revenue from Chapter 9, Table 9-8 and varies slightly from estimate in Appendices G and H of the Plan.

Sources: 2006 Plan, Chapter 9, Table 9-8 and Appendix H, Table 1; Tables 2.2, 2.3, and 5.1.

The conservation strategy in Chapter 5 of the Plan identifies biological goals and objectives that are supported by specific conservation measures: five measures related to landscape-level conservation, nine measures related to natural community-level conservation (excluding two measures related to wetland, pond, and stream restoration/creation discussed in the prior chapter of this report), and nine measures related to species-level conservation.

The cost model summarized in Chapter 9 of the Plan and presented in detail in Appendix G of the Plan explains and estimates the costs associated with implementation. Updated costs are shown in Chapter 3 of this report and include nine cost categories necessary to implement the Plan: program administration, land acquisition, planning and design, habitat restoration/creation, environmental compliance, HCP/NCCP preserve management and maintenance, monitoring, research, and adaptive management, remedial measures, and contingency fund. As explained in the prior chapter of this report costs related to wetland, pond, and stream habitat restoration/creation are not included in the development fee.

Proportion-ality: ***Identify a reasonable relationship between the amount of the fee and the portion of public facility costs attributable to the type of development paying the fee.***

A reasonable relationship exists between the amount of the development fee on a specific covered activity and the proportionate share of Plan costs based on the fee schedule shown in Table 5.2 for three reasons:

- The fee is based on urban development's fair share of Plan costs as determined by the share of urban development occurring under the Plan compared to total development (existing plus new) under the maximum UDA scenario. As stated in the Plan: "this analysis considers the pace of open space acquisition relative to the pace of development before and after adoption of the HCP/NCCP, and assigns the land acquisition requirements of the HCP/NCCP according to the premise that future development should mitigate impacts in the inventory area proportionate to its share of the overall habitat impacts in the inventory area (i.e., impacts in the past and the future)."[22]
- As explained in detail in Chapter 2 in the section "Development Fee Zone" the fee is adjusted for three zones that reflect the relative amount of impact from urban development on natural habitats and covered species. The mapping of the zones was completed at a level of detail sufficient to provide a reasonable relationship between all land within a specific zone and the relative weight of impacts assigned to that zone.
- The total fee for a covered activity is proportional to the amount of the impact based on the number of acres affected.

[22] 2006 Plan, Chapter 5, p. 5-51.

6. Rural Infrastructure and Temporary Impact Fees

This chapter presents the updated fee schedule for the rural infrastructure fee and the temporary impact fee, and the reasonable relationship findings for each fee required by the MFA and explained in Chapter 1.

Rural Infrastructure Fee

The rural infrastructure fee is applied to all permanent impacts from covered activities outside the UDA based on the UDA boundaries at the time of the covered activity. The rural infrastructure fee is based on the development fee described in the prior chapter and shown in the fee schedule in Table 5.2.

The Plan focused on fee estimates for 18 specified rural road projects.[23] For these projects the development fee was adjusted for the more severe fragmentation, edge, and increased-mortality effects compared to urban development and other rural infrastructure projects and activities. The extent of these additional impacts depend on whether the proposed facility is new or expanded, on the length of the facility, on the type of habitat traversed by the road, and other factors. Some of these additional impacts can be partially reduced by wildlife-friendly design measures.

The Plan also covers other rural infrastructure projects and activities such as flood protection projects, utility projects, and related maintenance activities. The Plan includes a revenue estimate for these covered activities but does not list specific projects or activities as it does for rural roads.[24]

Mitigation Fee Act Findings

The following findings are required by the MFA and were presented in Chapter 1.

Purpose: Identify the purpose to which the fee is to be put.

The rural infrastructure fee is intended to pay the fair share cost of the Plan associated with permanent impacts outside the urban development area

[23] 2006 Plan, Chapter 9, pp. 9-24 to 9-25, Table 9-6.

[24] 2006 Plan, Appendix H, Table 1. See the $1,500,000 revenue assumption estimate in section 2 of the table for "other rural infrastructure mitigation costs".

excluding habitat restoration/creation costs for aquatic land cover types funded by the wetland mitigation fee.

Impact: Identify a reasonable relationship between the need for the fee and the type of development paying the fee.

A reasonable relationship exists between the need for the rural infrastructure fee and covered activities that would pay the fee. Chapter 3 of the Plan explains the relationship between the 17 animal species, 11 plant species, and associated habitats covered under the Plan and terrestrial land cover types (see Table 3-9 in Chapter 3 of the Plan). Chapter 4 of the Plan explains the impacts of covered activities by land cover type on these animal and plant species, and more broadly on their habitats and natural communities.

Benefit: Identify a reasonable relationship between the use of fee revenues and the type of development paying the fee.

A reasonable relationship exists between the use of rural infrastructure fee revenue and covered activities that would pay the fee. Chapter 5 of the Plan explains the conservation strategy and Chapter 9 explains the costs associated with implementing the strategy.

The conservation strategy in Chapter 5 of the Plan identifies biological goals and objectives that are supported by specific conservation measures: five measures related to landscape-level conservation, nine measures related to natural community-level conservation (excluding two measures related to wetland, pond, and stream restoration/creation discussed in the prior chapter of this report), and nine measures related to species-level conservation.

The cost model summarized in Chapter 9 and presented in detail in Appendix G of the Plan explains the costs associated with implementation. Updated costs are shown in Chapter 3 of this report and include nine cost categories: program administration, land acquisition, planning and design, habitat restoration/creation, environmental compliance, HCP/NCCP preserve management and maintenance, monitoring, research, and adaptive management, remedial measures, and contingency fund. As explained in the prior chapter of this report costs related to habitat restoration/creation on aquatic land cover types are not included in the development fee.

Proportion-ality: Identify a reasonable relationship between the amount of the fee and the portion of public facility costs attributable to the type of development paying the fee.

A reasonable relationship exists between the amount of the rural infrastructure fee on a specific covered activity and the proportionate share of Plan costs based on the fee schedule shown in Table 5.2 for three reasons:

- As explained in the prior chapter, the development fee is based only on urban development's fair share of Plan costs and excludes permanent impacts outside the UDA. Permanent impacts within the UDA are reasonably similar to permanent impacts outside the UDA so it is reasonable to base the rural infrastructure fee at the same level as the development fee.
- As explained in detail in Chapter 2 in the section "Development Fee Zone" the fee is adjusted for three zones that reflect the relative amount of impact from urban development on natural habitats and covered species. The mapping of the zones was completed at a level of detail sufficient to provide a reasonable relationship between all land within a specific zone and the relative weight of impacts assigned to that zone.
- The fee for rural road projects is also adjusted by a multipliers set for individual rural road projects to reflect their respective level of additional fragmentation, edge and wildlife mortality effects.
- The total fee for a covered activity is proportional to the amount of the impact based on the number of acres affected.

Temporary Impact Fee

The temporary impact fee is applied to all temporary impacts from covered activities both inside and outside the UDA. The temporary impact fee is based on the development fee described in the prior chapter and shown in the fee schedule in Table 5.2. Where applicable the fee is also based on the wetland mitigation fee described in Chapter 4 and shown in the fee schedule in Table 4.1.

As described in Chapter 2 of the Plan there are many covered activities that are short duration or intermittent and result in temporary impacts on natural land cover types. As described in Chapter 4 of the Plan some covered activities are expected to have substantial temporary impacts on covered species due to their large footprint, linear nature, location in the inventory area, effect on local soils or hydrology, or a combination of these factors. Temporary impacts are defined as any impact on vegetation or habitat that does not result in permanent habitat removal.

Chapter 9 of the Plan provides a detailed explanation of the calculation of the temporary impact fee. Covered activities with temporary impacts pay a fee based on the development fee. In addition, covered activities with temporary impacts on aquatic land cover types also pay a fee based on the wetland mitigation fee. The temporary impact fee is calculated based on the frequency of the temporary impact over the 30-year permit term; the amount of the fee is equal to the applicable development or wetland mitigation fee multiplied by the proportion of the Plan's 30-year term affected by the temporary impact.

Mitigation Fee Act Findings

The following findings are required by the MFA and were presented in Chapter 1.

Purpose: Identify the purpose to which the fee is to be put.

The temporary impact fee is intended to pay the fair share cost of the Plan associated with temporary impacts.

Impact: Identify a reasonable relationship between the need for the fee and the type of development paying the fee.

A reasonable relationship exists between the need for the temporary impact fee and covered activities that would pay the fee. Chapter 3 of the Plan explains the relationship between the 17 animal and 11 plant species covered under the Plan and all land cover types (see Table 3-9 in Chapter 3 of the Plan). Chapter 4 of the Plan explains the impacts of covered activities on these animal and plant species.

Benefit: Identify a reasonable relationship between the use of fee revenues and the type of development paying the fee.

A reasonable relationship exists between the use of temporary impact fee revenue and covered activities that would pay the fee. Chapter 5 of the Plan explains the conservation strategy and Chapter 9 explains the costs associated with implementing the strategy.

The conservation strategy in Chapter 5 of the Plan identifies biological goals and objectives that are supported by specific conservation measures: five measures related to landscape-level conservation, 11 measures related to natural community-level conservation, and nine measures related to species-level conservation.

The cost model summarized in Chapter 9 and presented in detail in Appendix G of the Plan explains the costs associated with implementation. Updated costs are shown in Chapter 3 of this report and include nine cost categories: program administration, land acquisition, planning and design, habitat restoration/creation, environmental compliance, HCP/NCCP preserve management and maintenance, monitoring, research, and adaptive management, remedial measures, and contingency fund.

Proportion-ality: Identify a reasonable relationship between the amount of the fee and the portion of public facility costs attributable to the type of development paying the fee.

A reasonable relationship exists between the amount of the temporary impact fee on a specific covered activity and the proportionate share of Plan costs based on the fee schedules shown in Table 4.1 and Table 5.2 for three reasons:

- As explained in Chapter 4 regarding the wetland mitigation fee and Chapter 5 regarding the development fee, the fees are based only on Plan costs associated with permanent impacts. Temporary impacts are reasonably similar to permanent impacts when adjusted for the duration of the temporary impact so it is reasonable to establish the temporary fee based on the wetland mitigation and development fees.
- As explained in detail in Chapter 2 in the section "Development Fee Zone" the fee is adjusted for three zones that reflect the relative amount of impact from urban development on natural habitats and covered species. The mapping of the zones was completed at a level of detail sufficient to provide a reasonable relationship between all land within a specific zone and the relative weight of impacts assigned to that zone.
- The total fee for a covered activity is proportional to the amount of the impact based on the number of acres affected.
- The total fee is proportional to the duration of the temporary impact.

7. FUNDING PLAN

This chapter provides an updated funding plan for the Plan based on the Plan cost and mitigation fee revenue analysis presented in the prior chapters. This chapter provides the remaining two findings required by the MFA and explained in Chapter 1:

- Identify all sources and amounts of funding anticipated to complete financing of improvements to be funded by the fee.
- Designate the approximate dates when funding is expected to complete financing of improvements to be funded by the fee.

Table 7.1 presents the updated funding plan under the initial and maximum UDA scenarios. Actual revenues and costs for years 0-5 inflated to 2012 dollars are added to estimates of remaining revenues and costs for each scenario to calculate total amounts for years 0-30.

Consistent with the original funding plan, revenues from non-mitigation fee sources are held constant under both scenarios. Revenue from other fees and exactions not anticipated in the original funding plan are included with non-mitigation fee revenues because the former are not associated with impacts from covered activities paying mitigation fees or are to cover costs not reflected in the Plan. State and federal funding is calculated as a residual amount after accounting for all other non-mitigation fee revenue.

Table 7.1 supports the findings described above by identifying sources and amounts of funding anticipated to complete the Plan, and that funding is expected within the 30-year permit term.

As explained in Chapter 1 this audit does not include costs and funding associated with managing and monitoring the preserve system in perpetuity following the permit term. The Plan estimated these costs at between $3 million and $3.3 million annually ($2006) and identifies a range of potential funding sources. The Plan requires the Conservancy to develop a detailed plan for long-term funding before half of all authorized impacts occur (measured in acres) or at the end of year 15 of implementation, whichever occurs first.

This audit recognizes that post-permit term costs are currently an unfunded liability of the Plan. All cost estimates presented in this audit would be higher if this liability is funded. Mitigation fees would be higher if the Conservancy decides to include post-permit term costs in the fee calculation.

Table 7.2 compares the updated funding plan with the 2006 Plan. Revenues and costs have decreased by similar amounts under the updated funding plan compared to the 2006 Plan, maintaining the slight surplus shown in Chapter 9 of the Plan (Table 9-8). Total mitigation fee revenue has increased under the initial UDA scenario and declined under the maximum UDA scenario depending on whether or not the decline in development fee revenue is able to offset the increase in wetland mitigation fee revenue. The commitment from federal, state, and local funds needed to fully fund the Plan has declined under both scenarios reflecting a decline in total Plan costs.

Table 7.1: Funding Plan - Permit Term Only (2012$ rounded to nearest $10,000)

		Initial UDA		Maximum UDA	
	2007-2012 (Year 0-5) *Actual*	2013-2037 (Year 6-30) *Estimate*	Total (Year 0-30) *Estimate*	2013-2037 (Year 6-30) *Estimate*	Total (Year 0-30) *Estimate*
Funding					
Mitigation Fees					
Development Fee	$1,770,000	$113,320,000	$115,090,000	$152,420,000	$154,190,000
Rural Infrastructure[1]	440,000	7,060,000	7,500,000	7,060,000	7,500,000
Wetland Mitigation	640,000	30,830,000	31,470,000	35,280,000	35,920,000
Temporary Impacts[2]	900,000	-	900,000	-	900,000
Subtotal	$3,750,000	$151,210,000	$154,960,000	$194,760,000	$198,510,000
Other Fees & Exactions					
Administrative Charges[3]	180,000	900,000	1,080,000	900,000	1,080,000
Payments For Non-Covered Activities[4]	3,610,000	(3,610,000)	-	(3,610,000)	-
Other Development Exactions[2]	910,000	-	910,000	-	910,000
Subtotal	$4,700,000	$(2,710,000)	$1,990,000	$(2,710,000)	$1,990,000
Local, State & Federal Funds					
State & Federal Funds[5]	29,910,000	52,350,000	82,260,000	52,350,000	82,260,000
Local Funds[1]	19,110,000	32,680,000	51,790,000	32,680,000	51,790,000
Other Public Funds[2,4]	130,000	(130,000)	-	(130,000)	-
Subtotal	$49,150,000	$84,900,000	$134,050,000	$84,900,000	$134,050,000
Total Funding	**$57,600,000**	**$233,400,000**	**$291,000,000**	**$276,950,000**	**$334,550,000**
Total Costs	**$55,760,000**	**$233,120,000**	**$288,880,000**	**$276,670,000**	**$332,430,000**
Net (Revenues - Costs)[6]	**$1,840,000**	**$280,000**	**$2,120,000**	**$280,000**	**$2,120,000**

Note: Amounts exclude post-permit costs. Amounts would be higher if these costs were included in the analysis.

[1] Estimated based on changes since 2006 Plan:

	Rural infra. fee		Local Funds
2006 Plan:	$8,932,000	2006 Plan (EBRPD operational costs):	$55,000,000
Change in development fee (Table 4.5):	(16%)	Change in Plan costs excluding program admin. (Table 3.3):	(6%)
Current estimate:	$7,502,880	Current estimate:	$51,789,277

[2] Years 0-5 revenues from temporary impacts, payments for non-covered activities, other development exactions (including participating special entity fees), and other public funds primarily associated with one-time projects. Future activity is highly uncertain so future revenue not estimated.

[3] Assume revenue (years 6-30) generated at same average rate as years 0-5. Multiplier applied to years 0-5 amount = 6

[4] Years 0-5 revenue deducted from future years because funding must augment and not substitute for Plan obligations (see Chapter 9 of the Plan).

[5] State and federal funds (year 6-30) calculated to generate same ending fund balance as 2006 Plan (year 0-30) (see Table 6.2).

[6] Estimated fund balance as of December 31, 2012. Actual fund balance as of October 31, 2012 was $2,080,000.

Sources: 2006 Plan, Table 9-8; Tables 5.1, 5.4, 5.5, and 7.2; Appendices D and E, p. 2 of 29 (for years 0-5 costs), and Appendix F, Table F.1.

Table 7.2: Funding Plan Comparison - Permit Term Only (2012$ rounded to nearest $10,000)

	Initial UDA			Maximum UDA		
	2006 Plan	2012 Audit	Difference (Audit vs. Plan)	2006 Plan	2012 Audit	Difference (Audit vs. Plan)
Funding						
Mitigation Fees						
Development Fee	$118,180,000	$115,090,000	$(3,090,000)	$169,720,000	$154,190,000	$(15,530,000)
Rural Infrastructure	8,930,000	7,500,000	(1,430,000)	8,930,000	7,500,000	(1,430,000)
Wetland Mitigation[1]	22,240,000	31,470,000	9,230,000	24,010,000	35,920,000	11,910,000
Temporary Impacts[1]	-	900,000	900,000	-	900,000	900,000
Subtotal	$149,350,000	$154,960,000	$5,610,000	$202,660,000	$198,510,000	$(4,150,000)
Other Fees & Exactions						
Administrative Charges[2]	-	$1,080,000	$1,080,000	$-	$1,080,000	$1,080,000
Payments For Non-Covered Activities[2]	-	-	-	-	-	-
Other Development Exactions[2]	-	910,000	910,000	-	910,000	910,000
Subtotal	$-	$1,990,000	$1,990,000	$-	$1,990,000	$1,990,000
Local, State & Federal Funds						
State & Federal Funds	94,500,000	$82,260,000	$(12,240,000)	$94,500,000	$82,260,000	$(12,240,000)
Local Funds	55,000,000	51,790,000	(3,210,000)	55,000,000	51,790,000	(3,210,000)
Other Public Funds[2]	-	-	-	-	-	-
Subtotal	$149,500,000	$134,050,000	$(15,450,000)	$149,500,000	$134,050,000	$(15,450,000)
Total Funding	**$298,850,000**	**$291,000,000**	**$(7,850,000)**	**$352,160,000**	**$334,550,000**	**$(17,610,000)**
Total Costs	**$297,090,000**	**$288,880,000**	**$(8,210,000)**	**$350,040,000**	**$332,430,000**	**$(17,610,000)**
Net (Revenues - Costs)	**$1,760,000**	**$2,120,000**	**$360,000**	**$2,120,000**	**$2,120,000**	**$-**

Note: Amounts exclude post-permit costs. Amounts would be higher if these costs were included in the analysis.

Note: 2006 Plan data varies slightly from Table 9-8 in Plan due to rounding.

[1] Amount shown in 2006 Plan, Table 9-8 for maximum UDA corrected to match amount used in fee calculation in Appendix H, Table 1 and estimated in Appendix G, Wetland Fee Worksheet.

[2] These revenues were not estimated in the 2006 Plan.

Sources: 2006 Plan, Table 9-8; Tables 5.4, 5.5, and 7.1.

A. APPENDIX: DEVELOPMENT IMPACTS

Table A.1 provides detail for covered activities (impacts from development projects and other covered activities) for years 0-5 (2007 through 2012) of the Plan. Covered activities for the last two months of 2012 are estimated.

Table A.1: Covered Activities Through December 31, 2012 (Years 0-5)

		Permanent						Temporary[1]		
		Non-Aquatic				Aquatic[1]			Aquatic[1]	
		Urban Development								
Fiscal year	Description	Zone 1[2] (acres)	Zone 2 (acres)	Zone 3 (acres)	Rural Infra. (acres)	Wet-lands (acres)	Streams (linear ft.)	Non-Aquat-ic (acres)	Wet-lands (acres)	Streams (linear ft.)
Covered Activities Through October 31, 2012										
2008	PSE: Ameresco Keller Canyon Landfill Gas Power Plant Project- Impact Fees							0.60		
2008	CCC PWD: Marsh Creek Emergency Bridge Repair Project; JV1551 dd 10/22/08- Impact Fees						0.3		0.04	38.70
2008	City of Pittsburg: Mount Diablo Recycling Center Project- Impact Fees							5.00		
2009	PSE: Bypass Authority for SR4 Bypass, Segment 4, Phase 2 Project- Impact Fees	24.80	24.05			0.19				
2009	PSE: PG&E for Contra Costa-Las Positas Reconductoring Project; DP#520095- Impact Fees							22.36		
2009	CCC LP07-2033: Verizon Wireless Martin Cell Tower Project - Impact Fees				0.03			1.95		
2009	CCC LP09-2002: SBA Cell Tower Project- Impact Fees				0.04			1.12		
2009	City of Pittsburg: Rilemart Company (Illegal Grading Site)- Impact Fees							12.50		
2010	CCC PWD: Vasco Rd Safety Imp Project; JV4143 dd 4/19/10- Impact Fees				6.20	0.01	132.0	5.45	0.12	348.50
2010	PSE: Caltrans for SR4 Median Buffer and Shoulder Widening Project-Impacts Fees, GGS, CTR				7.34	0.41	6.0	15.28	0.40	
2010	PSE: BART for the eBART Phase I Project- Impact Fees, CTR	0.30						3.50		
2010	PSE: Equilon Enterprises DBA Shell Oil Products US for Coalinga-Avon Pipeline Repair Project- Impact Fees, CTR							0.27		
2010	City Of Pittsburg: JBM Construction for use of 2515 Ant-Pit HWY Site- Impact Fees							12.50		
2010	City Of Pittsburg: US Posco for Site LA-Stockpile Project- Impact Fees							7.81		
2010	PSE: ConocoPhillips Pipe Line Company for Line 200 Repair Project- Impact Fees, CTR.							2.00		
2010	CCC LP09-2033: Horizon Cell Tower Project- Impact Fees				0.05			1.88		
2011	City of Pittsburg: Bay Cities Paving & Grading for Ca Ave Widening Temp Contractors Storage Site- Impact Fee							1.96		
2011	PSE: ConocoPhillips Pipe Line Company for Line 200 Repair Project Second Amendment- Impact Fees							0.05		
2011	CCC PWD: Vasco Camino Diablo Project- Impact Fees				1.94			4.85		

Table A.1: Covered Activities Through December 31, 2012 (Years 0-5)

		Permanent						Temporary[1]		
		Non-Aquatic				Aquatic[1]			Aquatic[1]	
		Urban Development								
Fiscal year	Description	Zone 1[2] (acres)	Zone 2 (acres)	Zone 3 (acres)	Rural Infra. (acres)	Wet-lands (acres)	Streams (linear ft.)	Non-Aquat-ic (acres)	Wet-lands (acres)	Streams (linear ft.)
2011	PSE: Contra Costa Generating Station for Oakley Generating Station Project- Impact Fees, CTR, Antioch, Admin	16.70						38.56		
2011	CCC LP10-2082: J4 Byron Hot Springs Communications Facility Project- Impact Fees				0.06			0.99		
2011	CCC LP09-2037: Camino Diablo Vasco Telecommunications Facility Project- Impact Fees				0.27			2.94		
2011	City of Oakley: Stonewood 3 Project - Unit 1 of Sub# 9183- Impact Fees	2.21								
2011	CCC LP10-2070: Morgan Territory Road Telecommunication Facility Project- Impact Fees				0.04			0.93		
2011	City of Pittsburg: Trash Capture Demonstration Project- Impact Fees	0.02				0.02		0.06		
2011	PSE: Equilon Enterprises dba Shell Oil Products US for Coalinga Avon Pipeline Repair Project First Amendment-Impact Fees, CTR							0.05		
2011	CCC PWD: Byron Hwy Shoulder Widening Project-Impact Fees (JV #4956)				0.44		47.0	0.74		112.00
2011	CCC PWD: Balfour Rd. Culvert Repair Project- Impact Fees (JV#0870)				0.01		12.0	0.09		43.00
2011	PSE: ConocoPhillips Pipeline Company for Line 200 Repair and Anode Bed Project- Impact Fees							1.37		
2011	PSE: Contra Costa Generating Station for Oakley Generating Station Project First Amendment- Impact Fees, CTR	0.02						5.20		
2011	City of Brentwood: New Meeting House for Brentwood Project- Impact Fees			3.40						
2012	PSE: BART for the eBART Phase II Project- Impact Fees, CTR, SWHA mitigation (Minus $7511.77 credit owed BART for Phase I)	37.91						2.22		
2012	PSE: Equilon Enterprises dba Shell Oil Products US for Coalinga Avon Pipeline Repair Project Second Amendment- Impact Fees							0.05		
2012	CCC LP10-2009: Clayton Regency Mobile Home Park Project- Impact Fees				0.50			2.30		
2012	CCC PWD: Upper Sand Creek Detension Basin Excavation Project (JV#4596)							5.30		

Table A.1: Covered Activities Through December 31, 2012 (Years 0-5)

		Permanent						Temporary[1]		
		Non-Aquatic				Aquatic[1]			Aquatic[1]	
		Urban Development								
Fiscal year	Description	Zone 1[2] (acres)	Zone 2 (acres)	Zone 3 (acres)	Rural Infra. (acres)	Wet-lands (acres)	Streams (linear ft.)	Non-Aquat-ic (acres)	Wet-lands (acres)	Streams (linear ft.)
2012	CCC PWD: Deer Valley Rd Safety Imprvmnt Proj. South of Chadbourne- Impact Fees(JV#4608)				0.53	0.13		1.66	0.23	
2012	CCC BIG12-004598: Los Vaqueros Communications Facility-Impact Fees, Staff Fee				0.03			1.06		
2012	EBRPD: Round Valley Pedestrian Bridge Project- Impact Fees				0.15			0.83		
2012	CCC PWD: Marsh Creek Shoulder Widening Project-Impact Fees (JV# 0108)				4.71	0.06	29.0	3.61	0.03	24.00
2012	PSE: Caltrans for SR4 Median Buffer and Shoulder Widening Project Second Amendment- Impact Fees							0.45	0.06	
2012	PSE: BART for the eBART Phase II Project Second Amendment-Impact Fees, CTR							2.56		
2012	PSE: Phillips 66 for Vasco Rd Line 200 Pipeline Emergency Release Project- Impact Fees, Staff Time							24.22		
Estimated Covered Activities November 1 Through December 31, 2012										
2012	City of Oakley: iPark Oakley aka Park and Play Project- Impact Fees	9.14								
2012	CCC PWD: Upper Sand Creek Detension Basin Project-Impact Fees				6.89		295.0	3.03		
	2007-2011 (see note)	44.05	24.05	3.40	16.42	0.63	197.3	150.01	0.56	542.20
	2012	47.05	-	-	12.81	0.19	324.0	47.29	0.32	24.00
	Total	**91.10**	**24.05**	**3.40**	**29.23**	**0.82**	**521.3**	**197.30**	**0.88**	**566.20**

Note: Differences between 2007-2011 subtotal and Conservancy's 2011 Annual Report, Table 4, explained as follows. The 2011 Report lists 86.6 acres of permanent non-aquatic impacts, a 1.3-acre discrepancy (vs. 87.9 acres) that is not a material difference. The 2011 Report lists 0.62 acres of permanent aquatic impacts through 2011, a 0.02-acre discrepancy (vs. 0.63 acres) and is related to the 2011 City of Pittsburg Trash Capture Demonstration Project not included in the 2011 Report because it was not built until 2012. The 2011 Report lists 141.5 acres of temporary non-aquatic impacts, a 8.5-acre discrepancy (vs. 150.0 acres) and is related to 7.2 acres of temporary impacts associated with cell tower buffers not included in the 2011 Report, and a 1.3-acre discrepancy that is not a material difference.

Note: "PSE" is participating special entity. "CCC" is Contra Costa County. "CTR" is contribution to recovery.

[1] Aquatic and temporary impacts include covered activities inside and outside the urban development area. All projects with stream impacts are on streams that are less than 25 feet wide except for four projects: Marsh Creek (2008 and 2012), Vasco Rd. (2010), Balfour Rd., (2011). Total impacts (ln. ft.) on streams greater than or equal to 25 feet equals: 173.3

[2] Includes impacts outside UDA in Antioch area where fee is based on midpoint between zone 1 and zone 2 fee.

Sources: ECCC Habitat Conservancy.

B. APPENDIX: LAND ACQUISITION COST ANALYSIS

The following tables provide detail for the land acquisition cost analysis update.

Table B.1

REMAINING LAND ACQUISITION BY COST CATEGORY, Acres and Estimated Total Cost
EAST CONTRA COSTA COUNTY HCP/NCCP
2012 Update

		Initial Urban Development Area				Maximum Urban Development Area			
Acquisition Cost Category	**Parcel Size**	**Acres**	**% of Total**	**Estimated Cost**	**% of Total**	**Acres**	**% of Total**	**Estimated Cost**	**% of Total**
OUTSIDE THE URBAN LIMIT LINE									
1	120 + acres	12,064	74%	$63,940,888	59%	14,177	71%	$75,138,024	56%
2	40 - 120 acres	1,949	12%	14,614,929	14%	3,055	15%	22,910,491	17%
3	10 - 40 acres	566	3%	10,524,810	10%	857	4%	15,939,640	12%
4	5 - 10 acres	9	0%	443,984	0%	21	0%	1,019,703	1%
5	< 5 acres	-	0%	-	0%	4	0%	311,462	0%
6	ALL, steep slopes	572	4%	2,403,133	2%	586	3%	2,460,991	2%
INSIDE THE URBAN LIMIT LINE		1,082	7%	15,866,152	15%	1,273	6%	17,348,221	13%
TOTAL		**16,242**	**100%**	**$107,793,895**	**100%**	**19,973**	**100%**	**$135,128,532**	**100%**

Source: East Contra Costa County Habitat Conservancy and Hausrath Economics Group

Table B.2

LAND ACQUISITION COST FACTOR
EAST CONTRA COSTA COUNTY HCP/NCCP
2012 Update

OUTSIDE THE URBAN LIMIT LINE

Acquisition Cost Category	Parcel Size	Slope Characteristics (percent of parcel)	Per Acre Land Value Factor 2003 Valuation	2005 Valuation	2006 Valuation	2012 Valuation	Change from 2006
1	120 + acres	< 26%	$3,500	$4,800	$5,600	**$5,300**	-5%
2	40 - 120 acres	< 26%	$6,000	$8,200	$9,600	**$7,500**	-22%
3	10 - 40 acres	< 26%	$20,000	$27,400	$31,900	**$18,600**	-42%
4	5 - 10 acres	< 26%	$35,000	$48,000	$56,000	**$49,000**	-13%
5	< 5 acres	< 26%	$50,000	$68,600	$80,000	**$70,000**	-13%
6	ALL	> 26%	$3,000	$3,300	$3,800	**$4,200**	11%

INSIDE THE URBAN LIMIT LINE

Acquisition Cost Category	Currently Designated for Development (Yes/No)	Slope Characteristics (percent of parcel)	Per Acre Land Value Factor 2003 Valuation	2005 Valuation	2006 Valuation	2012 Valuation	Change from 2006
7	No	<15%	$14,500	$18,300	$21,300	**$11,000**	-48%
8	No	15-26%	$10,100	$12,700	$14,800	**$6,600**	-55%
9	No	>26%	$3,600	$4,500	$5,200	**$2,800**	-46%
10	Yes	<15%	$45,000	$56,800	$66,200	**$35,000**	-47%
11	Yes	15-26%	$31,500	$39,760	$46,400	**$21,000**	-55%
12	Yes	>26%	$11,300	$14,263	$16,600	**$8,800**	-47%
INSIDE THE URBAN LIMIT LINE - BYRON AIRPORT							
13	na	na	$8,000	$8,800	$10,300	**$6,200**	-40%

Note: The 2012 land cost factor for the Byron Airport Area is based on the $8,000 per acre value estimated in 2003, adjusted by the 2012 percentage change from values originally estimated in 2003 for Cost Category 10--about 20 percent.

Source: East Contra Costa County Habitat Conservancy and Hausrath Economics Group

Table B.3

LAND ACQUISITION ANALYSIS - Price per acre for parcels > 120 acres (nominal dollars)
EAST CONTRA COSTA COUNTY HCP/NCCP
2012 Update

Transaction ID	Project/Property Name	Year of Sale	Acres	Purchase Price/Market Value	Price/Value per acre
EBRPD/ECCC Habitat Conservancy Land Acquisitions					
1	Souza 1 (appraisal)	2004 (2009)	573.5	$2,759,085	$4,811
2	Lentzner (appraisal)	2005 (2009)	317.0	$1,340,000	$4,227
3	Chaparral Spring	2008	329.0	$1,400,000	$4,255
4	Souza 2	2009	191.5	$1,692,000	$8,836
5	Schwartz	2009	152.2	$803,880	$5,282
6	Vaquero Farms South	2009	709.2	$2,454,400	$3,461
7	Fox Ridge	2009	221.1	$1,760,000	$7,960
8	Vaquero Farms North	2010	574.9	$2,770,000	$4,818
9	Grandma's Quarter	2010	157.0	$1,036,200	$6,600
10	Martin	2010	234.3	$2,025,855	$8,646
11	Souza 3	2010	915.4	$2,146,790	$2,213
12	Ang	2010	461.9	$2,763,840	$5,984
13	Irish Canyon - Chopra	2010	313.0	$1,760,000	$5,623
14	Land Waste Management	2010	448.6	$3,050,000	$6,799
15	Barron	2010	763.5	$2,952,600	$3,867
16	Austin 1 (Thomas Southern)	2010	813.9	$3,240,000	$3,981
17	Austin 2 (Thomas Central)	2010	159.9	$624,000	$3,902
19	Vaquero Farms Central	2012	320.0	$1,855,700	$5,799
23	Thomas North	pending	135.0	$863,900	$6,400
Weighted Average					**$4,787**
Save Mount Diablo					
SMD 4	Mangini Ranch	2007	208.0	1,454,530	$6,993
SMD 9	Viera-North Peak	2003	165.3	975,000	$5,898
Weighted Average					**$6,508**
Other East Bay Regional Park District					
EBRPD 1	Cummings Skyway, Martinez	2007	218.7	$1,225,000	$5,601
Contra Costa Water District					
CCWD 5	Leonardini	2010	138.0	$899,000	$6,514
CCWD 6	Church Property	2011	340.0	$2,618,000	$7,700
CCWD 7	Evergreen	2011	658.0	$5,800,000	$8,815
Weighted Average					**$8,202**
Overall Weighted Average					**$5,281**
				Land Cost Factor for 2012 Update:	**$5,300**

Note: Adjustments for some of the acquisitions for the East Contra Costa County Habitat Conservancy remove the value of lease income and conservation easements: Souza 1, Vaquero Farms South, Martin, Souza 3, Irish Canyon, and Austin 1. Also EBRPD 1 adjusted to equivalent of 100% interest.

Souza 1 and Lentzner analyses reflect 2009 appraisals prepared for the Conservancy in support of matching funds applications. The appraisals assumed the properties were available for private ownership and accounted for the conservation easement value on Souza 1.

Sources: East Contra Costa Habitat Conservancy, Save Mount Diablo, Contra Costa Water District, various appraisals and Hausrath Economics Group

Table B.4

LAND ACQUISITION ANALYSIS - Price per acre for parcels 40 - 120 acres (nominal dollars)
EAST CONTRA COSTA COUNTY HCP/NCCP
2012 Update

Transaction ID	Project/Property Name	Year of Sale	Acres	Purchase Price/Market Value	Price/Value per acre
EBRPD/ECCC Habitat Conservancy Land Acquisitions					
18	Affinito - large parcel	2012	101.5	$862,500	$8,500
20	Galvin	2012	61.6	$370,000	$6,006
Weighted Average					**$7,558**
Save Mount Diablo					
SMD 1	Wright Canyon	2001	76.0	$640,000	$8,421
SMD 2	Joseph Galvin Ranch	2003	61.0	$385,000	$6,311
SMD 20	Highland Springs	2012	105.0	$495,000	$4,714
Weighted Average					**$6,281**
Contra Costa Water District					
CCWD 4	Acrew	2010	103.0	$694,000	$6,738
Contra Costa County Assessor's Data					
Assessor 8	0 Armstrong Road, Byron	2009	80.0	$980,000	$12,250
Overall Weighted Average					**$7,527**
				Land Cost Factor for 2012 Update:	**$7,500**

Note: Affinito value reflects the appraised market value of the largest parcel in a five-parcel acquisition expected to close by the end of 2012. The value is adjusted to reflect only the unimproved land, as presented in the 2010 appraisal analysis.

Sources: East Contra Costa Habitat Conservancy, Save Mount Diablo, Contra Costa Water District, and Hausrath Economics Group

Table B.5

LAND ACQUISITION ANALYSIS - Price per acre for parcels 10 - 40 acres (nominal dollars)
EAST CONTRA COSTA COUNTY HCP/NCCP
2012 Update

Transaction ID	Project/Property Name	Year of Sale	Acres	Purchase Price/Market Value	Price/Value per acre
EBRPD/ECCC Habitat Conservancy Land Acquisitions					
21	Moss Rock	2012	20.5	$410,000	$20,010
22	Fan	2012	21.0	$220,000	$10,476
Weighted Average					**$15,184**
Save Mount Diablo					
SMD 3	Young Canyon	2006	17.6	$300,000	$17,026
SMD 7	Marsh Creek 2	2008	17.0	$320,000	$18,824
SMD 11	7030 Morgan Territory Rd	2010	20.0	$425,000	$21,250
SMD 12	Oak Hill	2010	10.0	$87,500	$8,750
SMD 13	Oak Hill	2010	10.0	$87,500	$8,750
SMD 14	Oak Hill	2010	10.0	$87,500	$8,750
SMD 15	Oak Hill	2010	10.0	$87,500	$8,750
Weighted Average					**$14,743**
Contra Costa County Assessor's Data					
Assessor 1	Clayton	2008	16.1	$750,000	$46,671
Assessor 2	Brentwood	2010	10.6	$250,000	$23,585
Weighted Average					**$37,495**
Overall Weighted Average					**$18,583**
				Land Cost Factor for 2012 Update:	**$18,600**

Sources: East Contra Costa Habitat Conservancy, Save Mount Diablo, Contra Costa County Assessor, and Hausrath Economics Group

Table B.6

LAND ACQUISITION ANALYSIS - Price per acre for parcels 5 - 10 acres (nominal dollars)
EAST CONTRA COSTA COUNTY HCP/NCCP
2012 Update

Transaction ID	Project/Property Name	Year of Sale	Acres	Purchase Price/Market Value	Price/Value per acre
EBRPD/ECCC Habitat Conservancy Land Acquisitions					
18	Affinito - part	2012	6.50	$215,000	$33,077
Save Mount Diablo					
SMD 6	Marsh Creek 1	2007	8.92	$315,000	$35,314
SMD 10	Dry Creek	2010	5.18	$84,000	$16,216
SMD 16	Marsh Creek 5	2011	7.37	$125,000	$16,972
SMD 18	Marsh Creek 6	2011	5.74	$395,000	$68,815
SMD 19	Marsh Creek 7	2011	7.57	$574,000	$75,826
Weighted Average					**$42,933**
Contra Costa County Assessor's Data - Rural land use, unimproved					
Assessor 3	Clayton	2008	5.59	$450,000	$80,501
Assessor 4	Brentwood	2012	7.90	$500,000	$63,291
Weighted Average					**$70,423**
Overall Weighted Average					**$48,535**
				Land Cost Factor for 2012 Update:	**$49,000**

Note: Affinito value reflects the appraised market value of the 6.5 acre parcel in a five-parcel acquisition expected to close by the end of 2012. The value of that land as an unimproved parcel was appraised independently in the 2010 analysis.

Sources: East Contra Costa Habitat Conservancy, Save Mount Diablo, Contra Costa County Assessor, and Hausrath Economics Group

Table B.7

LAND ACQUISITION ANALYSIS - Price per acre for parcels less than 5 acres (nominal dollars)
EAST CONTRA COSTA COUNTY HCP/NCCP
2012 Update

Transaction ID	Project/Property Name	Year of Sale	Acres	Purchase Price/Market Value	Price/Value per acre
EBRPD/ECCC Habitat Conservancy Land Acquisitions					
18	Affinito - A	2012	3.94	$195,000	$49,492
18	Affinito - B	2012	2.69	$175,000	$65,056
18	Affinito - C	2012	1.89	$165,000	$87,302
Save Mount Diablo					
SMD 8	Marsh Creek 4	2008	2.65	$325,000	$122,642
Contra Costa County Assessor's Data - Rural land use, unimproved or improvements less than 10%					
Assessor 5	Clayton	2007	1.61	$125,000	$77,640
Assessor 6	Brentwood	2010	1.00	$89,000	$89,000
Assessor 7	Clayton	2010	3.16	$560,000	$177,215
Overall Weighted Average					**$96,458**
				Land Cost Factor for 2012 Update:	**$70,000**

Note: The Affinito A, B, and C values reflects the appraised market values of each of the three small parcels in a five-parcel acquisition expected to close by the end of 2012. The unimproved parcels were appraised independently in the 2010 analysis.

Only a small number of parcels less than 5 acres might be acquired as part of the acquisition strategy to fill gaps between larger parcels. Following the rationale presented in "NCCP/HCP Land Cost Data", Technical Memorandum to John Kopchik, prepared by Economic & Planning Systems, August 3, 2006 and included in Appendix G: HCP/NCCP Cost Data, the value assumption is based on a per-acre premium above the average value for the 5 - 10 acre parcels ($49,000 for this 2012 update). In the 2006 analysis, the premium was about 40 percent. This 2012 analysis assumes a roughly similar premium, resulting in the $70,000 per acre land cost factor for parcels less than five acres.

Sources: East Contra Costa Habitat Conservancy, Save Mount Diablo, Contra Costa County Assessor, and Hausrath Economics Group

Table B.8

LAND ACQUISITION ANALYSIS - Basis for price per acre calculation for parcels inside the Urban Limit Line
EAST CONTRA COSTA COUNTY HCP/NCCP
2012 Update

Item	Value		Source
Average Sales Price Per Single Family Unit	$360,000	a	New Home Sales 2011 and 2012 Antioch, Brentwood, Oakley, and Pittsburg
Units per Gross Acre	4.5	b	Average Lot Size of 7,000 sqft and net to gross ratio of 75 percent
Total Development Value	$1,620,000	c=a*b	Calculated
Raw Entitled Land Value as % of Development Value	9.0%	d	Based on standard 10 percent ratio, adjusted down slightly based on real estate broker conversations
Raw Entitled Land Value	$145,800	e=c*d	Calculated
Discount Rate	12%	f	Average land speculator discount rate
Category 10 - 12.5 years to entitlement/ development	$35,362	g=e/(1+f)^12.5	Calculated
Category 7 - 22.5 years to entitlement/ development	$11,385	h=e/(1+f)^22.5	Calculated

Note: This table updates the cost factors in the calculations for this land cost factor as established in the August 3, 2006 Technical Memorandum from Economic & Planning Systems, "NCCP/HCP Land Cost Data". The average sales price for new single family units is updated to reflect current market conditions.

This table calculates the average values for cost categories 7 and 10, Following the methodology established in 2006, the values for categories 8 and 11 are discounted 40 percent from the value for a level site and the values for categories 9 and 12 are discounted 75 percent from the average for the level site.

Sources: Dataquick; Hausrath Economics Group

C. APPENDIX: HABITAT RESTORATION AND ENVIRONMENTAL COMPLIANCE COST ANALYSIS

The following memorandum describes how wetland habitat restoration/creation and environmental compliance costs were updated for the audit.

AECOM
2020 L Street, Suite 400
Sacramento, CA 95811
www.aecom.com

916.414.5800 tel
916.414.5850 fax

To: James Edison, Willdan Financial Services

From: Lynn Hermansen and John Hunter, Ph.D., AECOM

cc: Sally Nielson, Hausrath Economics Group; Robert Spencer, Urban Economics

Date: December 12, 2012

Subject: East Contra Costa County Habitat Conservation Plan Restoration and Environmental Cost Analysis and Review

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Purpose

At the behest of Willdan, AECOM conducted a peer review of the habitat restoration and environmental consulting costs within the cost model produced for the 2006 East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) (Jones and Stokes 2006). Below, we provide a summary of our general methodology and approach arranged by cost model category. The resulting adjusted costs are provided in the attached spreadsheet for incorporation into a revised 2012 cost model by Hausrath Economic Group and Willdan.

Methods

AECOM reviewed and modified, as necessary, the consulting and contractor unit costs associated with the following HCP/NCCP 2006 cost model spreadsheets:

- Planning and Design,
- Habitat Restoration and Creation,
- Environmental Compliance, and
- Monitoring and Research.

These unit costs translate directly into the HCP/NCCP wetland fee worksheet. Adjustments to unit costs were made based on AECOM's professional experience with project costs for habitat restoration planning, design and implementation, environmental compliance and permitting, and biological surveys. In cases where AECOM agreed with the assumptions and costs in the 2006 model, costs were only adjusted for inflation and wage increases during 2005–2012.

To adjust for wage increases, AECOM evaluated salary adjustments from 2005 to 2012 for projects with public clients. Many of these clients, including the Department of Water Resources, use an escalation rate based on the U.S. Department of Labor Bureau of Labor Statistics (BLS) employment cost index. This index indicates a 21.1% increase in salary rates from 2005 to 2012 (BLS 2012a). This is consistent with the changes in rate schedules at AECOM for public clients. Similarly, to adjust for 2005–2012 cost increases, AECOM used the BLS consumer price index inflation calculator (BLS 2012b).

Where sufficient assumptions and methodology were provided in the 2006 cost model and supporting documentation, AECOM maintained consistency with those assumptions and methodology. Deviations are documented in the approach below. AECOM did not modify any 2006 model assumptions on the apportionment of land acquisitions over the life of the HCP/NCCP and the types and acreages of habitat restoration to occur over time.

AECOM used the following data sources in our analysis:

- East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan, specifically Chapter 5, and Appendix H and G (Jones & Stokes 2006)
- 2011 Fee Update Memorandum dated March 17, 2011 prepared by Economic and Planning Systems (EPS) entitled: East Contra Costa County HCP/ NCCP 2011 Mitigation Fee Update EPS# 20149 and the memorandum by EPS providing additional information dated July 15, 2011. (EPS 2011a and EPS 2011b)
- Conservancy database of project costs for a total of seven habitat restoration projects implemented by the East Contra Costa County Conservancy (Conservancy) and one project implemented by the City of Oakley between 2007 and 2012[1.]
- AECOM habitat restoration cost database covering a total of 17 northern California habitat restoration projects (located primarily in the Bay Area and lower Sacramento Valley) implemented by AECOM between 2004 and 2012[1].

Approach

The approach to complete the cost review for each model spreadsheet is documented below.

1) *Planning and Design*

AECOM reviewed the assumptions and costs for the planning and design effort. AECOM cost estimates to complete this type of work were within 10% of estimates provided in the 2006 cost model (as adjusted for 2012 costs), thus no changes were made to the unit model costs other than updating for current costs. Wage increase adjustments during 2005–2012, were completed as described above.

2) *Habitat Restoration and Creation*

Costs for habitat restoration and creation can vary considerably among projects. Costs are dependent on many factors including project complexity, level of engineering required, project site characteristics (e.g., topography, soil type, and level of disturbance), and construction considerations (e.g., site access, distance to spoils disposal, and total earthwork required). Smaller projects (i.e., those that result in less than approximately one-quarter acre of wetland creation) typically have a greater per acre cost for design, oversight, and in some cases construction. Often projects of this size require a level of analysis for design comparable to much larger projects, and some unit construction costs such as mobilization remain similar to those of much larger projects.

The unit costs for design (including hydraulic and hydrologic investigations, plans, specifications, and engineering), bid assistance, construction oversight, and post-construction maintenance were calculated based on the median of actual AECOM and Conservancy project costs. Available total costs for each component were compiled on a project-by-project basis from the AECOM and Conservancy restoration cost databases. When actual costs were unavailable, project cost estimates completed at the time of the project were used. To provide consistency between these unit costs, despite project cost factors (as described above), the total cost to complete each component (e.g., design cost) was

[1] All costs were adjusted to 2012 dollars based on the Bureau of Labor Statistics inflation calculator. http://www.bls.gov/cpi/home.htm. Accessed 10/24/2012

calculated as a percent of the total cost for construction. The median percent cost was calculated over all projects, and then reduced by 10% to be conservative.

Construction costs were calculated on a per-acre basis. Projects from the AECOM and Conservancy restoration cost databases were grouped based on (1) the expected level of effort required to complete the project (i.e., taking into account construction considerations as described above), and (2) similarity to completed and anticipated future HCP/NCCP restoration projects. One AECOM wetland project was eliminated because, due to a high unit cost for design and construction, it would be deemed infeasible during initial HCP/NCCP restoration planning phases. Three AECOM stream restoration projects were eliminated from consideration due to the complexity, high level of engineering needed, and high construction costs. These three stream restoration projects are not consistent with what is expected of future HCP stream restoration projects. Additionally, the costs for two of the stream restoration projects were reduced to account for a broader stream width in comparison to those typically expected to be restored under the HCP/NCCP.

Construction costs for oak savannah, riparian woodland scrub, and stream restoration were grouped by category; the median per-acre (per-linear foot for stream restoration) construction cost was calculated over all projects in each category; and the median was reduced by 10% to be conservative.

The wetland construction projects from the AECOM and Conservancy databases included restoration and creation of multiple habitat types at one project site. Maximizing the mitigation potential of restoration sites typically dictates a holistic approach to restoration design that incorporates multiple habitat types into one project. Future Conservancy restoration projects are also expected to use this integrated and practical method of restoring and creating multiple habitats at a site. To address this integrated approach, increase the sample size, and account for both economy of scale and construction of some smaller restoration/creation projects by the Conservancy (as has occurred in the past and is expected in the future), wetland creation/restoration costs for all wetland types were pooled. The median per-acre construction cost of all projects was calculated, and the median reduced by 10% to be conservative. To differentiate construction costs between habitat types, a number of factors were used based on AECOM project experience and construction cost break downs for similar restoration/creation projects. These factors are identified in Tables 1a and 1b below. The spreadsheets used to calculate these costs are provided in Attachment A.

3) *Environmental Compliance*

The 2006 cost estimates (updated for inflation and wage changes during 2005–2012) to provide project compliance under the California Environmental Quality Act (CEQA) and National Historic Preservation Act (NHPA) fell within 10% of AECOM cost estimates, and thus were updated but not otherwise modified. Permitting costs for compliance with Section 404 of the Clean Water Act (CWA) were estimated to be zero in 2006. Because Conservancy projects are expected to qualify under the existing U.S. Army Corps of Engineers (USACE) General Permit for the HCP/NCCP, the zero cost was maintained in 2012. Despite the absence of an application fee for a 404 permit, the General Permit requires preparation of a notification package that must be approved by USACE. Because the 2006 estimate to complete CWA Section 404 compliance was zero, we assumed all labor costs were covered by Conservancy staff. Similar reasoning was followed regarding costs for CWA Section 401 and California Department of Fish and Game (CDFG) Lake and Streambed Alteration Agreement (LSAA) compliance.

The cost review for compliance with Section 1602 of the CDFG Code and Section 401 of the CWA resulted in a slight modification to the 2006 cost model methods and assumptions. In 2006, the Conservancy anticipated obtaining a Master LSAA from CDFG and was considering pursuit of a regional general CWA Section 401 permit from the Regional Water Quality Control Board (RWQCB). Acquisition of these general permits is no longer under consideration. As such, project-by-project permits will be required where impacts occur within the jurisdiction of CDFG or the RWQCB. The model has been updated to reflect these costs.

The application fee for a CWA 401 permit is based on size of impacts to jurisdictional waters of the state rather than project size. CDFG 1602 application fee costs are calculated based on the assumed cost of project activities within CDFG jurisdiction per Fish and Game Code Sections 1600-1616. Calculation of these two fees for input to the 2012 revised cost model required the addition of impact and cost assumptions. Impact sizes were estimated by AECOM, based on wetland impacts typically associated with the project types to be implemented by the Conservancy (e.g., wetland restoration/creation projects, stream restoration projects, adaptive management measures for existing wetland features, and facilities improvements). It is expected that impacts to wetlands and streams would be avoided if possible. Using assumed impacts for each project size, the CWA 401 fee was calculated using the RWQCB dredge and fill fee calculator (RWQCB 2011). Cost estimates used to calculate the CDFG 1600 fees were derived from the AECOM restoration cost database. The CDFG 1600 fee was calculated using the Lake and Streambed Alteration Agreements and Fees, Fee Schedule (CDFG 2011). An average of the fees based on the minimum and maximum expected costs was used for the 2012 cost model.

4) *Monitoring and Research*

AECOM reviewed the assumptions and costs for the survey and monitoring efforts. AECOM cost estimates for completing the level of effort indicated were within 10% of those provided in the 2006 model with one exception. The level of effort to complete the monitoring for the restoration, creation, and enhancement sites was increased from a 5-hour day to an 8-hour day. The unit cost is based on 10 acres of restoration/creation of habitat at a site. In many cases to date, the Conservancy has restored/ created habitat at sites in smaller increments. In these cases, the survey and monitoring teams would be required to visit multiple sites per 10-acre unit, which justified an increase in the estimated hours.

Table 1a. Cost Differentiation Factors for Pond and Seasonal Wetland Habitat Types		
Habitat Type	**Cost Change from Baseline**	**Description of Cost Differentiation Factors**
Pond	Baseline cost	Baseline cost. Ponds are expected to require a greater per-acre cost when compared to other wetland types. Ponds often require more earthwork compared to seasonal wetlands. Over-excavation and installation of a pond liner may be required. Plantings in and around ponds typically include container trees and shrubs in addition to plug planting and/or seeding. Ponds may also require engineered berms and spillways. Ponds often require incorporation of a drain for predator management and some maintenance operations.
Open Water	No change	The HCP/NCCP dictates that impacts to open water be compensated by the creation of additional pond habitat at a ratio of 0.5:1 to support breeding habitat for California red-legged frog, California tiger salamander, western pond turtle, and tricolored blackbird. Thus, the baseline pond cost was used.
Seasonal Wetlands	-10%	Seasonal wetland costs were estimated to be less than for ponds and open water based on generally lower construction costs. Typically, seasonal wetlands require less earth movement; although over-excavation and lining may still be necessary, seasonal wetlands are typically shallower than pond habitat. Plantings in seasonal wetlands are herbaceous wetland species. Planting is typically accomplished through seeding with the potential for plug planting.
Alkaline Wetlands	-9%	The cost for alkali wetlands was considered slightly greater than the cost to create seasonal wetlands. Alkali wetland creation requires the same level of effort as seasonal wetland creation. However, plant costs may be slightly greater because of higher materials costs for alkaline species.

Table 1b. Cost Differentiation Factors for Slough and Perennial Wetland Habitat Types		
Habitat Type	**Cost Change from Baseline**	**Description of Cost Differentiation Factors**
Slough/ Channels	Baseline	A subset of wetland creation costs from the database was used to calculate the slough channel creation unit cost based on expected level of earthwork and project size. Slough and channel creation are typically completed with greater economies of scale compared to pond and seasonal wetland habitat due to a higher reliability of water supply (i.e. connection to perennial water feature).
Perennial Wetlands	+10%	Perennial wetland creation costs are expected to be similar to slough channel costs based on the expected earthwork and planting. The perennial wetland costs were increased from baseline costs to account for additional planting expected for perennial wetland compared to the open water area within a slough

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Attachment A

Detailed Cost Analysis

Calculation of Design Cost as Percentage of Construction Cost

Available design costs from AECOM and Conservancy projects were compiled here; the median design $ were calculated as a percentage of construction

Wetlands

source (A=AECOM; C=conservancy; CO=City of Oakley)	Total Acre	Total Design $ 2012	Total Construction Cost $ 2012	Design $ as % of Constructed $
A	0.08	$ 15,735	$ 72,377	22%
A	0.16	$ 33,371	$ 104,021	32%
A	0.5	$ 4,288	$ 26,705	16%
A	0.5	$ 35,684	$ 105,442	34%
A	1.6	$ 105,628	$ 149,089	71%
A	2	$ 114,190	$ 226,340	50%
A	2.19	$ 262,798	$ 975,067	27%
A	217	$ 198,838	$ 3,458,703	6%
C	0.15	$ 68,701	$ 101,569	68%
C	0.26	$ 5,626	$ 11,000	51%
C	0.33	$ 16,754	$ 24,500	68%
C	1.99	$ 88,671	$ 164,074	54%
C	9.1	$ 128,164	$ 315,009	41%
C	2.35	$ 294,443	$ 640,103	46%
C	0.91	$ 4,859	$ 39,264	12%
CO	2.75	$ 22,500	$ 120,054	19%
	Wetlands Only Median design $ as a % of Constructed $			37%

Streams

source (A=AECOM; C=conservancy; CO=City of Oakley)	Total Linear Feet	Total Cost for Design $ 2012	Total Cost for Construction $ 2012	Design $ as % of Constructed $
A	1400	$ 191,314	$ 1,841,235	10%
A	3000	$ 212,240	$ 14,997,620	1%
A	3248	$ 288,251	$ 431,046	67%
A	3000	$ 95,508	$ 413,734	23%
C	3500	$ 42,721	$ 105,003	41%
C	226	$ 29,121	$ 63,307	46%
CO	900	$ 90,000	$ 480,217	19%
Streams Only Median design $ as a % of Constructed $				23%
Median of Design $ as % of Constructed $ for ALL				34%
Average of Design $ as % of Constructed $ for ALL				36%
Conservative by 10% of Median				**30%**

Calculation of Bid Assistance as Percentage of Construction Cost

Acreage	Total est bid cost in $ 2012 based on size of project.	Total Construct $ 2012	Bid Asst $ as % of Constructed $
0.08	$ 500	$ 72,377	0.7%
0.16	$ 500	$ 104,021	0.5%
0.5	$ 500	$ 26,705	1.9%
0.5	$ 500	$ 105,442	0.5%
1.6	$ 5,060	$ 149,089	3.4%
2	$ 5,060	$ 226,340	2.2%
2.19	$ 7,000	$ 1,125,206	0.6%
217	$ 10,000	$ 3,458,703	0.3%
0.15	$ 500	$ 105,471	0.5%
0.26	$ 500	$ 11,000	4.5%
0.33	$ 500	$ 24,500	2.0%
1.09	$ 5,060	$ 170,378	3.0%
9.1	$ 7,000	$ 420,012	1.7%
Median Estimated Bid $ as a % of Const Cost			1.7%
Conservative by 10% of Median			**1.5%**

Typical Bid Assistance	Hours	Rate	
Attend bid meeting	3	140	420
Respond to RFIs	16	140	2240
Respond to RFIs	24	100	2400
			5060

Pre-Bid Meeting
Bid Assistance by evaluating contractors qualifications and past projects Answer bidders' questions and clarifying the final construction documents Prepare required addenda (up to 2 addenda)
Evaluate submitted bids Range for larger projects $5,000 low to $15,000 mid to $20,000 high.

Calculation of Construction Oversight as Percentage of Construction Cost

Wetlands

Source (A=AECOM; C=conservancy)	Acreage	Total Construction Oversight $ 2012	Total Construction Cost $ 2012	Const Oversight $ as % of Constructed $
A	0.08	$ 5,925	$ 72,377	8%
A	0.16	$ 8,371	$ 104,021	8%
A	0.5	$ 4,655	$ 26,705	17%
A	0.5	$ 8,438	$ 105,442	8%
A	1.6	$ 11,936	$ 149,089	8%
A	2	$ 33,751	$ 226,340	15%
A	2.19	$ 20,080	$ 975,067	2%
A	217	$ 91,531	$ 3,458,703	3%
C	1.99	$ 8,061	$ 94,030	9%
C	2.35	$ 66,469	$ 420,012	16%
Wetlands Median Const Oversight $ as % of Constructed $				8%

Stream Restoration

Source (A=AECOM; C=conservancy)	Linear Feet	Total Construction Oversight $ 2012	Total Construction Cost $ 2012	Const Oversight $ as % of Constructed $
A	1400	$ 50,838	$ 1,978,959	2.6%
A	3248	$ 8,747	$ 431,046	2.0%
A	3000	$ 48,164	$ 15,915,474	0.3%
C	226	$ 6,574	$ 63,307	10.4%
Streams Median Const Oversight $ as % of Constructed $				2%

Median Construction Oversight $ as % of Constructed $ for ALL	8%
Conservative by 10% of Median	**7%**

Calculation of Post-construction Maintenance as Percentage of Construction Cost

Wetlands

Source (A=AECOM; C=conservancy)	Acreage	Total Maintenance $ 2012	Total Construct $ 2012	Maintenance $ as % of Constructed $
A	15.5	$ 74,860	$ 537,107	14%
A	18.4	$ 215,196	$ 1,120,513	19%
A	49	$ 185,735	$ 1,230,084	15%
A	0.16	$ 11,273	$ 104,021	11%
A	0.5	$ 11,025	$ 26,705	41%
A	0.5	$ 15,702	$ 105,442	15%
A	1.6	$ 16,742	$ 149,089	11%
A	2	$ 62,808	$ 226,340	28%
A	2.19	$ 51,327	$ 975,067	5%
A	30	$ 118,906	$ 357,123	33%
A	159.8	$ 42,732	$ 806,489	5%
C	0.15	$ 10,784	$ 101,569	11%
C	0.26	$ 3,000	$ 11,000	27%
C	0.33	$ 5,000	$ 24,500	20%
C	1.99	$ 8,916	$ 164,074	5%
C	9.1	$ 14,298	$ 315,009	5%
C	2.35	$ 9,454	$ 640,103	1%
C	0.91	$ 2,000	$ 39,264	5%
Median Maintenance $ as % of Constructed $ for wetlands				13%

Stream Restoration

Source (A=AECOM; C=conservancy)	Linear Feet	Total maintenance $ 2012	Total Construct $ 2012	Maintenance $ as % of Constructed $
A	1400	$ 409,304	$ 1,841,235	22%
A	3000	$ 33,109	$ 14,997,620	0.2%
A	3248	$ 22,489	$ 431,046	5%
A	3000	$ 114,610	$ 413,734	28%
C	3500	$ 4,766	$ 105,003	5%
C	226	$ 935	$ 63,307	1%
Median Maintenance $ as % of Constructed $ for streams				5%

Median Post-Const Maintenance $ as % of Constructed $ for ALL	11%
Conservative by 10% of Median	**10%**

Calculation of Wetland Construction Unit Cost Per Acre

Includes all wetland types to look at much larger scale projects combined with smaller scale projects; see wetland differentiation worksheet.

Source (A=AECOM; C=conservancy; CO=City of Oakley)	Acreage	Cost for Construction/Acre in 2012 dollars	Notes:
A	2.50	$ 129,621	
A	0.16	$ 650,128	
A	2.19	$ 445,236	
A	1.60	$ 93,180	
A	0.08	$ 904,706	This project ultimately excluded; high unit cost would be deemed infeasible by Conservancy during initial project vetting.
A	30	$ 11,904	
A	217	$ 15,939	
A	159.8	$ 5,047	
C	1.09	$ 150,526	
C	0.15	$ 677,124	
C	0.26	$ 42,308	
C	0.33	$ 74,242	
C	9.10	$ 34,616	
C	2.35	$ 272,384	

		w/ 10% conservative estimate
AECOM Median Unit Construciton Cost/Acre	$ 111,401	$ 100,261
AECOM Median Unit Construction Cost/Acre w/o #5	$ 93,180	$ 83,862
Conservancy Median Unit Construciton Cost/Acre	$ 112,384	$ 101,146
Median Unit Construction Cost/Acre of ALL Projects	$ 111,401	$ 100,261
edian Unit Construction Cost/Acre of ALL Projects w/o	$ 93,180	$ 83,862
Rounded Value		**$ 83,900**

Calculation of Slough Channel Construction Unit Cost Per Acre

Source (A=AECOM; C=conservancy; CO=City of Oakley)	Acreage	Cost for Construction/Acre in 2012 dollars	Adjusted cost	Notes
A	217	$ 15,939		these projects were all on a large scale; unexpected that conservancy will be at this scale
A	30	$ 11,904		these projects were all on a large scale; unexpected that conservancy will be at this scale
A	159.8	$ 5,047		these projects were all on a large scale; unexpected that conservancy will be at this scale
		Median Cost/Acre	$ 11,904	

Ultimately used combined data to be more representative of costs on a broader range of project size; see notes on wetland differentiation

Source (A=AECOM; C=conservancy)	Acreage	Cost for Construction/Acre in 2012 dollars	
A	2.50	$ 129,621	
A	2.19	$ 445,236	
A	1.60	$ 93,180	
C	9.10	$ 34,616	
C	2.35	$ 272,384	
A	217	$ 15,939	
A	30	$ 11,904	
A	159.8	$ 5,047	
			w/ 10% conservative estimate
Median Construction Cost of All Projects		$ 63,898	$ 57,508
Rounded Value			**$ 57,500**

Calculation of Slough Channel Construction Unit Cost Per Acre

Habitat Type	Description of Cost Differentiation	Cost Change from Baseline	AECOM Only Projects Median Cost minus 10%	Conservancy Only Projects Median Cost minus 10%	All Wetland Creation Projects Median Cost minus 10%
Pond	Baseline cost. Ponds are expected to require a greater per-acre cost when compared to other wetland types. Ponds often require more earthwork compared to seasonal wetlands. Over-excavation and installation of a pond liner may be required. Plantings in and around ponds typically include container trees and shrubs in addition to plug planting and/or seeding. Ponds may also require engineered berms and spillways. Ponds often require incorporation of a drain for predator management and some maintenance operations.	Baseline	$ 100,300	$ 101,200	$ 83,900
Open Water	The HCP/NCCP dictates that impacts to open water be compensated by the creation of additional pond habitat at a ratio of 0.5:1 to support breeding habitat for California red-legged frog, California tiger salamander, western pond turtle, and tricolored blackbird. Thus, the baseline pond cost was used.	No Change	$ 100,300	$ 101,200	$ 83,900
Seasonal Wetland	Seasonal wetland costs were estimated to be less than for ponds and open water based on generally lower construction costs. Typically, seasonal wetlands require less earth movement; although over-excavation and lining may still be necessary, seasonal wetlands are typically shallower than pond habitat. Plantings in seasonal wetlands are herbaceous wetland species. Planting is typically accomplished through seeding with the potential for plug planting.	-10%	$ 90,270	$ 91,080	$ 75,510
Alkali Seasonal wetland	The cost for alkali wetlands was considered slightly greater than the cost to create seasonal wetlands. Alkali wetland creation requires the same level of effort as seasonal wetland creation. However, plant costs may be slightly greater because of higher materials costs for alkaline species.	-9%	$ 91,273	$ 92,092	$ 76,349
Slough Channel	A subset of wetland creation costs from the database was used to calculate the slough channel creation unit cost based on expected level of earthwork and project size. Slough and channel creation are typically completed with greater economies of scale compared to pond and seasonal wetland habitat due to a higher reliability of water supply (i.e. connection to perennial water feature).	Baseline			$ 57,500
Perennial Wetland	Perennial wetland creation costs are expected to be similar to slough channel costs based on the expected earthwork and planting. The perennial wetland costs were increased from baseline costs to account for additional planting expected for perennial wetland compared to the open water area within a slough.	+10%			$ 63,250

ponds	acres	$83,900
open water	acres	$83,900
seasonal	acres	$75,500
alkali wetland	acres	$76,400

slough/channel	acres	$57,500
perennial	acres	$63,300

Calculation of Riparian Woodland Scrub Construction Unit Cost Per Acre

source (A=AECOM; C=conservancy; CO=City of Oakley)	Acreage	Cost for Construction/Acre in 2012 dollars	
A	15.5	$ 33,298	
A	18.4	$ 59,626	
A	49	$ 24,401	
A	0.5	$ 53,410	
C	0.91	$ 43,148	
CO	2.75	$ 43,656	
			w/ 10% conservative estimate
Median of Cost for Const Per Acre ALL Projects		$ 43,148	$ 38,833
	Rounded Value		**$ 38,800**

Calculation of Stream Restoration Construction Unit Cost Per Acre

Source (A=AECOM; C=conservancy; CO=City of Oakley)	Stream restored >25 ft wide?	Linear Feet of Restored Stream	Cost for Construction/ Linear Ft in 2012 dollars	Adjusted Cost[1]	Notes
A	yes	3000	$ 5,305		Did not include Napa Creek b/c of the high level of engineering and cost/linear foot; ped bridge install inc in costs
A	yes	1400	$ 1,414		After further consideration, did not include Adobe Creek b/c higher than expected cost when compared to future expected conservancy projects
A	yes	1200	$ 1,355		After further consideration, did not include Blackwood Creek b/c higher than expected cost when compared to future expected conservancy projects; project also included reveg of slopes and trails and more ext erosion control
A	yes	3000	$ 414	$ 182	See note below.
A	no	3248	$ 133		
C	no	226	$ 280		
C	no	3500	$ 30		
CO	yes	900	$ 534	$ 249	This project is at the high end cost compared to others expected to be implemented; pedestrian bridge included, but costs for bridge const were removed. See note below.

		w/ 10% conservative estimate
Median Cost for Const/Linear Ft. in 2012 C ONLY	$ 280	$ 252
Median Cost for Const/Linear Ft. in 2012 A & C	$ 414	$ 373
Median Cost for Const/Linear Ft. in 2012 All Projects w/o high end work and with adjusted costs for stream width	$ 182	**$ 164**

[1]To account for a narrower expected stream restoration width in Conservancy projects the construction costs for these project costs were reduced. The primary factor in construction cost is typically the grading effort. Grading and construction costs would be reduced by 1/2, other costs would be reduced by 1/3.

Calculation of Oak Savannah Construction Unit Cost Per Acre

Source (A=AECOM; C=conservancy; CO=City of Oakley; JSA=Jones & Stokes database)	Acreage	Cost for Construction/ acre in 2012 dollars	For Oak Savannah using 10% of Oak Woodlands construction costs (based on expected canopy cover of oak savannah compared to oak woodland)	For Oak Savannah using 8%	For Oak Savannah using 5%
A	15.5	$ 33,298	$ 3,330	$ 2,664	$ 1,665
A	18.4	$ 59,626	$ 5,963	$ 4,770	$ 2,981
A	49	$ 24,401	$ 2,440	$ 1,952	$ 1,220
JSA	5.3	$ 51,907	$ 5,191	$ 4,153	$ 2,595
JSA	2	$ 36,446	$ 3,645	$ 2,916	$ 1,822
	AECOM Only		$ 3,330	$ 2,664	$ 1,665
	Median price for Oak Savannah		$ 3,645	$ 2,916	$ 1,822
				$ 2,624	
			Rounded value	**$ 2,600**	

Environmental Compliance Detailed Calculations

Table 1. Permit Fees Associated with HCP Projects

Project size	Size Range	Compliance Category						Total
		CEQA	CWA 404	CWA 401	CDFG 1602	NHPA	Other	
Small/simple	up to 10 acres or up to 0.1 stream miles	$ 6,055	$ -	$ 993	$ 392	$ 3,028	$ 2,870	$ 13,338
Medium/more complex	10.1-50 acres or 0.1-0.5 stream miles	$ 48,440	$ -	$ 1,236	$ 700	$ 4,239	$ 3,444	$ 58,059
Large/most complex	over 50 acres or 0.5 stream miles	$ 121,100	$ -	$ 2,162	$ 2,858	$ 10,294	$ 4,592	$ 141,006

Table 2. CWA 401 Project Specific Fee Estimates

Project size	Size Range	Project Impacts[1]		CWA 401 Fee Formula (Ac. * $4059)+$944		Assume Max Fee
		Minimum	Maximum[2]			
Small/simple	up to 10 acres or up to 0.1 stream miles	0.001	0.01	$948	$993	$992.71
Medium/more complex	10.1-50 acres or 0.1-0.5 stream miles	0.0121	0.07	$993	$1,236	$1,236.25
Large/most complex	over 50 acres or 0.5 stream miles	0.073	0.30	$1,240	$2,162	$2,161.70

[1] Assumed value determined by AECOM based experience with typical projects that would be expected to be implemented by the Conservancy. For example wetland restoration/creation projects, stream restoration projects, adaptive management measures for existing wetland features and facilities improvements. In general, it is expected that impacts to wetlands and streams would be avoided if at all possible. Of the stream length indicated, assumed only 10% of that length would be impacted and an average stream width of 10 feet.

[2.] Increases to the maximum stream impact were based on the increase of the median size of project (small = 5 acres, medium = 30 acres, large = 125 to 200 acres); small to medium increased 6x; medium to larg increased by 4x

Table 3. DFG 1602 Project Specific Fee Estimates

Project size	Size Range	Project Impacts		Estimate Project Cost within DFG jurisdiction		Fees (Average of Two Fee)
		Minimum	Maximum			
Small/simple[3]	up to 10 acres or up to 0.1 stream miles	0.001	0.01	$ 2,000	$ 20,000	$ 392.13
Medium/more complex[4]	10.1-50 acres or 0.1-0.5 stream miles	0.0121	0.07	$ 20,001	$ 100,000	$ 700.25
Large/most complex	over 50 acres or 0.5 stream miles	0.073	0.30	$ 100,001	$500,000 or more	$ 2,858.00

[1] Assumed value determined by AECOM based notes

[2] DFG 1602 fee has a maximum limit of $500,000 for project cost and $4,482.75 for fee.

[3] Simple could be a single culvert outfall in the creek; at the higher end could be a single bioengineered structure in the creek, or up to 10% of 0.1 stream miles

[4] Multiple structures in the creek, bioengineering along 10% o f 0.5 miles = =264 linear feet @$366/linear foot = 96624 round up to 100000

Notes:
Fee information based on:
1) California Department of Fish and Game Lake and Streambed Alteration Agreements and Fees, Fee Schedule – Updated September 2011. Available: http://www.dfg.ca.gov/habcon/1600/forms.htm
2) Central Valley Regional Water Quality Control Board Water Quality Certification Dredge and Fill Fee Calculator – v9 9/21/2011. Available http://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/dredgefillfeecalculator.xls

Assumptions:
1) This table is derived from the "Cost Per Project Size and Compliance Category" table prepared by ICF, Inc.(formerly Jones & Stokes Associates) in the "MAIN_MODEL_App._G-01_Cost _tables-initial_UDA_08-30-06(1).xls".
2 This table assumes that Contra Costa Conservancy staff will prepare permit applications and notification for the 401, 404 and 1600 applications, thereby resulting in no labor costs (outside of the Conservancy) for permit preparatic
3) This table assumes that NHPA and CEQA compliance will be accomplished by an outside consulting firm and includes labor and permit fees.
4) This table assumes that the 10 projects proposed per 5-year term can be completed within the 5-year term, which is also the permit duration. This table assumes that application for permits would only be done once and fees for amendments to the permits are not included in the fee estimate in this table.
5) This table assumes that "environmental compliance", for the purposes of the projects under the HCP, is defined as CEQA/NEPA document preparation and preparation and securing of necessary permits only.
6) CWA 404 permit applications do not require a fee. This table assumes that because there is no fee and permit application preparation would be done by the Conservancy, there is no cost for environmental compliance for the CWA 404 permit.
7) CWA 401 fee cost estimate is based on impacts to jurisdictional waters of the staterather than project size. Table 2 shows fees associated with projects based on assumed impacts to jurisdictional waters of the state from the various projects. Average cost based on mean of minimum and maximum fee amounts.
8) DFG 1602 costs are estimated based on the assumed cost of project activities within DFG jurisdiction per Fish and Game Code Sections 1600-1616, and the fee schedule corresponding to the project costs. Average cost based o mean of minimum and maximum fee amounts.
9) CEQA costs estimated by JSA were comparable to AECOM estimates and were simply updated for 2012 rates based on Bureau of Labor multiplier of 1.221
10) NHPA costs estimated by AECOM were within 10% of the JSA estimates updated to 2012 rates based on the Bureau of Labor multiplier of 1.211; thus these estimates were maintained.
11) Other category costs expected to include County grading and/or building permit and labor compliance; these costs were updated for 2012 expected costs

D. APPENDIX: INITIAL UDA COST MODEL UPDATE

The following tables provide comprehensive documentation for the cost model update based on estimated impacts for the initial urban development area.

East Contra Costa County HCP/NCCP
2012 Update
Implementation Cost Data and Assumptions with Initial Urban Development Area

Summary of East Contra Costa HCP Implementation Costs for Initial Urban Development Area
2012 Update
(Rounded to the Nearest $10,000)

Total Costs

	Implementation Period (Years)							
Cost Category	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total (2012)**
Program Administration	$160,000	$2,700,000	$3,470,000	$3,380,000	$3,400,000	$3,410,000	$3,420,000	$19,930,000
Land Acquisition	$190,000	$46,260,000	$23,220,000	$23,220,000	$23,220,000	$23,220,000	$23,220,000	$162,570,000
Planning and Design	$0	$930,000	$2,370,000	$1,370,000	$1,060,000	$1,060,000	$900,000	$7,690,000
Habitat Restoration/Creation	$0	$1,820,000	$7,020,000	$7,230,000	$7,220,000	$7,220,000	$7,060,000	$37,560,000
Environmental Compliance	$0	$510,000	$570,000	$570,000	$570,000	$570,000	$0	$2,780,000
Preserve Management and Maintenance	$0	$90,000	$4,770,000	$4,960,000	$7,160,000	$7,730,000	$8,860,000	$33,580,000
Monitoring, Research, and Adaptive Management	$0	$460,000	$2,070,000	$2,960,000	$3,350,000	$3,700,000	$3,910,000	$16,450,000
Remedial Measures	$0	$0	$30,000	$80,000	$470,000	$470,000	$1,310,000	$2,360,000
East Bay Regional Park District - initial operational costs (est.)	$0	$1,320,000	$0	$0	$0	$0	$0	$1,320,000
Contingency	$0	$0	$810,000	$820,000	$950,000	$1,000,000	$1,060,000	$4,640,000
Total	**$350,000**	**$54,090,000**	**$44,330,000**	**$44,590,000**	**$47,400,000**	**$48,380,000**	**$49,740,000**	**$288,880,000**

Capital Costs

	Implementation Period (Years)							
Cost Category	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total (2012)**
Program Administration	INCLUDED IN STAFF AND OVERHEAD COSTS							
Land Acquisition: acquisition and site improvements	$0	$44,890,000	$22,290,000	$22,290,000	$22,290,000	$22,290,000	$22,290,000	$156,320,000
Planning and Design	$0	$0	$10,000	$20,000	$10,000	$10,000	$10,000	$60,000
Habitat Restoration/Creation	$0	$0	$4,180,000	$4,200,000	$4,190,000	$4,180,000	$4,180,000	$20,930,000
Preserve Management and Maintenance	$0	$0	$1,340,000	$1,010,000	$1,910,000	$1,640,000	$1,930,000	$7,830,000
Monitoring, Research, and Adaptive Management	$0	$0	$10,000	$20,000	$10,000	$10,000	$10,000	$60,000
Remedial Measures	$0	$0	$30,000	$80,000	$470,000	$470,000	$1,310,000	$2,360,000
Total	**$0**	**$44,890,000**	**$27,860,000**	**$27,620,000**	**$28,880,000**	**$28,600,000**	**$29,730,000**	**$187,560,000**

Operational Costs

	Implementation Period (Years)							
Cost Category	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total (2012)**
Program Administration	$160,000	$2,700,000	$3,470,000	$3,380,000	$3,400,000	$3,410,000	$3,420,000	$19,930,000
Land Acquisition: transactional costs	$190,000	$1,370,000	$940,000	$940,000	$940,000	$940,000	$940,000	$6,250,000
Planning and Design	$0	$930,000	$2,360,000	$1,350,000	$1,050,000	$1,050,000	$890,000	$7,630,000
Habitat Restoration/Creation	$0	$1,820,000	$2,830,000	$3,030,000	$3,030,000	$3,030,000	$2,870,000	$16,630,000
Environmental Compliance	$0	$510,000	$570,000	$570,000	$570,000	$570,000	$0	$2,780,000
Preserve Management and Maintenance	$0	$90,000	$3,440,000	$3,940,000	$5,250,000	$6,090,000	$6,920,000	$25,740,000
Monitoring, Research, and Adaptive Management	$0	$460,000	$2,070,000	$2,960,000	$3,350,000	$3,700,000	$3,910,000	$16,450,000
East Bay Regional Park District - initial operational costs (est.)	$0	$1,320,000	$0	$0	$0	$0	$0	$1,320,000
Contingency	$0	$0	$810,000	$820,000	$950,000	$1,000,000	$1,060,000	$4,640,000
Total	**$350,000**	**$9,200,000**	**$16,490,000**	**$16,990,000**	**$18,540,000**	**$19,790,000**	**$20,010,000**	**$101,370,000**

NOTE: EBRPD estimate of initial operational costs reflects all costs except land acquisition. The estimate is based on average cost of $86 per acre derived from the maintenance of effort estimate in the 2006 Plan (Appendix H) applied to actual acres acquired and managed during the 2008 - 2012 period. For this 2012 update, the estimate is reduced 50 percent to reflect the lag between the rapid land acquisition of this initial period and the allocation of operational resources associated with those land acquisitions.

Summary of East Contra Costa HCP Implementation Costs for Initial Urban Development Area
2012 Update
(Not Rounded)

Total Costs

	Implementation Period (Years)							
Cost Category	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total**
Program Administration	$157,212	$2,696,566	$3,469,775	$3,383,008	$3,395,510	$3,408,013	$3,420,515	$19,930,599
Land Acquisition	$187,840	$46,260,511	$23,224,522	$23,224,522	$23,224,522	$23,224,522	$23,224,522	$162,570,961
Planning and Design	$0	$934,262	$2,369,179	$1,369,766	$1,063,516	$1,056,182	$895,682	$7,688,586
Habitat Restoration/Creation	$0	$1,822,840	$7,015,158	$7,226,745	$7,223,245	$7,215,911	$7,055,411	$37,559,310
Environmental Compliance	$0	$512,855	$567,600	$567,600	$567,600	$567,600	$0	$2,783,255
Preserve Management and Maintenance	$0	$92,002	$4,772,670	$4,956,749	$7,164,109	$7,733,279	$8,858,539	$33,577,347
Monitoring, Research, and Adaptive Management	$0	$456,421	$2,074,364	$2,957,192	$3,348,848	$3,704,815	$3,907,615	$16,449,254
Remedial Measures	$0	$0	$30,000	$84,660	$471,559	$471,559	$1,306,519	$2,364,295
East Bay Regional Park District - initial operational costs (est.)	$0	$1,320,000	$0	$0	$0	$0	$0	$1,320,000
Contingency Fund	$0	$0	$806,197	$818,546	$952,979	$999,128	$1,063,474	$4,640,325
Total	**$345,052**	**$54,095,455**	**$44,329,464**	**$44,588,787**	**$47,411,888**	**$48,381,008**	**$49,732,277**	**$288,883,932**

Capital Costs

	Implementation Period (Years)							
Cost Category	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total**
Program Administration	INCLUDED IN STAFF AND OVERHEAD COSTS							
Land Acquisition: acquisition and site improvements	$0	$44,886,900	$22,286,358	$22,286,358	$22,286,358	$22,286,358	$22,286,358	$156,318,692
Planning and Design	$0	$0	$7,333	$22,000	$14,667	$7,333	$7,333	$58,667
Habitat Restoration/Creation	$0	$0	$4,182,133	$4,196,800	$4,189,467	$4,182,133	$4,182,133	$20,932,667
Preserve Management and Maintenance	$0	$0	$1,335,200	$1,012,700	$1,911,000	$1,641,200	$1,933,900	$7,834,000
Monitoring, Research, and Adaptive Management	$0	$0	$7,333	$22,000	$14,667	$7,333	$7,333	$58,667
Remedial Measures	$0	$0	$30,000	$84,660	$471,559	$471,559	$1,306,519	$2,364,295
Total	**$0**	**$44,886,900**	**$27,848,358**	**$27,624,518**	**$28,887,717**	**$28,595,917**	**$29,723,577**	**$187,566,988**

Operational Costs

	Implementation Period (Years)							
Cost Category	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total**
Program Administration	$157,212	$2,696,566	$3,469,775	$3,383,008	$3,395,510	$3,408,013	$3,420,515	$19,930,599
Land Acquisition: due diligence, transaction costs	$187,840	$1,373,611	$938,163	$938,163	$938,163	$938,163	$938,163	$6,252,268
Planning and Design	$0	$934,262	$2,361,846	$1,347,766	$1,048,849	$1,048,849	$888,349	$7,629,920
Habitat Restoration/Creation	$0	$1,822,840	$2,833,025	$3,029,945	$3,033,778	$3,033,778	$2,873,278	$16,626,643
Environmental Compliance	$0	$512,855	$567,600	$567,600	$567,600	$567,600	$0	$2,783,255
Preserve Management and Maintenance	$0	$92,002	$3,437,470	$3,944,049	$5,253,109	$6,092,079	$6,924,639	$25,743,347
Monitoring, Research, and Adaptive Management	$0	$456,421	$2,074,364	$2,957,192	$3,348,848	$3,704,815	$3,907,615	$16,449,254
East Bay Regional Park District - initial operational costs (est.)	$0	$1,320,000						**$1,320,000**
Contingency Fund	$0	$0	$806,197	$818,546	$952,979	$999,128	$1,063,474	$4,640,325
Total	**$345,052**	**$9,208,555**	**$16,488,439**	**$16,986,269**	**$18,538,837**	**$19,792,425**	**$20,016,033**	**$101,375,611**

NOTE: EBRPD estimate of initial operational costs reflects all costs except land acquisition. The estimate is based on average cost of $86 per acre derived from the maintenance of effort estimate in the 2006 Plan (Appendix H) applied to actual acres acquired and managed during the 2008 - 2012 period. For this 2012 update, the estimate is reduced 50 percent to reflect the lag between the rapid land acquisition of this initial period and the allocation of operational resources associated with those land acquisitions.

Consumer Price Index - All Urban Consumers

Series Id: CUURA422SA0
Not Seasonally Adjusted
Area: San Francisco-Oakland-San Jose, CA
Item: All items
Base Period: 1982-84=100
Years: 2002 to 2012

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	HALF1	HALF2	2012 dollars
2002		191.3		193.0		193.2		193.5		194.3		193.2	193.0	192.3	193.7	
2003		197.7		197.3		196.3		196.3		196.3		195.3	196.4	196.8	196.1	
2004		198.1		198.3		199.0		198.7		200.3		199.5	198.8	198.2	199.5	
2005		201.2		202.5		201.2		203.0		205.9		203.4	202.7	201.5	203.9	**0.8513**
2006		207.1		208.9		209.1		210.7		211.0		210.4	209.2	207.9	210.6	**0.8786**
2007		213.688		215.842		216.123		216.240		217.949		218.485	216.048	214.736	217.361	**0.9074**
2008		219.612		222.074		225.181		225.411		225.824		218.528	222.767	221.730	223.804	**0.9356**
2009		222.166		223.854		225.692		225.801		226.051		224.239	224.395	223.305	225.484	**0.9424**
2010		226.145		227.697		228.110		227.954		228.107		227.658	227.469	226.994	227.944	**0.9554**
2011		229.981		234.121		233.646		234.608		235.331		234.327	233.390	232.082	234.698	**0.9802**
2012		236.880		238.985		239.806		241.170						238.099		**1.0000**

Employment cost index: December 2005 = 100

Private industry workers

Professional, scientific and technical services	**121.1**
Cost adjustment factor	**0.82576**

NOTE: Orignal unit cost estimates for the 2006 HCP/NCCP were in 2005 dollars, inflated to 2006 dollars for use in the plan document.

Legend

red numbers are assumptions or data entered directly into the worksheet
blue numbers are links from other worksheets in the workbook
black numbers are calculations based on the above numbers

Cost factors are colored coded by primary source considered:

EBRPD (for HCP)
CCWD (for HCP)
Average of CCWD/EBRPD
ECCC Habitat Conservancy
J&S and EPS (for HCP)
AECOM, 2012
Updated by HEG, 2012
Other estimated factors
Actual costs start-up and years 1 - 5
Estimate of EBRPD contributions to operational costs, start up and years 1-5
Summary actuals supercede model detail

Acres Acquired, Managed, and Restored within HCP/NCCP Preserves for Initial Urban Development Area
2012 Update

	Initial UDA	Source
Total acres acquired/managed	24,000	(Table 5-9: mid-point of range)
Pond acres acquired	14	(Table 5-5a)

Acres Acquired and Managed by Time Period

	Implementation Period (Years)							
	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total**
Total reserve acres acquired per period	-	7,417	3,317	3,317	3,317	3,317	3,317	24,000
Total reserve acres managed, per period		4,000	4,000	4,000	4,000	4,000	4,000	24,000
Total reserve acres managed, cumulative	-	4,000	8,000	12,000	16,000	20,000	24,000	24,000
Pond acres acquired per period		7.03	1.4	1.4	1.4	1.4	1.4	14
Pond acres managed per period		2.33	2.3	2.3	2.3	2.3	2.3	14
Pond acres managed cumulative, including restoration	-	2.73	9.2	15.6	22.1	28.5	35.0	35.0

Assumptions:
Actual acquisition accounted for in years 1-5; the net remaining requirement is allocated evenly over the next 5 periods
Management and monitoring on acquired land and ponds has not kept pace with actual acquisition; land is assumed to come under management in 6 equal increments over the 30-year p

9,099.4	Total acres acquired through 2012
1,682.3	Easement acres on parcels acquired
7,417.1	Total acres acquired and credited toward reserve

Land Cover Type Restored/Created by Time Period

	Implementation Period (Years)							
Land Cover Type (acres except where noted)	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total**
oak savanna	-	-	8.4	8.4	8.4	8.4	8.4	42.0
riparian woodland/scrub	-	0.9	9.8	9.8	9.8	9.8	9.8	50.0
perennial wetland (jurisdictional boundary)	-	0.2	6.4	6.4	6.4	6.4	6.4	32.2
seasonal wetland (jurisdictional boundary)	-	8.2	7.4	7.4	7.4	7.4	7.4	45.2
alkali wetland (jurisdictional boundary)	-	2.5	3.9	3.9	3.9	3.9	3.9	21.8
slough/channel	-	-	14.4	14.4	14.4	14.4	14.4	72.0
open water	-	-	-	-	-	-	-	-
ponds	-	0.4	4.1	4.1	4.1	4.1	4.1	21.0
streams (miles)	-	0.9	0.7	0.7	0.7	0.7	0.7	4.6
Total (acres)	-	**12.8**	**54.8**	**54.8**	**54.8**	**54.8**	**54.8**	**287.0**

Assumptions:
Actual restoration accounted for in years 1-5; the net remaining requirement is allocated evenly over the next 5 periods
For total acre calculation, streams are assumed to be 5 feet wide

30%	% of perennial, seasonal or alkali wetland complex acreage assumed to be jurisdictional wetland; for compensatory restoration onl

Defining sites:	average acres/site or linear feet/site (streams)	% requiring substantial soil disturbance
riparian/woodland scrub sites by acreage conversion:	3	20%
wetlands and pond sites by acreage conversion	2.0	80%
stream sites by linear feet conversion:	1,000	90%

Restoration sites that require significant soil disturbance by land-cover type USED IN MONITORING COST ESTIMATE

	Implementation Period (Years)							
Land Cover Type Restoration Sites	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total**
riparian woodland/scrub	-	0.1	0.7	0.7	0.7	0.7	0.7	3.3
perennial wetland	-	0.1	2.6	2.6	2.6	2.6	2.6	12.9
seasonal wetland	-	3.3	3.0	3.0	3.0	3.0	3.0	18.1
alkali wetland	-	1.0	1.5	1.5	1.5	1.5	1.5	8.7
ponds	-	-	5.8	5.8	5.8	5.8	5.8	28.8
streams (miles/acres converted to sites)	-	4.2	3.5	3.5	3.5	3.5	3.5	21.9
Total sites for monitoring cost estimate	-	8.6	17.0	17.0	17.0	17.0	17.0	93.7

Assumptions:
average acres/site and percent of sites requiring substantial soil disturbance calculated in table above.
Seasonal, perennial, and alkali wetland acreages in Tables 5-16 and 5-17 are for wetland complexes; for cost estimates and revenue projections the wetted acres of these complexes are assumed to be 30% of the total acres.

Summary of HCP/NCCP Personnel
2012 Update

		Number of FTEs						
2012 UPDATE STAFFING		0	1-5	6-10	11-15	16-20	21-25	26-30
Administrative staffing								
Principal Planner				0.50	0.80	0.80	0.80	0.80
Senior Planner				0.30	0.50	0.50	0.50	0.50
Senior GIS Planner				0.25	0.25	0.25	0.25	0.25
Associate Planner				0.80	-	-	-	-
Assistant Planner				0.25	0.50	0.50	0.50	0.50
Accountant				0.25	0.25	0.25	0.25	0.25
Admin – Secretary (included in rates)				-	-	-	-	-
IT Support Staff (included in rates)				-	-	-	-	-
Total		-	-	2.35	2.30	2.30	2.30	2.30
Land acquisition staffing								
Principal Planner				0.20	0.20	0.20	0.20	0.20
Total				0.20	0.20	0.20	0.20	0.20
Planning and design, restoration, and monitoring staffing								
Principal Planner				0.10	-	-	-	-
Senior Planner				0.20	-	-	-	-
Senior Scientist				0.17	0.33	0.33	0.33	0.33
Project Manager				0.17	0.33	0.33	0.33	0.33
Technical Support				0.17	0.67	0.67	0.67	0.33
Total				0.80	1.33	1.33	1.33	1.00
Habitat restoration and creation staffing								
Principal Planner				0.10	-	-	-	-
Senior Planner				0.20	-	-	-	-
Senior Scientist				0.17	0.33	0.33	0.33	0.33
Project Manager				0.17	0.33	0.33	0.33	0.33
Technical Support				0.17	0.67	0.67	0.67	0.33
Total				0.80	1.33	1.33	1.33	1.00
Environmental compliance staffing								
Principal Planner				-	-	-	-	-
Total				-	-	-	-	-
Preserve management and maintenance staffing								
Principal Planner				0.10	-	-	-	-
Senior Planner				0.20	-	-	-	-
Preserve Manager				1.00	1.00	1.00	1.00	1.00
Preserve Maintenance Staff				3.00	4.00	6.00	7.00	8.00
Total				4.30	5.00	7.00	8.00	9.00
Monitoring and research staffing								
Principal Planner				-	-	-	-	-
Senior Planner				0.10	-	-	-	-
Senior Scientist				0.17	0.33	0.33	0.33	0.33
Project Manager				0.17	0.33	0.33	0.33	0.33
Technical Support				0.17	0.67	0.67	0.67	0.33
Total				0.60	1.33	1.33	1.33	1.00
Overall Staffing Plan								
Principal Planner				1.00	1.00	1.00	1.00	1.00
Senior Planner				1.00	0.50	0.50	0.50	0.50
Senior GIS Planner				0.25	0.25	0.25	0.25	0.25
Associate Planner				0.80	-	-	-	-
Assistant Planner				0.25	0.50	0.50	0.50	0.50
Accountant				0.25	0.25	0.25	0.25	0.25
Admin – Secretary (included in rates)				-	-	-	-	-
IT Support Staff (included in rates)				-	-	-	-	-
Senior Scientist				0.50	1.00	1.00	1.00	1.00
Project Manager				0.50	1.00	1.00	1.00	1.00
Technical Support				0.50	2.00	2.00	2.00	1.00
Preserve Manager				1.00	1.00	1.00	1.00	1.00
Preserve Maintenance Staff				3.00	4.00	6.00	7.00	8.00
Total				**9.05**	**11.50**	**13.50**	**14.50**	**14.50**

HCP/NCCP Program Administration for Initial Urban Development Area
2012 Update

	Implementation Period (Years)							
	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total**
Capital Costs								
Capital Subtotal			**INCLUDED IN STAFF AND OVERHEAD COSTS**					
Operational Costs								
Staff and overhead			$2,655,970	$2,702,500	$2,702,500	$2,702,500	$2,702,500	
Travel			$20,000	$20,000	$20,000	$20,000	$20,000	
Vehicle / mileage allowance			$20,000	$20,000	$20,000	$20,000	$20,000	
Insurance			$100,000	$100,000	$100,000	$100,000	$100,000	
Legal assistance			$388,800	$243,000	$243,000	$243,000	$243,000	
Financial analysis assistance			$40,000	$40,000	$40,000	$40,000	$40,000	
Financial audit (annual)			$75,000	$75,000	$75,000	$75,000	$75,000	
In-lieu funding for law enforcement and firefighting			$25,005	$37,508	$50,010	$62,513	$75,015	
Public relations and outreach			$145,000	$145,000	$145,000	$145,000	$145,000	
Operational Subtotal	**$157,212**	**$2,696,566**	**$3,469,775**	**$3,383,008**	**$3,395,510**	**$3,408,013**	**$3,420,515**	
Total	**$157,212**	**$2,696,566**	**$3,469,775**	**$3,383,008**	**$3,395,510**	**$3,408,013**	**$3,420,515**	**$19,930,599**

Staff and Overhead

Position	Hourly Cost per FTE with Overhead & Support	Number of FTEs						
		0	1-5	6-10	11-15	16-20	21-25	26-30
Principal Planner and Support	$155			0.50	0.80	0.80	0.80	0.80
Senior Planner and Support (grants then permitting)	$126			0.30	0.50	0.50	0.50	0.50
Senior GIS Planner and Support	$135			0.25	0.25	0.25	0.25	0.25
Associate Planner and Support (permitting)	$110			0.80	-	-	-	-
Assistant Planner and Support (grants)	$85			0.25	0.50	0.50	0.50	0.50
Accountant and Support	$97			0.25	0.25	0.25	0.25	0.25
Total FTEs				2.35	2.30	2.30	2.30	2.30
Total cost per year				$531,194	$540,500	$540,500	$540,500	$540,500
Total cost per 5-year period				$2,655,970	$2,702,500	$2,702,500	$2,702,500	$2,702,500

Notes/Assumptions:

Hourly cost factor includes staff salary and benefits, salaries and benefits of administrative support staff (secretaries, clerks, IT staff, etc.) and associated overhead, including space and utility costs, office furniture, equipment, and supplies, .

Some actual costs for program administration staff and contractors through 2012 are included in actual costs under land acquisition, planning and design, preserve management, restoration, monitoring and environmental compliance.

1,880 hours per year

Other Administrative Costs

	Implementation Period (years)						
	0	1-5	6-10	11-15	16-20	21-25	26-30
CHCPC membership			$25,000	$25,000	$25,000	$25,000	$25,000
Miscellaneous equipment and supplies			$5,000	$5,000	$5,000	$5,000	$5,000
Total cost per 5-year period			$30,000	$30,000	$30,000	$30,000	$30,000

Assumption:

$5,000	annual cost for CHCPC membership, based on actual Conservancy experience through 2012
$1,000	annual cost based on actual Conservancy experience through 2012

Vehicle / Mileage Allowance

	Implementation Period (years)						
	0	1-5	6-10	11-15	16-20	21-25	26-30
Total cost per 5-year period			$20,000	$20,000	$20,000	$20,000	$20,000

Assumption:

$4,000	annual cost based on actual Conservancy experience through 2012

Travel

	Implementation Period (years)						
	0	1-5	6-10	11-15	16-20	21-25	26-30
Total cost per 5-year period			$20,000	$20,000	$20,000	$20,000	$20,000

Assumption:

$4,000	annual cost based on actual Conservancy experience through 2012

Insurance

	Implementation Period (years)						
	0	1-5	6-10	11-15	16-20	21-25	26-30
Total cost per 5-year period			$100,000	$100,000	$100,000	$100,000	$100,000

Assumption:

$20,000	annual cost based on actual Conservancy experience through 2012

Legal Assistance

	0	1-5	6-10	11-15	16-20	21-25	26-30	Total
Cost per 5-year period			$388,800	$243,000	$243,000	$243,000	$243,000	$1,360,800

Assumptions:

$360	Hourly rate for legal assistance
1,200	Total hours for legal assistance years 6 - 10
70%	Percentage allocated to program administration, years 6-10
20%	Percentage allocated to environmental compliance (regional wetlands permitting), years 6 - 10
10%	Percentage allocated to land acquisition, years 6 - 10
750	Total hours for legal assistance per period after year 10
90%	Percentage allocated to program administration, after year 10
10%	Percentage allocated to land acquisition, after year 10

Note: The legal assistance category covers legal assistance required for program administration and (for years 6 - 10) the environmental compliance category.
Legal assistance for land acquisition included in the due diligence cost factor.

Financial Analysis Assistance

	0	1-5	6-10	11-15	16-20	21-25	26-30	Total
Cost per 5-year period			$40,000	$40,000	$40,000	$40,000	$40,000	$200,000

Assumptions:

$40,000	Cost per period for financial analysis assistance

Financial analyst review will occur periodically over the life of the Plan (years 3, 6, 10, 15, 20 and 25).

Note: The financial analyis assistance category covers the periodic assistance of a financial analyst to review the program's cost/revenue balance, ensure that charges are adjusted in line with changing land costs and ensure compliance with State requirements on collection of fees.

Annual Financial Audit

	0	1-5	6-10	11-15	16-20	21-25	26-30	Total
Cost per 5-year period			$75,000	$75,000	$75,000	$75,000	$75,000	$375,000

Assumptions:

$15,000	Cost per year for financial audit services

Annual financial audit of the Conservancy's financial statements by an independent auditor are required by the JPA agreement and Government Code.

In-Lieu Payments for Law Enforcement and Firefighting

	0	1-5	6-10	11-15	16-20	21-25	26-30
Total preserve area per period	-	4,000	8,000	12,000	16,000	20,000	24,000
In-lieu payments for law enforcement per year			$1,974	$2,961	$3,948	$4,935	$5,922
In-lieu payments for firefighting per year			$3,027	$4,540	$6,054	$7,567	$9,081
Total cost per year			$5,001	$7,502	$10,002	$12,503	$15,003
Cost per 5-year period			$25,005	$37,508	$50,010	$62,513	$75,015

Assumptions:

$4.05	In-lieu law enforcement funding per preserve acre
$2.64	In-lieu firefighting funding per preserve acre

In lieu costs per preserve acres are based on CCWD's annual in-lieu payments and the assumption that CCWD manages approximately 20,000 acres of preserve.

Public Relations/Outreach

	0	1-5	6-10	11-15	16-20	21-25	26-30	Total
Total cost per year			$29,000	$29,000	$29,000	$29,000	$29,000	$145,000
Cost per 5-year period			$145,000	$145,000	$145,000	$145,000	$145,000	$725,000

HCP/NCCP Land Acquisition for Initial Urban Development Area
2012 Update

	Implementation Period (Years)							
Capital Costs	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total**
Acquisition	$0	$44,886,900	$21,558,779	$21,558,779	$21,558,779	$21,558,779	$21,558,779	$152,680,795
Site improvements	$0	$0	$727,579	$727,579	$727,579	$727,579	$727,579	$3,637,897
Capital Subtotal	**$0**	**$44,886,900**	**$22,286,358**	**$22,286,358**	**$22,286,358**	**$22,286,358**	**$22,286,358**	**$156,318,692**
Operational Costs								
Program staff and overhead			$291,400	$291,400	$291,400	$291,400	$291,400	$1,457,000
Due diligence	$187,840	$1,373,611	$646,763	$646,763	$646,763	$646,763	$646,763	$4,795,268
Operational Subtotal	**$187,840**	**$1,373,611**	**$938,163**	**$938,163**	**$938,163**	**$938,163**	**$938,163**	**$6,252,268**
Total	**$187,840**	**$46,260,511**	**$23,224,522**	**$23,224,522**	**$23,224,522**	**$23,224,522**	**$23,224,522**	**$162,570,961**

Acquisition Cost over 30-year Program, Actuals year 1 - 5 + Projections Years 6 - 30 (2012 dollars)

	Cost per 5-year period								**Estimated**
Acquisition Analysis Zone	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total**	**Remainder 6-30**
Zone 1	$0	$6,944,900	$1,848,580	$1,848,580	$1,848,580	$1,848,580	$1,848,580	$16,187,801	$9,242,901
Zone 2	$0	$13,123,000	$9,227,421	$9,227,421	$9,227,421	$9,227,421	$9,227,421	$59,260,105	$46,137,105
Zone 3	$0	$1,830,000	$160,079	$160,079	$160,079	$160,079	$160,079	$2,630,395	$800,395
Zone 4	$0	$1,633,000	$5,899,884	$5,899,884	$5,899,884	$5,899,884	$5,899,884	$31,132,422	$29,499,422
Zone 5	$0	$21,356,000	$3,618,466	$3,618,466	$3,618,466	$3,618,466	$3,618,466	$39,448,328	$18,092,328
Zone 6 (incl. within ULL along Marsh Creek)	$0	$0	$804,349	$804,349	$804,349	$804,349	$804,349	$4,021,744	$4,021,744
Total	**$0**	**$44,886,900**	**$21,558,779**	**$21,558,779**	**$21,558,779**	**$21,558,779**	**$21,558,779**	**$152,680,795**	**$107,793,895**

Assumptions:

Actual acquisition cost through year 5. Updated 2012 land cost factors by cost category applied to remaining acquisition targets. Total remaining cost allocated evenly over remaining 5 periods.
See Appendix G and description of separate land cost model in Chapter 9.

Program Staff and Overhead

		Number of FTEs						
Position	Hourly Cost per FTE with Overhead & Support	0	1-5	6-10	11-15	16-20	21-25	26-30
Principal Planner and Support	$155			0.20	0.20	0.20	0.20	0.20
Total FTEs				0.20	0.20	0.20	0.20	0.20
Total cost per year				$58,280	$58,280	$58,280	$58,280	$58,280
Total cost per 5-year period				$291,400	$291,400	$291,400	$291,400	$291,400

Notes/Assumptions:

Hourly cost factor includes staff salary and benefits, salaries and benefits of administrative support staff (secretaries, clerks, IT staff, etc.) and associated overhead, including space and utility costs, office furniture, equipment, and supplies, .

1,880 hours per year

Due Diligence

Covers costs for appraisals, preliminary title report, boundary surveys, legal services, environmental and Phase 1 site assessment.
Based on actual costs for EBRPD and the Conservancy through 2012, these costs are 4 percent of acquisition costs.
The 2006 cost model used more detailed unit costs. The result of applying those cost factors in the 2006 model was that due diligence represented about 4% of land acquisition costs.
For the 2012 update the model is simplified to assume due diligence costs at 3% of land acquisition costs, consistent with the experience of the Conservancy through 2012, during which time more than 25 percent of the reserve goals for land acquisition took place. For years 6 -30, Conservancy staff time costs included in Program Staff line item above.

	Cost per 5-year period							
	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total**
Due Diligence	$187,840	$1,373,611	$646,763	$646,763	$646,763	$646,763	$646,763	$4,795,268

Assumptions:

3.0% Due diligence costs as a percentage of land acquisition cost.

Planning Surveys (Pre-Acquisition)

Based on Conservancy and EBRPD experience to date, initial property evaluation and planning is included in staff and consultant time.
Most significant field biological work is done post acquisition and is included as a monitoring cost.

Site Improvements

	Cost per 5-year period						
	0	1-5	6-10	11-15	16-20	21-25	26-30
Demolition of old facilities	$0	$0	$39,799	$39,799	$39,799	$39,799	$39,799
Repair of boundary fence	$0	$0	$359,439	$359,439	$359,439	$359,439	$359,439
Repair and replacement of gates	$0	$0	$155,879	$155,879	$155,879	$155,879	$155,879
Signs (boundary, landbank, etc.)	$0	$0	$96,181	$96,181	$96,181	$96,181	$96,181
Other security (e.g., boarding up barns)	$0	$0	$76,281	$76,281	$76,281	$76,281	$76,281
Total	$0	$0	$727,579	$727,579	$727,579	$727,579	$727,579

Assumptions:

Most demolition to date is a condition of the transaction and assigned to the seller. Other site improvement costs included in EBRPD operations and maintenance costs to date.

$6,000	Demolition of old facilities per 500 acres
$4,700	Repair and replacement of gates per 100 acres
$2,900	Signs (boundary, landbank, etc.) per 100 acres
$2,300	Other security (e.g., boarding up barns) per 100 acres
170	Estimated number of parcels acquired years 6 - 30 assuming 100 acres per parcel
15,000	Average parcel boundary length in linear feet (from GIS analysis, grouping adjacent parcels with the same landowner)
$4.70	Average cost per linear foot for boundary fence repair
15%	Proportion of boundary fence that needs repair

HCP/NCCP Management, Restoration, and Recreation Planning and Design for Initial Urban Development Area 2012 Update

	Implementation Period (Years)							
Capital costs	0	1-5	6-10	11-15	16-20	21-25	26-30	Total
Vehicle purchase			$7,333	$22,000	$14,667	$7,333	$7,333	
Capital subtotal			**$7,333**	**$22,000**	**$14,667**	**$7,333**	**$7,333**	
Operational costs								
Program staff and overhead			$382,580	$0	$0	$0	$0	
Technical staff and overhead			$415,167	$987,000	$987,000	$987,000	$830,333	
Travel			$6,667	$6,667	$6,667	$6,667	$6,667	
Vehicle Fuel and Maintenance			$3,833	$11,500	$15,333	$15,333	$11,500	
Contractors			$1,553,599	$342,599	$39,849	$39,849	$39,849	
Operational subtotal	**$0**	**$934,262**	**$2,361,846**	**$1,347,766**	**$1,048,849**	**$1,048,849**	**$888,349**	
Total	**$0**	**$934,262**	**$2,369,179**	**$1,369,766**	**$1,063,516**	**$1,056,182**	**$895,682**	**$7,688,586**

Program Staff and Overhead

		Number of FTEs						
Position	Hourly Cost per FTE with Overhead & Support	0	1-5	6-10	11-15	16-20	21-25	26-30
Principal Planner and Suppport	$155			0.10	-	-	-	-
Senior Planner and Support	$126			0.20	-	-	-	-
Total FTEs				0.30	-	-	-	-
Total cost per year				$76,516	$0	$0	$0	$0
Total cost per 5-year period				$382,580	$0	$0	$0	$0

Note: Hourly cost factor includes staff salary and benefits, salaries and benefits of administrative support staff (secretaries, clerks, IT staff, etc.) and associated overhead, including space and utility costs, office furniture, equipment, and supplies, .

Technical Staff and Overhead

		Number of FTEs						
Position	Hourly Cost per FTE with Overhead & Support	0	1-5	6-10	11-15	16-20	21-25	26-30
Senior scientist and support	$130			0.17	0.33	0.33	0.33	0.33
Project Manager and support	$85			0.17	0.33	0.33	0.33	0.33
Technical support	$50			0.17	0.67	0.67	0.67	0.33
Total FTEs				0.50	1.33	1.33	1.33	1.00
Total cost per year				$83,033	$197,400	$197,400	$197,400	$166,067
Total cost per 5-year period				$415,167	$987,000	$987,000	$987,000	$830,333

Notes/Assumptions:

Hourly cost factor includes staff salary and benefits, salaries and benefits of administrative support staff (secretaries, clerks, IT staff, etc.) and associated overhead, including space and utility costs, office furniture, equipment, and supplies, .

1,880 hours per year

Travel (shared with restoration and monitoring)

	Implementation Period (years)						
	0	1-5	6-10	11-15	16-20	21-25	26-30
Total cost per 5-year period			$6,667	$6,667	$6,667	$6,667	$6,667

Assumption:

$4,000	annual cost based on actual Conservancy experience through 2012
0.33	Proportion of travel costs that are used for planning (one third are used for restoration, and are included in the restoration spreadsheet,and one-third are used for monitoring, and are included in the monitoring spreadsheet).

Vehicles and Fuel (shared with restoration and monitoring)

	Number of vehicles						
	0	1-5	6-10	11-15	16-20	21-25	26-30
Total FTEs (Shared Technical)			1.50	4.00	4.00	4.00	3.00
Number of vehicles purchased			1	3	2	1	1
Number of vehicles retired			-	1	1	1	2
Total number of vehicles			1	3	4	4	3
Total vehicle purchase cost per period			$7,333	$22,000	$14,667	$7,333	$7,333
Total vehicle fuel and maintenance per year			$767	$2,300	$3,067	$3,067	$2,300
Total vehicle fuel and maintenance per 5-year period			$3,833	$11,500	$15,333	$15,333	$11,500

Assumptions:

$22,000	Vehicle purchase price
$1,100	Fuel cost per vehicle per year
$1,200	Maintenance cost per vehicle per year
0.33	Proportion of vehicle and fuel costs that are used for planning (one third are used for restoration, and are included in the restoration spreadsheet, and one-third are used for monitoring, and are included in the monitoring spreadsheet).

Contractors

	Contract value per 5-year period						
Contractor category	0	1-5	6-10	11-15	16-20	21-25	26-30
Management planning			$908,250	$181,650	$0	$0	$0
Restoration planning			$605,500	$121,100	$0	$0	$0
Restoration design			$39,849	$39,849	$39,849	$39,849	$39,849
Total per 5-year period			$1,553,599	$342,599	$39,849	$39,849	$39,849

Assumptions:

$727	Cost per acre for restoration design (does not include conceptual restoration planning or creation of plans, specifications, and engineering documents).

The total area of restoration that occurs in each 5-year period will be designed as three different projects (approximately 14 acres each).
Restoration designs will be created in the 5-year period in which construction takes place.

The management and restoration planning and design staff and contractors will conduct the following activities:

Management Planning
Management plans prepared for cropland/pasture preserves
Management plans prepared for natural area preserves
Grazing leases developed or renewed
Jurisdictional wetland delineation
Exotic Plant Control Program (Preserve System-wide)
Fire management/control plan (System-wide)

Restoration Planning & Design
Pond creation plan and construction designs
Wetland creation plan and construction designs
Stream restoration plan and construction designs
Oak savanna restoration plan and construction designs
Riparian woodland/scrub restoration plan and construction designs

HCP/NCCP Habitat Restoration/Creation for Initial Urban Development Area
2012 Update

	Implementation Period (Years)							
Capital Costs	0	1-5	6-10	11-15	16-20	21-25	26-30	Total
Creation/Restoration			$4,174,800	$4,174,800	$4,174,800	$4,174,800	$4,174,800	
Vehicle purchase			$7,333	$22,000	$14,667	$7,333	$7,333	
Capital Subtotal			**$4,182,133**	**$4,196,800**	**$4,189,467**	**$4,182,133**	**$4,182,133**	
Operational Costs								
Program staff and overhead			$382,580	$0	$0	$0	$0	
Technical staff and overhead			$415,167	$987,000	$987,000	$987,000	$830,333	
Travel			$6,667	$6,667	$6,667	$6,667	$6,667	
Vehicle Fuel and Maintenance			$3,833	$11,500	$15,333	$15,333	$11,500	
Contractors			$2,024,778	$2,024,778	$2,024,778	$2,024,778	$2,024,778	
Operational Subtotal		**$1,822,840**	**$2,833,025**	**$3,029,945**	**$3,033,778**	**$3,033,778**	**$2,873,278**	
Total	**$0**	**$1,822,840**	**$7,015,158**	**$7,226,745**	**$7,223,245**	**$7,215,911**	**$7,055,411**	**$37,559,310**

Land Cover Type Restored/Created

	Implementation Period (Years)							
Land Cover Type (acres)	0	1-5	6-10	11-15	16-20	21-25	26-30	Total
oak savanna	-	-	8.4	8.4	8.4	8.4	8.4	42.0
riparian woodland/scrub	-	0.9	9.8	9.8	9.8	9.8	9.8	50.0
perennial wetland	-	0.2	6.4	6.4	6.4	6.4	6.4	32.2
seasonal wetland	-	8.2	7.4	7.4	7.4	7.4	7.4	45.2
alkali wetland	-	2.5	3.9	3.9	3.9	3.9	3.9	21.8
slough/channel	-	-	14.4	14.4	14.4	14.4	14.4	72.0
open water	-	-	-	-	-	-	-	-
ponds	-	0.4	4.1	4.1	4.1	4.1	4.1	21.0
streams (miles)	-	0.9	0.7	0.7	0.7	0.7	0.7	4.6
Total (acres)	-	12.8	54.8	54.8	54.8	54.8	54.8	287.0

Cost of Restoration/Creation Construction

			Implementation Period (Years)						
Land Cover Type	Units	Cost per unit	0	1-5	6-10	11-15	16-20	21-25	26-30
oak savanna	acres	$2,600			$26,208	$26,208	$26,208	$26,208	$26,208
riparian woodland/scrub	acres	$38,800			$457,219	$457,219	$457,219	$457,219	$457,219
perennial wetland	acres	$63,300			$486,144	$486,144	$486,144	$486,144	$486,144
seasonal wetland	acres	$75,500			$669,715	$669,715	$669,715	$669,715	$669,715
alkali wetland	acres	$76,400			$353,885	$353,885	$353,885	$353,885	$353,885
slough/channel	acres	$57,500			$993,600	$993,600	$993,600	$993,600	$993,600
open water	acres	$83,900			$0	$0	$0	$0	$0
ponds	acres	$83,900			$414,802	$414,802	$414,802	$414,802	$414,802
streams	linear feet	$164			$773,227	$773,227	$773,227	$773,227	$773,227
	Total				$4,174,800	$4,174,800	$4,174,800	$4,174,800	$4,174,800

Assumptions:

Construction costs depend mostly on the amount, depth, and linear extent of earthwork expected, and whether water control structure are required. Plant propagation, seeding, and watering also included.

20%	Contingency factor for restoration projects; assumed higher than the standard contingency because of the higher degree of uncertainty in this portion of the conservation program.

Program Staff and Overhead

Position	Hourly Cost per FTE with Overhead & Support	Number of FTEs						
		0	1-5	6-10	11-15	16-20	21-25	26-30
Principal Planner and Support	$155			0.10	-	-	-	-
Senior Planner and Support	$126			0.20	-	-	-	-
Total FTEs				0.30	-	-	-	-
Total cost per year				$76,516	$0	$0	$0	$0
Total cost per 5-year period				$382,580	$0	$0	$0	$0

Note: Hourly cost factor includes staff salary and benefits, salaries and benefits of administrative support staff (secretaries, clerks, IT staff, etc.) and associated overhead, including space and utility costs, office furniture, equipment, and supplies, .

1,880 hours per year

Technical Staff and Overhead

Position	Hourly Cost per FTE with Overhead &	Number of FTEs						
		0	1-5	6-10	11-15	16-20	21-25	26-30
Senior scientist and support	$130			0.17	0.33	0.33	0.33	0.33
Project Manager and support	$85			0.17	0.33	0.33	0.33	0.33
Technical support	$50			0.17	0.67	0.67	0.67	0.33
Total FTEs				0.50	1.33	1.33	1.33	1.00
Total cost per year				$83,033	$197,400	$197,400	$197,400	$166,067
Cost per 5-year period				$415,167	$987,000	$987,000	$987,000	$830,333

Assumptions:

Habitat Conservancy staff select sites, hire and oversee consultants for plans, specs., and implementation, and conduct some monitoring. Staff shared with other implementation tasks; the amount listed is the estimated portion to support wetland mitigation creation/restoration.

Cost includes staff salary and benefits, salaries and benefits of administrative support staff (secretaries, clerks, IT staff, etc.) and associated overhead, including space and utility costs, office furniture, equipment, and supplies.

Travel (shared with planning and monitoring)

	Implementation Period (years)						
	0	1-5	6-10	11-15	16-20	21-25	26-30
Total cost per 5-year period			$6,667	$6,667	$6,667	$6,667	$6,667

Assumption:

$4,000 annual cost based on actual Conservancy experience through 2012

0.33 Proportion of travel costs that are used for restoration (one third are used for planning, and are included in the planning spreadsheet, and one-third are used for monitoring, and are included in the monitoring spreadsheet).

Vehicles and Fuel (shared with planning and monitoring)

	Implementation Period (years)						
	0	1-5	6-10	11-15	16-20	21-25	26-30
Vehicle purchase, per period			$7,333	$22,000	$14,667	$7,333	$7,333
Vehicle fuel and maintenace, per period			$3,833	$11,500	$15,333	$15,333	$11,500

See Planning and Design worksheet for more detail on vehicle purchase and fuel/maintenance assumptions.

0.33 Proportion of vehicle and fuel costs that are used for restoration (one third are used for planning, and are included in the planning spreadsheet, and one-third are used for monitoring, and are included in the monitoring spreadsheet).

Contractors

	Contract value per 5-year period						
Contractor category	0	1-5	6-10	11-15	16-20	21-25	26-30
Plans, specifications, and engineering			$1,252,440	$1,252,440	$1,252,440	$1,252,440	$1,252,440
Bid assistance			$62,622	$62,622	$62,622	$62,622	$62,622
Construction oversight			$292,236	$292,236	$292,236	$292,236	$292,236
Post-construction maintenance			$417,480	$417,480	$417,480	$417,480	$417,480
Cost per 5-year period			$2,024,778	$2,024,778	$2,024,778	$2,024,778	$2,024,778

Assumptions:

30%	percent of total construction cost required to complete plans, specifications, engineering and provide allowance for remedial measures
1.50%	percent of total construction cost required for bid assistance
7%	percent of total construction cost required for construction oversight
10%	percent of total construction cost required for post construction maintenance

The total area of restoration that occurs in each 5-year period will be designed as three different projects (approximately 14 acres each).

Plan, specification, and engineering work, bid assistance, and construction oversight will be conducted in the 5-year period in which construction takes place.

Two years of post-construction maintenance will be conducted in the 5-year period after construction takes place to maintain irrigation systems, conducting weeding, etc.

Management costs after success criteria are met is included in development fee paid for same site (wetland mitigation fee is in addition).

HCP/NCCP Environmental Compliance for Initial Urban Development Area
2012 Update

	Implementation Period (Years)							
Operational Costs	0	1-5	6-10	11-15	16-20	21-25	26-30	Total
NEPA/CEQA			$460,200	$460,200	$460,200	$460,200	$0	
CWA 404			$0	$0	$0	$0	$0	
CWA 401			$13,200	$13,200	$13,200	$13,200	$0	
CDFG 1602			$10,100	$10,100	$10,100	$10,100	$0	
NHPA			$49,700	$49,700	$49,700	$49,700	$0	
Other	**$0**	**$512,855**	$34,400	$34,400	$34,400	$34,400	$0	
Total	**$0**	**$512,855**	**$567,600**	**$567,600**	**$567,600**	**$567,600**	**$0**	**$2,783,255**

Number of Projects Requiring Environmental Compliance

		Number							
Project size	Size Range	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total**
Small/simple	up to 10 acres or up to 0.1 stream miles			4	4	4	4	-	20
Medium/more complex	10.1-50 acres or 0.1-0.5 stream miles			4	4	4	4	-	20
Large/most complex	over 50 acres or 0.5 stream miles			2	2	2	2	-	10
	Total projects			10	10	10	10	-	40

Assumptions:

Of the total of approximately 50 projects that would require environmental compliance, 1/5 would require compliance in each 5-year period between years 1 and 25.

Environmental Compliance Cost per Project Size and Compliance Category (2012 dollars)

Project size	Size Range	Estimate Project Cost within DFG jurisdiction		Project Impacts to Wetlands for CWA 401		Compliance Category					
				Minimum	Maximum	CEQA	CWA 404	CWA 401	CDFG 1602	NHPA	Other
Small/simple	up to 10 acres or up to 0.1 stream miles	$ 2,000	$ 20,000	0.001	0.01	$6,055	$0	$993	$392	$3,028	$2,870
Medium/more complex	10.1-50 acres or 0.1-0.5 stream miles	$ 20,001	$ 100,000	0.0121	0.07	$48,440	$0	$1,236	$700	$4,239	$3,444
Large/most complex	over 50 acres or 0.5 stream miles	$ 100,001	$500,000 or more	0.073	0.30	$121,100	$0	$2,162	$2,858	$10,294	$4,592

Assumptions:

Assumed wetland impact determined by AECOM based experience with typical projects that would be expected to be implemented by the Conservancy. For example wetland restoration/creation projects, stream restoration projects, adaptive management measures for existing wetland features and facilities improvements. In general, it is expected that impacts to wetlands and streams would be avoided if at all possible. Of the stream length indicated, assumed only 10% of that length would be impacted and an average stream width of 10 feet.
For NEPA/CEQA, 401/404 and 1602 compliance, varying costs have more to do with project complexity than with project size.
Clean Water Act 401 and 1602 permits will be done on a per-project basis
Cultural compliance permits will be done on a per-project basis.
Contra Costa Conservancy staff will prepare permit applications and notification for the 401, 404 and 1600 applications, thereby resulting in no consultant cost for permit preparation. This table also assumes that the permits for Water Quality Certification (CWA 401) and Streambed Alteration Agreement (DFG 1602) will not be secured under programmatic or Master permit processes.
Permitted projects would be completed within the time limit allotted for the permits; no extensions or re-application would be required.
The "other" compliance category could include county grading permits, road encroachment permits, or other local approvals.

NEPA/CEQA
Depending on the level of detail that is provided for specific projects, they may or may not be able to be covered under the HCP EIR/EIS.
For those without sufficient detail, additional environmental documentation may need to be prepared.
It is likely that the majority of those would be in the form of mitigated negative declarations.
Because it is difficult to provide a cost estimate for a project without knowing details such as location, size, etc., the following are some rough numbers based on level of controversy:
Small scale non-controversial projects = Cat Excl/Cat Exemp
Medium scale more controversial projects = IS MND/EA FONSI
Larger scale more controversial projects = EIR/EIS
All land acquisitions would be a categorical exemption under CEQA as well as under NEPA, when NEPA applies.

401/404
The cost of conducting wetland delineations is not included under CWA 404/401 compliance; it is expected that delineation would be covered under land acquisition costs.
Each project implemented under the HCP will qualify for compliance under the USACE 404 regional permit program for the inventory area; there is no fee for 404 permit applications
Tasks associated with Section 402 compliance are not included in this cost estimate.

CWA 401 fee cost estimate is based on impacts to jurisdictional waters of the state rather than project size. Fee is an average based on the minimum and maximum expected impacts. Central Valley Regional Water Quality Control Board Water Quality Certification Dredge and Fill Fee Calculator – v9 9/21/2011. Available: http://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/dredgefillfeecalculator.xls

NHPA
Archaeological surveys can be conducted at an intensive level at a rate of 40 acres per person per day.
No more than one cultural resource will be identified per 40 acres or part thereof.
This scope of work and cost estimate does not include tasks necessary for significance evaluations and resolution of adverse effects.

CDFG 1602
DFG 1602 costs are estimated based on the assumed cost of project activities within DFG jurisdiction per Fish and Game Code Sections 1600-1616, and the fee schedule corresponding to the project costs. Average cost based on mean of minimum and maximum fee amounts.
California Department of Fish and Game Lake and Streambed Alteration Agreements and Fees, Fee Schedule – Updated September 2011. Available: http://www.dfg.ca.gov/habcon/1600/forms.html

HCP/NCCP Preserve Management and Maintenance for Initial Urban Development Area
2012 Update

	Implementation Period (Years)							
Capital Costs	0	1-5	6-10	11-15	16-20	21-25	26-30	Total
Vehicle purchase			$271,200	$166,700	$283,000	$231,200	$241,900	
Equipment - capital			$140,000	$210,000	$280,000	$350,000	$420,000	
Field facilities			$500,000	$0	$500,000	$0	$0	
Contractors - capital			$424,000	$636,000	$848,000	$1,060,000	$1,272,000	
Recreation facilities			$0	$0	$0	$0	$0	
Capital Subtotal			**$1,335,200**	**$1,012,700**	**$1,911,000**	**$1,641,200**	**$1,933,900**	
Operational Costs								
Program staff and overhead			$382,580	$0	$0	$0	$0	
Preserve staff and overhead			$2,068,000	$2,444,000	$3,196,000	$3,572,000	$3,948,000	
Vehicle maintenance and fuel			$71,300	$147,400	$199,900	$225,800	$245,300	
Equipment - operational			$304,000	$456,000	$608,000	$760,000	$912,000	
Facilities maintenance and utilities			$67,500	$67,500	$135,000	$135,000	$135,000	
Water pumping			$17,620	$26,429	$35,239	$44,049	$52,859	
Contractors - operational			$526,470	$802,720	$1,078,970	$1,355,230	$1,631,480	
Recreation - operational			$0	$0	$0	$0	$0	
Operational Subtotal	**$0**	**$92,002**	**$3,437,470**	**$3,944,049**	**$5,253,109**	**$6,092,079**	**$6,924,639**	
Total	**$0**	**$92,002**	**$4,772,670**	**$4,956,749**	**$7,164,109**	**$7,733,279**	**$8,858,539**	**$33,577,347**

Program Staff and Overhead

		Number of FTEs						
Position	Hourly Cost per FTE with Overhead & Support	0	1-5	6-10	11-15	16-20	21-25	26-30
Principal Planner and Support	$155			0.10	-	-	-	-
Senior Planner and Support	$126			0.20	-	-	-	-
Total FTEs				0.30	-	-	-	-
Total cost per year				$76,516	$0	$0	$0	$0
Total cost per 5-year period				$382,580	$0	$0	$0	$0

Note: Hourly cost factor includes staff salary and benefits, salaries and benefits of administrative support staff (secretaries, clerks, IT staff, etc.) and associated overhead, including space and utility costs, office furniture, equipment, and supplies, .

Preserve Staff and Overhead

			Number of FTEs						
Position	Preserve area per position (acres)	Hourly Cost per FTE with Overhead & Support	0	1-5	6-10	11-15	16-20	21-25	26-30
Preserve Manager and Support		$100			1.0	1.0	1.0	1.0	1.0
Preserve maintenance staff	3,000	$40			3.0	4.0	6.0	7.0	8.0
Total FTEs					4.0	5.0	7.0	8.0	9.0
Total cost per year					$413,600	$488,800	$639,200	$714,400	$789,600
Total cost per 5-year period					$2,068,000	$2,444,000	$3,196,000	$3,572,000	$3,948,000

Notes/Assumptions:

Hourly cost factor includes staff salary and benefits, salaries and benefits of administrative support staff (secretaries, clerks, IT staff, etc.) and associated overhead, including space and utility costs, office furniture, equipment, and supplies, .

1,880	hours per year

Vehicles, Maintenance, and Fuel

	Purchase price per vehicle	Fuel cost per vehicle per year	Maintenance cost per vehicle per year	Number of vehicles, per period						
				0	1-5	6-10	11-15	16-20	21-25	26-30
Total number of FTEs				0	0	4	5	7	8	9
New trucks purchased	$24,700	$1,100	$1,200			1	1	1	0	1
Old trucks retired						0	0	1	0	1
Total trucks						1	2	2	2	2
New 4WDs purchased	$41,100	$2,100	$1,800			2	3	4	5	5
Old 4WDs retired						0	0	2	4	4
Total 4WDs						2	5	7	8	9
New ATVs purchased	$7,000	$290	$350			1	1	0	2	0
Old ATVs retired						0	0	0	0	0
Total ATVs						1	2	2	4	4
New dump trucks purchased	$35,200	$470	$470			1	0	1	0	0
Old dump trucks retired						0	0	0	0	0
Total dump trucks						1	1	2	2	2
New tractors purchased	$47,000	$590	$1,170			1	0	1	0	0
Old tractors retired						0	0	0	0	0
Total tractors						1	1	2	2	2
New auger, mower, scraper for tractor	$47,000	$0	$120			1	0	0	0	0
Old auger, mower, scraper retired						0	0	0	0	0
Total auger, mower, scraper						1	1	1	1	1
New small tractors	$16,400	$350	$350			1	0	0	0	0
Old small tractors retired						0	0	0	0	0
Total small tractors						1	1	1	1	1
New light 4WD vehicles	$11,700	$290	$290			1	1	1	1	1
Old light 4WD vehicles retired						1	0	1	1	1
Total light 4WD vehicles						0	1	1	1	1
Total vehicle purchase cost per 5-year period						$271,200	$166,700	$283,000	$231,200	$241,900
Total vehicle fuel and maintenance per year						$14,260	$29,480	$39,980	$45,160	$49,060
Total vehicle fuel and maintenance per 5-year period						$71,300	$147,400	$199,900	$225,800	$245,300

Assumptions:

Cost of 4WD truck includes cost of fire pumper, chain saw, sprayer, and small tool set for vehicle.

Equipment and Materials

	Number of new units bought per period						
	0	1-5	6-10	11-15	16-20	21-25	26-30
New preserve area managed per period	-	4,000	4,000	4,000	4,000	4,000	4,000
Total preserve area managed per period	-	4,000	8,000	12,000	16,000	20,000	24,000
Capital cost of equipment and materials per year			$28,000	$42,000	$56,000	$70,000	$84,000
Operational cost of equipment and materials per year			$60,800	$91,200	$121,600	$152,000	$182,400
Total capital cost per 5-year period			$140,000	$210,000	$280,000	$350,000	$420,000
Total operational cost per 5-year period			$304,000	$456,000	$608,000	$760,000	$912,000

Assumptions:

$3,500	Capital cost of equipment and materials per 1,000 preserve acres per year.
$7,600	Operational cost of equipment and materials per 1,000 preserve acres per year.

Capital costs include the capital component of fire fighting equipment/gear, small tools (pliers, wrenches, screwdrivers, etc.), glasses, gloves, hard hats, rain gear, irrigation supplies, cargo container, landscape plants and grass, oak trees, lumber, and truck hauling services.

Operational costs include the operational component of fire fighting equipment/gear, small tools (pliers, wrenches, screwdrivers, etc.), glasses, gloves, hard hats, rain gear, irrigation supplies, cargo container, landscape plants and grass, oak trees, lumber, and truck hauling services.

Operational costs also include portable radios, small pumps, piping, generator, saw, and demolition hammers.

Field Facilities

	0	1-5	6-10	11-15	16-20	21-25	26-30
Total preserve area managed per period	-	4,000	8,000	12,000	16,000	20,000	24,000
Total field offices/parking areas	-	-	1	1	2	2	2
New field offices/parking areas	-	-	1	-	1	-	-
Cost per 5-year period for offices/workshops	$0	$0	$500,000	$0	$500,000	$0	$0

Assumptions:

10,000	Number of acres per workshop/parking area
$500,000	Cost to build a workshop/parking area

Note: Field facilities contain an area for equipment storage, a manager's office, a shared office, a locker room, and restrooms.
Based on experience to date, cost assumes donated portable building, with costs representing transportation, installation, utilities, etc.

Facilities Maintenance and Utilities

	Cost per facility per year	0	1-5	6-10	11-15	16-20	21-25	26-30
Total facilities per period		-	-	1	1	2	2	2
Maintenance cost per year	$8,800			$8,800	$8,800	$17,600	$17,600	$17,600
Utilities cost per year	$4,700			$4,700	$4,700	$9,400	$9,400	$9,400
Total cost per year				$13,500	$13,500	$27,000	$27,000	$27,000
Total cost per 5-year period				$67,500	$67,500	$135,000	$135,000	$135,000

Water Pumping

	0	1-5	6-10	11-15	16-20	21-25	26-30
Total preserve area managed	-	4,000	8,000	12,000	16,000	20,000	24,000
Total cost per year			$3,524	$5,286	$7,048	$8,810	$10,572
Total cost per 5-year period			$17,620	$26,429	$35,239	$44,049	$52,859

$440	Annual cost for pump and well drilling per 1,000 acres

Contractors - operational

	Contract value per 5-year period						
Contractor category	0	1-5	6-10	11-15	16-20	21-25	26-30
Total pond area managed	-	3	9	16	22	29	35
Total preserve area managed	-	4,000	8,000	12,000	16,000	20,000	24,000
Routine dirt road maintenance			$28,160	$42,240	$56,320	$70,400	$84,480
Feral pig management			$54,000	$81,000	$108,000	$135,000	$162,000
Pond maintenance			$64,310	$109,480	$154,650	$199,830	$245,000
Weed management			$28,000	$42,000	$56,000	$70,000	$84,000
Other maintenance services			$352,000	$528,000	$704,000	$880,000	$1,056,000
Total per 5-year period			$526,470	$802,720	$1,078,970	$1,355,230	$1,631,480

Assumptions:

$7,000	Cost for pond maintenance (dredging) per acre of pond every 5 years.
$17,600	Cost of dirt road maintenance per 100 miles of road per year.
100	miles of dirt roads on preserves
4	miles of dirt roads per 1,000 acres of preserve
$1,350	Cost of feral pig management per year per 1,000 acres managed
$700	Cost of weed management per 1,000 acres of preserve per year.
$8,800	Cost for other maintenance services per 1,000 acres of preserve per year.

Other maintenance services include mowing, grading, pest control, disking for fire breaks, fencing, alarms, janitorial services (pond maintenance subtracted based on the yearly pond maintenance costs above)

Contractors - capital

	Contract value per 5-year period						
Contractor category	0	1-5	6-10	11-15	16-20	21-25	26-30
Total preserve area managed	-	4,000	8,000	12,000	16,000	20,000	24,000
Construction services			$424,000	$636,000	$848,000	$1,060,000	$1,272,000

Assumptions:

$10,600	Cost for construction services per 1,000 preserve acres per year

Construction services includes roadway design, paving, fencing, grading, weather station, and boundary surveying services

Recreation Facilities and Maintenance

	0	1-5	6-10	11-15	16-20	21-25	26-30
Total facilities per period	-	-	-	-	-	-	-
Facilities cost - capital, per period	-	-	$0	$0	$0	$0	$0
Facilities cost - maintenance and operations	-	-	$0	$0	$0	$0	$0
Total facilities capital cost			$0	$0	$0	$0	$0
Total cost per year			$0	$0	$0	$0	$0
Total cost per 5-year period			$0	$0	$0	$0	$0

Assumptions:

For this estimate, assumed costs covered by the East Bay Parks and Recreation District.

$0	Cost per unit for recreation facilities.
$0	Annual maintenance and operations cost for recreation facilities

HCP/NCCP Monitoring, Research, and Adaptive Management for Initial Urban Development Area
2012 Update

	Implementation Period (Years)							
Capital costs	0	1-5	6-10	11-15	16-20	21-25	26-30	Total
Vehicle purchase			$7,333	$22,000	$14,667	$7,333	$7,333	
Capital Subtotal			**$7,333**	**$22,000**	**$14,667**	**$7,333**	**$7,333**	
Operational Costs								
Program staff and overhead			$118,440	$0	$0	$0	$0	
Technical staff and overhead			$415,167	$987,000	$987,000	$987,000	$830,333	
Travel			$6,667	$6,667	$6,667	$6,667	$6,667	
Vehicle Fuel and Maintenance			$3,833	$11,500	$15,333	$15,333	$11,500	
Field data collection (contractors)			$887,424	$1,294,526	$1,689,682	$2,052,982	$2,416,282	
Directed research			$454,000	$454,000	$454,000	$454,000	$454,000	
Adaptive management			$181,500	$181,500	$181,500	$181,500	$181,500	
Operational Subtotal	**$0**	**$456,421**	**$2,067,030**	**$2,935,192**	**$3,334,182**	**$3,697,482**	**$3,900,282**	
Total	**$0**	**$456,421**	**$2,074,364**	**$2,957,192**	**$3,348,848**	**$3,704,815**	**$3,907,615**	**$16,449,254**

Program Staff and Overhead

	Hourly Cost per FTE	Number of FTEs						
Position	with Overhead & Support	0	1-5	6-10	11-15	16-20	21-25	26-30
Senior Planner and Support	$126			0.10	-	-	-	-
Total FTEs				0.10	-	-	-	-
Total cost per year				$23,688	$0	$0	$0	$0
Total cost per 5-year period				$118,440	$0	$0	$0	$0

Note: Hourly cost factor includes staff salary and benefits, salaries and benefits of administrative support staff (secretaries, clerks, IT staff, etc.) and associated overhead, including space and utility costs, office furniture, equipment, and supplies, .

1,880 hours per year

Technical Staff and Overhead (shared with planning and restoration/creation)

	Hourly Cost per FTE	Number of FTEs						
Position	with Overhead &	0	1-5	6-10	11-15	16-20	21-25	26-30
Senior scientist and support	$130			0.17	0.33	0.33	0.33	0.33
Project Manager and support	$85			0.17	0.33	0.33	0.33	0.33
Technical support	$50			0.17	0.67	0.67	0.67	0.33
Total FTEs				0.50	1.33	1.33	1.33	1.00
Total cost per year				$83,033	$197,400	$197,400	$197,400	$166,067
Cost per 5-year period				$415,167	$987,000	$987,000	$987,000	$830,333

Assumptions:

Hourly cost factor includes staff salary and benefits, salaries and benefits of administrative support staff (secretaries, clerks, IT staff, etc.) and associated overhead, including space and utility costs, office furniture, equipment, and supplies, .

Travel (shared with planning and restoration/creation)

	Implementation Period (years)						
	0	1-5	6-10	11-15	16-20	21-25	26-30
Total cost per 5-year period			$6,667	$6,667	$6,667	$6,667	$6,667

Assumption:

$4,000 annual cost based on actual Conservancy experience through 2012

0.33 Proportion of travel costs that are used for monitoring (one third are used for planning, and are included in the planning spreadsheet, and one-third are used for restoration and are included in the restoration spreadsheet).

Vehicles and Fuel (shared with planning and restoration)

	Implementation Period (years)						
	0	1-5	6-10	11-15	16-20	21-25	26-30
Vehicle purchase, per period			$7,333	$22,000	$14,667	$7,333	$7,333
Vehicle fuel and maintenace, per period			$3,833	$11,500	$15,333	$15,333	$11,500

See Planning and Design worksheet for more detail on vehicle purchase and fuel/maintenance assumptions.

0.33 Proportion of vehicle and fuel costs that are used for monitoring (one third are used for planning, and are included in the planning spreadsheet, and one-third are used for restoration, and are included in the restoration spreadsheet).

Field Data Collection (Contractors)

On-going and Construction Monitoring

	0	1-5	6-10	11-15	16-20	21-25	26-30
Total acres of land added to reserve for management and monitoring each 5-year period	-	4,000	4,000	4,000	4,000	4,000	4,000
New acres created/restored per 5-year period	-	13	55	55	55	55	55
Number of restoration sites per 5-year period	-	9	17	17	17	17	17
Number of preserve covered activities requiring pre-construction surveys and construction monitoring per 5 - year period (sites)	-	2	4	4	4	4	4

				Average area requiring monitoring **per year** (acres or sites) and average annual cost per period						
Monitoring type	Cost per unit	Unit		0	1-5	6-10	11-15	16-20	21-25	26-30
pre-construction surveys	$1,991	1	site			5	5	5	5	5
subtotal						$9,955	$9,955	$9,955	$9,955	$9,955
construction monitoring	$5,289	1	site			1	1	1	1	1
subtotal						$5,289	$5,289	$5,289	$5,289	$5,289
post-acquisition biological inventories	$18	1	acre			800	800	800	800	800
subtotal						$14,532	$14,532	$14,532	$14,532	$14,532
monitoring: restoration, creation and enhancement sites	$7,964	10	acres			3	14	22	22	22
subtotal						$2,389	$11,150	$17,521	$17,521	$17,521
status and trends monitoring: key covered species and ecosystems	$18	1	acre			8,000	12,000	16,000	20,000	24,000
subtotal						$145,320	$217,980	$290,640	$363,300	$435,960
Total cost per year						$177,485	$258,905	$337,936	$410,596	$483,256
Total cost per 5-year period						$887,424	$1,294,526	$1,689,682	$2,052,982	$2,416,282

Assumptions:

Implementing entity monitoring staff will plan, coordinate, and report on the monitoring categories described below.

Contractors will conduct the field monitoring and data analysis.

Implementation monitoring will be conducted by the GIS/Database technician in conjunction with the other monitoring staff. The cost for the GIS/database technician's time will be covered by the program administration cost category. The cost for the monitoring staffs' time is assumed to be included in the other monitoring categories.

Preconstruction surveys are assumed to occur prior to construction of covered activites on the Preserve System. Preconstruction surveys are for the following species only: Townsend's big-eared bat, San Joaquin kit fox, golden eagle, burrowing owl, Swainson's hawk, and covered shrimp species. Surveys are assumed to require **one visit by two biologists** at **$121/hour** each. They are assumed to occur in the same 5-year period in which construction occurs. Assumes negative findings.

Construction monitoring is assumed to occur periodically during construction of covered activities and conservation measures. An average of **seven visits by one biologist** at **$91/hour** is assumed.

10%	% of times construction surveys are anticipated to be required for covered activities within the preserve system (it is anticipated that Implementing Entity will whenever possible avoid habitat and breeding season of covered species).
0.25	Ratio of area of other covered activities in preserves to area created/restored.

Planning, preconstruction surveys and construction monitoring for covered activities outside of preserves will be paid for by developers.

Post-acquisition inventories will build on planning surveys. Inventory will include mapping of noxious weeds.

Monitoring of restoration, creation, and enhancement sites is assumed to occur **4 times per year** for the 5-year period following the restoration activity and will require **two biologists at $121/hr for one 8-hour day each visit**. It will include species-response monitoring. It is assumed to begin in the 5-year period after the creation/restoration/enhancement takes place.

Status and trends monitoring is assumed to occur after preserve land is purchased through year 30. Status and trend monitoring will build on planning surveys and post-acquisition inventories, when appropriate.

Directed Research

	0	1-5	6-10	11-15	16-20	21-25	26-30
Average cost per year to fund directed research			$90,800	$90,800	$90,800	$90,800	$90,800
Total cost per 5-year period			$454,000	$454,000	$454,000	$454,000	$454,000

Adaptive Management

	0	1-5	6-10	11-15	16-20	21-25	26-30
Average Independent Conservation Assessment Team cost per 5-year period			$30,500	$30,500	$30,500	$30,500	$30,500
Average Science Advisors cost per 5-year period			$151,000	$151,000	$151,000	$151,000	$151,000
Total cost per 5-year period			$181,500	$181,500	$181,500	$181,500	$181,500

Assumptions:
Adaptive management experiments are covered under the monitoring staff and directed research categories.
It is assumed that the Independent Conservation Assessment Team will meet once every 4 years and have:

5	members
$6,100	stipend per member per 5-year period

It is assumed that the Science Advisors will contain:

10	members
$15,100	stipend per member per 5-year period

Field monitoring and analysis contractors

Base cost per hour	$121	$91	$ per hour
Travel	$28	$28	$ per day
assuming	50	50	miles
and	$0.550	$0.550	$ per mile
Hours per day	8	8	hours per day
Total cost per hour including amortized per diem and travel (assuming 10-hour days)	$124.44	$94.44	$ per hour

Assumptions:
Bay Area billing rate, assuming all work will be conducted from a local office (no per diem needed).

Remedial Measures for Initial Urban Development Area
2012 Update

	Implementation Period (Years)							
Capital costs	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total**
Remedial measures	$0	$0	$30,000	$84,660	$471,559	$471,559	$1,306,519	$2,364,295
Total	**$0**	**$0**	**$30,000**	**$84,660**	**$471,559**	**$471,559**	**$1,306,519**	**$2,364,295**

Remedial Measures

	0	1-5	6-10	11-15	16-20	21-25	26-30
Cost of created/restored habitat per 5-year period	$0	$0	$4,174,800	$4,174,800	$4,174,800	$4,174,800	$4,174,800
Cost for remedial measures for created/restored habitat per 5-year period	$0	$0	$0	$0	$417,480	$417,480	$1,252,440
Area of new preserve not including created/restored habitat per 5-year period	-	7,404	3,262	3,262	3,262	3,262	3,262
Cost for remedial measures for preserves per 5-year period			$0	$54,660	$24,079	$24,079	$24,079
Cost for other remedial measures per 5-year period			$30,000	$30,000	$30,000	$30,000	$30,000
Total cost per 5-year period			$30,000	$84,660	$471,559	$471,559	$1,306,519

Assumptions:

2%	Percent of annual preserve management and maintenance cost assumed to be needed for preserve remedial actions.
10%	Percent of created/restored habitat for which remedial measures will be required.
$369	Cost per acre for preserve management and maintenance in years 26-30.

Remedial actions are assumed to occur in the second 5-year period after habitat is created/restored or preserve land is purchased, with the exception of remedial actions for habitat created/restored in years 21-30. The cost for these remedial actions is included in years 26-30 so that it can be included in this cost estimate.

The remedial cost for preserve lands is assumed to be a percentage of the cost per acre for preserve management and maintenance in years 26-30, and is assumed to be needed once, in the second 5-year period after the preserve land is purchased.

The cost for other remedial measures includes the costs for restoration or maintenance of preserve areas because of other changed circumstances,

Contingency Fund for Initial Urban Development Area
2012 Update

Contingency Fund

	0	1-5	6-10	11-15	16-20	21-25	26-30	Total
Total cost of program excluding land acquisition and habitat restoration capital costs	$0	$0	$16,123,945	$16,370,919	$19,059,586	$19,982,559	$21,269,481	$92,806,490
Contingency fund	**$0**	**$0**	**$806,197**	**$818,546**	**$952,979**	**$999,128**	**$1,063,474**	**$4,640,325**

Assumptions:

5.0% Percent of total program funding needed for contingency fund

E. APPENDIX: MAXIMUM UDA COST MODEL UPDATE

The following tables provide comprehensive documentation for the cost model update based on estimated impacts for the maximum urban development area.

East Contra Costa County HCP/NCCP
2012 Update
Implementation Cost Data and Assumptions with Maximum Urban Development Area

Summary of East Contra Costa HCP Implementation Costs for Maximum Urban Development Area
2012 Update
(Rounded to the Nearest $10,000)

Total Costs

	Implementation Period (Years)							
Cost Category	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total (2012)**
Program Administration	$160,000	$2,700,000	$3,480,000	$3,390,000	$3,410,000	$3,420,000	$3,440,000	$19,990,000
Land Acquisition	$190,000	$46,260,000	$29,120,000	$29,120,000	$29,120,000	$29,120,000	$29,120,000	$192,030,000
Planning and Design	$0	$930,000	$2,390,000	$1,390,000	$1,080,000	$1,080,000	$920,000	$7,790,000
Habitat Restoration/Creation	$0	$1,820,000	$7,880,000	$8,090,000	$8,090,000	$8,080,000	$7,920,000	$41,890,000
Environmental Compliance	$0	$510,000	$570,000	$570,000	$570,000	$570,000	$0	$2,780,000
Preserve Management and Maintenance	$0	$90,000	$5,480,000	$6,400,000	$7,710,000	$9,890,000	$10,680,000	$40,260,000
Monitoring, Research, and Adaptive Management	$0	$460,000	$2,270,000	$3,270,000	$3,780,000	$4,220,000	$4,520,000	$18,520,000
Remedial Measures	$0	$0	$30,000	$80,000	$540,000	$540,000	$1,490,000	$2,680,000
East Bay Regional Park District - initial operational costs (est.)	$0	$1,320,000	$0	$0	$0	$0	$0	$1,320,000
Contingency	$0	$0	$870,000	$920,000	$1,020,000	$1,150,000	$1,210,000	$5,170,000
Total	**$350,000**	**$54,090,000**	**$52,090,000**	**$53,230,000**	**$55,320,000**	**$58,070,000**	**$59,300,000**	**$332,430,000**

Capital Costs

	Implementation Period (Years)							
Cost Category	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total (2012)**
Program Administration	INCLUDED IN STAFF AND OVERHEAD COSTS							
Land Acquisition: acquisition and site improvements	$0	$44,890,000	$28,010,000	$28,010,000	$28,010,000	$28,010,000	$28,010,000	$184,950,000
Planning and Design	$0	$0	$10,000	$20,000	$10,000	$10,000	$10,000	$60,000
Habitat Restoration/Creation	$0	$0	$4,760,000	$4,780,000	$4,770,000	$4,760,000	$4,760,000	$23,850,000
Preserve Management and Maintenance	$0	$0	$1,480,000	$1,720,000	$1,690,000	$2,490,000	$2,360,000	$9,740,000
Monitoring, Research, and Adaptive Management	$0	$0	$10,000	$20,000	$10,000	$10,000	$10,000	$60,000
Remedial Measures	$0	$0	$30,000	$80,000	$540,000	$540,000	$1,490,000	$2,680,000
Total	**$0**	**$44,890,000**	**$34,300,000**	**$34,630,000**	**$35,030,000**	**$35,820,000**	**$36,640,000**	**$221,340,000**

Operational Costs

	Implementation Period (Years)							
Cost Category	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total (2012)**
Program Administration	$160,000	$2,700,000	$3,480,000	$3,390,000	$3,410,000	$3,420,000	$3,440,000	$19,990,000
Land Acquisition: transactional costs	$190,000	$1,370,000	$1,100,000	$1,100,000	$1,100,000	$1,100,000	$1,100,000	$7,070,000
Planning and Design	$0	$930,000	$2,380,000	$1,370,000	$1,070,000	$1,070,000	$910,000	$7,730,000
Habitat Restoration/Creation	$0	$1,820,000	$3,120,000	$3,310,000	$3,320,000	$3,320,000	$3,160,000	$18,040,000
Environmental Compliance	$0	$510,000	$570,000	$570,000	$570,000	$570,000	$0	$2,780,000
Preserve Management and Maintenance	$0	$90,000	$4,010,000	$4,680,000	$6,020,000	$7,400,000	$8,330,000	$30,520,000
Monitoring, Research, and Adaptive Management	$0	$460,000	$2,270,000	$3,270,000	$3,780,000	$4,220,000	$4,520,000	$18,520,000
East Bay Regional Park District - initial operational costs (est.)	$0	$1,320,000	$0	$0	$0	$0	$0	$1,320,000
Contingency	$0	$0	$870,000	$920,000	$1,020,000	$1,150,000	$1,210,000	$5,170,000
Total	**$350,000**	**$9,200,000**	**$17,800,000**	**$18,610,000**	**$20,290,000**	**$22,250,000**	**$22,670,000**	**$111,140,000**

NOTE: EBRPD estimate of initial operational costs reflects all costs except land acquisition. The estimate is based on average cost of $86 per acre derived from the maintenance of effort estimate in the 2006 Plan (Appendix H) applied to actual acres acquired and managed during the 2008 - 2012 period. For this 2012 update, the estimate is reduced 50 percent to reflect the lag between the rapid land acquisition of this initial period and the allocation of operational resources associated with those land acquisitions.

Summary of East Contra Costa HCP Implementation Costs for Maximum Urban Development Area
2012 Update
(Not Rounded)

Total Costs

	Implementation Period (Years)							
Cost Category	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total**
Program Administration	$157,212	$2,696,566	$3,476,026	$3,392,385	$3,408,013	$3,423,641	$3,439,269	$19,993,112
Land Acquisition	$187,840	$46,260,511	$29,115,518	$29,115,518	$29,115,518	$29,115,518	$29,115,518	$192,025,941
Planning and Design	$0	$934,262	$2,389,557	$1,390,143	$1,083,893	$1,076,560	$916,060	$7,790,475
Habitat Restoration/Creation	$0	$1,822,840	$7,880,324	$8,091,911	$8,088,411	$8,081,077	$7,920,577	$41,885,140
Environmental Compliance	$0	$512,855	$567,600	$567,600	$567,600	$567,600	$0	$2,783,255
Preserve Management and Maintenance	$0	$92,002	$5,482,874	$6,402,267	$7,709,939	$9,890,401	$10,683,473	$40,260,956
Monitoring, Research, and Adaptive Management	$0	$456,421	$2,274,179	$3,271,724	$3,778,097	$4,224,889	$4,518,514	$18,523,823
Remedial Measures	$0	$0	$30,000	$82,736	$537,318	$537,318	$1,488,799	$2,676,172
East Bay Regional Park District - initial operational costs (est.)	$0	$1,320,000	$0	$0	$0	$0	$0	$1,320,000
Contingency Fund	$0	$0	$867,158	$922,068	$1,020,793	$1,152,204	$1,210,464	$5,172,688
Total	**$345,052**	**$54,095,455**	**$52,083,236**	**$53,236,352**	**$55,309,583**	**$58,069,209**	**$59,292,675**	**$332,431,562**

Capital Costs

	Implementation Period (Years)							
Cost Category	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total**
Program Administration	INCLUDED IN STAFF AND OVERHEAD COSTS							
Land Acquisition: acquisition and site improvements	$0	$44,886,900	$28,013,347	$28,013,347	$28,013,347	$28,013,347	$28,013,347	$184,953,634
Planning and Design	$0	$0	$7,333	$22,000	$14,667	$7,333	$7,333	$58,667
Habitat Restoration/Creation	$0	$0	$4,764,737	$4,779,403	$4,772,070	$4,764,737	$4,764,737	$23,845,683
Preserve Management and Maintenance	$0	$0	$1,476,200	$1,724,200	$1,693,000	$2,493,700	$2,356,900	$9,744,000
Monitoring, Research, and Adaptive Management	$0	$0	$7,333	$22,000	$14,667	$7,333	$7,333	$58,667
Remedial Measures	$0	$0	$30,000	$82,736	$537,318	$537,318	$1,488,799	$2,676,172
Total	**$0**	**$44,886,900**	**$34,298,950**	**$34,643,686**	**$35,045,069**	**$35,823,769**	**$36,638,449**	**$221,336,823**

Operational Costs

	Implementation Period (Years)							
Cost Category	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total**
Program Administration	$157,212	$2,696,566	$3,476,026	$3,392,385	$3,408,013	$3,423,641	$3,439,269	$19,993,112
Land Acquisition: due diligence, transaction costs	$187,840	$1,373,611	$1,102,171	$1,102,171	$1,102,171	$1,102,171	$1,102,171	$7,072,307
Planning and Design	$0	$934,262	$2,382,223	$1,368,143	$1,069,227	$1,069,227	$908,727	$7,731,809
Habitat Restoration/Creation	$0	$1,822,840	$3,115,587	$3,312,507	$3,316,341	$3,316,341	$3,155,841	$18,039,456
Environmental Compliance	$0	$512,855	$567,600	$567,600	$567,600	$567,600	$0	$2,783,255
Preserve Management and Maintenance	$0	$92,002	$4,006,674	$4,678,067	$6,016,939	$7,396,701	$8,326,573	$30,516,956
Monitoring, Research, and Adaptive Management	$0	$456,421	$2,274,179	$3,271,724	$3,778,097	$4,224,889	$4,518,514	$18,523,823
East Bay Regional Park District - initial operational costs (est.)	$0	$1,320,000						$1,320,000
Contingency Fund	$0	$0	$867,158	$922,068	$1,020,793	$1,152,204	$1,210,464	$5,172,688
Total	**$345,052**	**$9,208,555**	**$17,791,619**	**$18,614,666**	**$20,279,181**	**$22,252,774**	**$22,661,560**	**$111,153,406**

NOTE: EBRPD estimate of initial operational costs reflects all costs except land acquisition. The estimate is based on average cost of $86 per acre derived from the maintenance of effort estimate in the 2006 Plan (Appendix H) applied to actual acres acquired and managed during the 2008 - 2012 period. For this 2012 update, the estimate is reduced 50 percent to reflect the lag between the rapid land acquisition of this initial period and the allocation of operational resources associated with those land acquisitions.

Consumer Price Index - All Urban Consumers

Series Id: CUURA422SA0
Not Seasonally Adjusted
Area: San Francisco-Oakland-San Jose, CA
Item: All items
Base Period: 1982-84=100
Years: 2002 to 2012

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	HALF1	HALF2	2012 dollars
2002		191.3		193.0		193.2		193.5		194.3		193.2	193.0	192.3	193.7	
2003		197.7		197.3		196.3		196.3		196.3		195.3	196.4	196.8	196.1	
2004		198.1		198.3		199.0		198.7		200.3		199.5	198.8	198.2	199.5	
2005		201.2		202.5		201.2		203.0		205.9		203.4	202.7	201.5	203.9	**0.8513**
2006		207.1		208.9		209.1		210.7		211.0		210.4	209.2	207.9	210.6	**0.8786**
2007		213.688		215.842		216.123		216.240		217.949		218.485	216.048	214.736	217.361	**0.9074**
2008		219.612		222.074		225.181		225.411		225.824		218.528	222.767	221.730	223.804	**0.9356**
2009		222.166		223.854		225.692		225.801		226.051		224.239	224.395	223.305	225.484	**0.9424**
2010		226.145		227.697		228.110		227.954		228.107		227.658	227.469	226.994	227.944	**0.9554**
2011		229.981		234.121		233.646		234.608		235.331		234.327	233.390	232.082	234.698	**0.9802**
2012		236.880		238.985		239.806		241.170						238.099		**1.0000**

Employment cost index: December 2005 = 100

Private industry workers

Professional, scientific and technical services	**121.1**
Cost adjustment factor	**0.82576**

NOTE: Orignal unit cost estimates for the 2006 HCP/NCCP were in 2005 dollars, inflated to 2006 dollars for use in the plan document.

Legend

red numbers are assumptions or data entered directly into the worksheet
blue numbers are links from other worksheets in the workbook
black numbers are calculations based on the above numbers

Cost factors are colored coded by primary source considered:

EBRPD (for HCP)
CCWD (for HCP)
Average of CCWD/EBRPD
ECCC Habitat Conservancy
J&S and EPS (for HCP)
AECOM, 2012
Updated by HEG, 2012
Other estimated factors
Actual costs start-up and years 1 - 5
Estimate of EBRPD contributions to operational costs, start up and years 1-5
Summary actuals supercede model detail

Acres Acquired, Managed, and Restored within HCP/NCCP Preserves for Maximum Urban Development Area
2012 Update

	Max UDA	Source
Total acres acquired/managed	30,000	(Table 5-9: mid-point of range)
Pond acres acquired	16	(Table 5-5b)

Acres Acquired and Managed by Time Period

	Implementation Period (Years)							
	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total**
Total reserve acres acquired per period	-	7,417	4,517	4,517	4,517	4,517	4,517	30,000
Total reserve acres managed, per period		5,000	5,000	5,000	5,000	5,000	5,000	30,000
Total reserve acres managed, cumulative	-	5,000	10,000	15,000	20,000	25,000	30,000	30,000
Pond acres acquired per period		7.03	1.8	1.8	1.8	1.8	1.8	16
Pond acres managed per period		2.67	2.7	2.7	2.7	2.7	2.7	16
Pond acres managed cumulative, including restoration	-	3.07	10.1	17.0	24.0	31.0	38.0	38.0

Assumptions:
Actual acquisition accounted for in years 1-5; the net remaining requirement is allocated evenly over the next 5 periods
Management and monitoring on acquired land and ponds has not kept pace with actual acquisition; land is assumed to come under management in 6 equal increments over the 30-year p

9,099.4	Total acres acquired through 2012
1,682.3	Easement acres on parcels acquired
7,417.1	Total acres acquired and credited toward reserve

Land Cover Type Restored/Created by Time Period

	Implementation Period (Years)							
Land Cover Type (acres except where noted)	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total**
oak savanna	-	-	33.0	33.0	33.0	33.0	33.0	165.0
riparian woodland/scrub	-	0.9	10.8	10.8	10.8	10.8	10.8	55.0
perennial wetland (jurisdictional boundary)	-	0.2	6.5	6.5	6.5	6.5	6.5	32.5
seasonal wetland (jurisdictional boundary)	-	8.2	9.1	9.1	9.1	9.1	9.1	53.6
alkali wetland (jurisdictional boundary)	-	2.5	4.2	4.2	4.2	4.2	4.2	23.6
slough/channel	-	-	14.4	14.4	14.4	14.4	14.4	72.0
open water	-	-	-	-	-	-	-	-
ponds	-	0.4	4.3	4.3	4.3	4.3	4.3	22.0
streams (miles)	-	0.9	1.0	1.0	1.0	1.0	1.0	5.8
Total (acres)	-	**12.8**	**82.9**	**82.9**	**82.9**	**82.9**	**82.9**	**427.2**

Assumptions:
Actual restoration accounted for in years 1-5; the net remaining requirement is allocated evenly over the next 5 periods
For total acre calculation, streams are assumed to be 5 feet wide

30%	% of perennial, seasonal or alkali wetland complex acreage assumed to be jurisdictional wetland; for compensatory restoration onl

Defining sites:	average acres/site or linear feet/site (streams)	% requiring substantial soil disturbance
riparian/woodland scrub sites by acreage conversion:	3	20%
wetlands and pond sites by acreage conversion	2.0	80%
stream sites by linear feet conversion:	1,000	90%

Restoration sites that require significant soil disturbance by land-cover type USED IN MONITORING COST ESTIMATE

	Implementation Period (Years)							
Land Cover Type Restoration Sites	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total**
riparian woodland/scrub	-	0.1	0.7	0.7	0.7	0.7	0.7	3.7
perennial wetland	-	0.1	2.6	2.6	2.6	2.6	2.6	13.0
seasonal wetland	-	3.3	3.6	3.6	3.6	3.6	3.6	21.4
alkali wetland	-	1.0	1.7	1.7	1.7	1.7	1.7	9.4
ponds	-	-	5.8	5.8	5.8	5.8	5.8	28.8
streams (miles/acres converted to sites)	-	4.2	4.7	4.7	4.7	4.7	4.7	27.6
Total sites for monitoring cost estimate	-	8.6	19.1	19.1	19.1	19.1	19.1	103.9

Assumptions:
average acres/site and percent of sites requiring substantial soil disturbance calculated in table above.
Seasonal, perennial, and alkali wetland acreages in Tables 5-16 and 5-17 are for wetland complexes; for cost estimates and revenue projections the wetted acres of these complexes are assumed to be 30% of the total acres.

Summary of HCP/NCCP Personnel
2012 Update

		Number of FTEs						
2012 UPDATE STAFFING		0	1-5	6-10	11-15	16-20	21-25	26-30
Administrative staffing								
Principal Planner				0.50	0.80	0.80	0.80	0.80
Senior Planner				0.30	0.50	0.50	0.50	0.50
Senior GIS Planner				0.25	0.25	0.25	0.25	0.25
Associate Planner				0.80	-	-	-	-
Assistant Planner				0.25	0.50	0.50	0.50	0.50
Accountant				0.25	0.25	0.25	0.25	0.25
Admin – Secretary (included in rates)				-	-	-	-	-
IT Support Staff (included in rates)				-	-	-	-	-
Total		-	-	2.35	2.30	2.30	2.30	2.30
Land acquisition staffing								
Principal Planner				0.20	0.20	0.20	0.20	0.20
Total				0.20	0.20	0.20	0.20	0.20
Planning and design, restoration, and monitoring staffing								
Principal Planner				0.10	-	-	-	-
Senior Planner				0.20	-	-	-	-
Senior Scientist				0.17	0.33	0.33	0.33	0.33
Project Manager				0.17	0.33	0.33	0.33	0.33
Technical Support				0.17	0.67	0.67	0.67	0.33
Total				0.80	1.33	1.33	1.33	1.00
Habitat restoration and creation staffing								
Principal Planner				0.10	-	-	-	-
Senior Planner				0.20	-	-	-	-
Senior Scientist				0.17	0.33	0.33	0.33	0.33
Project Manager				0.17	0.33	0.33	0.33	0.33
Technical Support				0.17	0.67	0.67	0.67	0.33
Total				0.80	1.33	1.33	1.33	1.00
Environmental compliance staffing								
Principal Planner				-	-	-	-	-
Total				-	-	-	-	-
Preserve management and maintenance staffing								
Principal Planner				0.10	-	-	-	-
Senior Planner				0.20	-	-	-	-
Preserve Manager				1.00	1.00	1.00	1.00	1.00
Preserve Maintenance Staff				4.00	5.00	7.00	9.00	10.00
Total				5.30	6.00	8.00	10.00	11.00
Monitoring and research staffing								
Principal Planner				-	-	-	-	-
Senior Planner				0.10	-	-	-	-
Senior Scientist				0.17	0.33	0.33	0.33	0.33
Project Manager				0.17	0.33	0.33	0.33	0.33
Technical Support				0.17	0.67	0.67	0.67	0.33
Total				0.60	1.33	1.33	1.33	1.00
Overall Staffing Plan								
Principal Planner				1.00	1.00	1.00	1.00	1.00
Senior Planner				1.00	0.50	0.50	0.50	0.50
Senior GIS Planner				0.25	0.25	0.25	0.25	0.25
Associate Planner				0.80	-	-	-	-
Assistant Planner				0.25	0.50	0.50	0.50	0.50
Accountant				0.25	0.25	0.25	0.25	0.25
Admin – Secretary (included in rates)				-	-	-	-	-
IT Support Staff (included in rates)				-	-	-	-	-
Senior Scientist				0.50	1.00	1.00	1.00	1.00
Project Manager				0.50	1.00	1.00	1.00	1.00
Technical Support				0.50	2.00	2.00	2.00	1.00
Preserve Manager				1.00	1.00	1.00	1.00	1.00
Preserve Maintenance Staff				4.00	5.00	7.00	9.00	10.00
Total				**10.05**	**12.50**	**14.50**	**16.50**	**16.50**

HCP/NCCP Program Administration for Maximum Urban Development Area
2012 Update

	Implementation Period (Years)							
	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total**
Capital Costs								
Capital Subtotal			**INCLUDED IN STAFF AND OVERHEAD COSTS**					
Operational Costs								
Staff and overhead			$2,655,970	$2,702,500	$2,702,500	$2,702,500	$2,702,500	
Travel			$20,000	$20,000	$20,000	$20,000	$20,000	
Vehicle / mileage allowance			$20,000	$20,000	$20,000	$20,000	$20,000	
Insurance			$100,000	$100,000	$100,000	$100,000	$100,000	
Legal assistance			$388,800	$243,000	$243,000	$243,000	$243,000	
Financial analysis assistance			$40,000	$40,000	$40,000	$40,000	$40,000	
Financial audit (annual)			$75,000	$75,000	$75,000	$75,000	$75,000	
In-lieu funding for law enforcement and firefighting			$31,256	$46,885	$62,513	$78,141	$93,769	
Public relations and outreach			$145,000	$145,000	$145,000	$145,000	$145,000	
Operational Subtotal	$157,212	$2,696,566	**$3,476,026**	**$3,392,385**	**$3,408,013**	**$3,423,641**	**$3,439,269**	
Total	**$157,212**	**$2,696,566**	**$3,476,026**	**$3,392,385**	**$3,408,013**	**$3,423,641**	**$3,439,269**	**$19,993,112**

Staff and Overhead

Position	Hourly Cost per FTE with Overhead & Support	Number of FTEs						
		0	1-5	6-10	11-15	16-20	21-25	26-30
Principal Planner and Support	$155			0.50	0.80	0.80	0.80	0.80
Senior Planner and Support (grants then permitting)	$126			0.30	0.50	0.50	0.50	0.50
Senior GIS Planner and Support	$135			0.25	0.25	0.25	0.25	0.25
Associate Planner and Support (permitting)	$110			0.80	-	-	-	-
Assistant Planner and Support (grants)	$85			0.25	0.50	0.50	0.50	0.50
Accountant and Support	$97			0.25	0.25	0.25	0.25	0.25
Total FTEs				2.35	2.30	2.30	2.30	2.30
Total cost per year				$531,194	$540,500	$540,500	$540,500	$540,500
Total cost per 5-year period				$2,655,970	$2,702,500	$2,702,500	$2,702,500	$2,702,500

Notes/Assumptions:

Hourly cost factor includes staff salary and benefits, salaries and benefits of administrative support staff (secretaries, clerks, IT staff, etc.) and associated overhead, including space and utility costs, office furniture, equipment, and supplies, .

Some actual costs for program administration staff and contractors through 2012 are included in actual costs under land acquisition, planning and design, preserve management, restoration, monitoring and environmental compliance.

1,880 hours per year

Other Administrative Costs

	Implementation Period (years)						
	0	1-5	6-10	11-15	16-20	21-25	26-30
CHCPC membership			$25,000	$25,000	$25,000	$25,000	$25,000
Miscellaneous equipment and supplies			$5,000	$5,000	$5,000	$5,000	$5,000
Total cost per 5-year period			$30,000	$30,000	$30,000	$30,000	$30,000

Assumption:

$5,000	annual cost for CHCPC membership, based on actual Conservancy experience through 2012
$1,000	annual cost based on actual Conservancy experience through 2012

Vehicle / Mileage Allowance

	Implementation Period (years)						
	0	1-5	6-10	11-15	16-20	21-25	26-30
Total cost per 5-year period			$20,000	$20,000	$20,000	$20,000	$20,000

Assumption:

$4,000	annual cost based on actual Conservancy experience through 2012

Travel

	Implementation Period (years)						
	0	1-5	6-10	11-15	16-20	21-25	26-30
Total cost per 5-year period			$20,000	$20,000	$20,000	$20,000	$20,000

Assumption:

$4,000	annual cost based on actual Conservancy experience through 2012

Insurance

	Implementation Period (years)						
	0	1-5	6-10	11-15	16-20	21-25	26-30
Total cost per 5-year period			$100,000	$100,000	$100,000	$100,000	$100,000

Assumption:

$20,000	annual cost based on actual Conservancy experience through 2012

Legal Assistance

	0	1-5	6-10	11-15	16-20	21-25	26-30	Total
Cost per 5-year period			$388,800	$243,000	$243,000	$243,000	$243,000	$1,360,800

Assumptions:

$360	Hourly rate for legal assistance
1,200	Total hours for legal assistance years 6 - 10
70%	Percentage allocated to program administration, years 6-10
20%	Percentage allocated to environmental compliance (regional wetlands permitting), years 6 - 10
10%	Percentage allocated to land acquisition, years 6 - 10
750	Total hours for legal assistance per period after year 10
90%	Percentage allocated to program administration, after year 10
10%	Percentage allocated to land acquisition, after year 10

Note: The legal assistance category covers legal assistance required for program administration and (for years 6 - 10) the environmental compliance category.
Legal assistance for land acquisition included in the due diligence cost factor.

Financial Analysis Assistance

	0	1-5	6-10	11-15	16-20	21-25	26-30	Total
Cost per 5-year period			$40,000	$40,000	$40,000	$40,000	$40,000	$200,000

Assumptions:

$40,000	Cost per period for financial analysis assistance

Financial analyst review will occur periodically over the life of the Plan (years 3, 6, 10, 15, 20 and 25).

Note: The financial analyis assistance category covers the periodic assistance of a financial analyst to review the program's cost/revenue balance, ensure that charges are adjusted in line with changing land costs and ensure compliance with State requirements on collection of fees.

Annual Financial Audit

	0	1-5	6-10	11-15	16-20	21-25	26-30	Total
Cost per 5-year period			$75,000	$75,000	$75,000	$75,000	$75,000	$375,000

Assumptions:

$15,000	Cost per year for financial audit services

Annual financial audit of the Conservancy's financial statements by an independent auditor are required by the JPA agreement and Government Code.

In-Lieu Payments for Law Enforcement and Firefighting

	0	1-5	6-10	11-15	16-20	21-25	26-30
Total preserve area per period	-	5,000	10,000	15,000	20,000	25,000	30,000
In-lieu payments for law enforcement per year			$2,468	$3,701	$4,935	$6,169	$7,403
In-lieu payments for firefighting per year			$3,784	$5,676	$7,567	$9,459	$11,351
Total cost per year			$6,251	$9,377	$12,503	$15,628	$18,754
Cost per 5-year period			$31,256	$46,885	$62,513	$78,141	$93,769

Assumptions:

$4.05	In-lieu law enforcement funding per preserve acre
$2.64	In-lieu firefighting funding per preserve acre

In lieu costs per preserve acres are based on CCWD's annual in-lieu payments and the assumption that CCWD manages approximately 20,000 acres of preserve.

Public Relations/Outreach

	0	1-5	6-10	11-15	16-20	21-25	26-30	Total
Total cost per year			$29,000	$29,000	$29,000	$29,000	$29,000	$145,000
Cost per 5-year period			$145,000	$145,000	$145,000	$145,000	$145,000	$725,000

HCP/NCCP Land Acquisition for Maximum Urban Development Area
2012 Update

	Implementation Period (Years)							
Capital Costs	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total**
Acquisition	$0	$44,886,900	$27,025,706	$27,025,706	$27,025,706	$27,025,706	$27,025,706	$180,015,432
Site improvements	$0	$0	$987,640	$987,640	$987,640	$987,640	$987,640	$4,938,201
Capital Subtotal	**$0**	**$44,886,900**	**$28,013,347**	**$28,013,347**	**$28,013,347**	**$28,013,347**	**$28,013,347**	**$184,953,634**
Operational Costs								
Program staff and overhead			$291,400	$291,400	$291,400	$291,400	$291,400	$1,457,000
Due diligence	$187,840	$1,373,611	$810,771	$810,771	$810,771	$810,771	$810,771	$5,615,307
Operational Subtotal	**$187,840**	**$1,373,611**	**$1,102,171**	**$1,102,171**	**$1,102,171**	**$1,102,171**	**$1,102,171**	**$7,072,307**
Total	**$187,840**	**$46,260,511**	**$29,115,518**	**$29,115,518**	**$29,115,518**	**$29,115,518**	**$29,115,518**	**$192,025,941**

Acquisition Cost over 30-year Program, Actuals year 1 - 5 + Projections Years 6 - 30 (2012 dollars)

	Cost per 5-year period								**Estimated**
Acquisition Analysis Zone	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total**	**Remainder 6-30**
Zone 1	$0	$6,944,900	$1,848,580	$1,848,580	$1,848,580	$1,848,580	$1,848,580	$16,187,801	$9,242,901
Zone 2	$0	$13,123,000	$9,342,998	$9,342,998	$9,342,998	$9,342,998	$9,342,998	$59,837,990	$46,714,990
Zone 3	$0	$1,830,000	$160,079	$160,079	$160,079	$160,079	$160,079	$2,630,395	$800,395
Zone 4	$0	$1,633,000	$8,301,843	$8,301,843	$8,301,843	$8,301,843	$8,301,843	$43,142,213	$41,509,213
Zone 5	$0	$21,356,000	$5,517,654	$5,517,654	$5,517,654	$5,517,654	$5,517,654	$48,944,272	$27,588,272
Zone 6 (incl. within ULL along Marsh Creek)	$0	$0	$1,854,552	$1,854,552	$1,854,552	$1,854,552	$1,854,552	$9,272,762	$9,272,762
Total	**$0**	**$44,886,900**	**$27,025,706**	**$27,025,706**	**$27,025,706**	**$27,025,706**	**$27,025,706**	**$180,015,432**	**$135,128,532**

Assumptions:

Actual acquisition cost through year 5. Updated 2012 land cost factors by cost category applied to remaining acquisition targets. Total remaining cost allocated evenly over remaining 5 periods.
See Appendix G and description of separate land cost model in Chapter 9.

Program Staff and Overhead

		Number of FTEs						
Position	Hourly Cost per FTE with Overhead & Support	0	1-5	6-10	11-15	16-20	21-25	26-30
Principal Planner and Support	$155			0.20	0.20	0.20	0.20	0.20
Total FTEs				0.20	0.20	0.20	0.20	0.20
Total cost per year				$58,280	$58,280	$58,280	$58,280	$58,280
Total cost per 5-year period				$291,400	$291,400	$291,400	$291,400	$291,400

Notes/Assumptions:

Hourly cost factor includes staff salary and benefits, salaries and benefits of administrative support staff (secretaries, clerks, IT staff, etc.) and associated overhead, including space and utility costs, office furniture, equipment, and supplies, .

1,880 hours per year

Due Diligence

Covers costs for appraisals, preliminary title report, boundary surveys, legal services, environmental and Phase 1 site assessment.
Based on actual costs for EBRPD and the Conservancy through 2012, these costs are 4 percent of acquisition costs.
The 2006 cost model used more detailed unit costs. The result of applying those cost factors in the 2006 model was that due diligence represented about 4% of land acquisition costs.
For the 2012 update the model is simplified to assume due diligence costs at 3% of land acquisition costs, consistent with the experience of the Conservancy through 2012, during which time more than 25 percent of the reserve goals for land acquisition took place. For years 6 -30, Conservancy staff time costs included in Program Staff line item above.

	Cost per 5-year period							
	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total**
Due Diligence	$187,840	$1,373,611	$810,771	$810,771	$810,771	$810,771	$810,771	$5,615,307

Assumptions:

3.0% Due diligence costs as a percentage of land acquisition cost.

Planning Surveys (Pre-Acquisition)

Based on Conservancy and EBRPD experience to date, initial property evaluation and planning is included in staff and consultant time.
Most significant field biological work is done post acquisition and is included as a monitoring cost.

Site Improvements

	Cost per 5-year period						
	0	1-5	6-10	11-15	16-20	21-25	26-30
Demolition of old facilities	$0	$0	$54,199	$54,199	$54,199	$54,199	$54,199
Repair of boundary fence	$0	$0	$486,300	$486,300	$486,300	$486,300	$486,300
Repair and replacement of gates	$0	$0	$212,279	$212,279	$212,279	$212,279	$212,279
Signs (boundary, landbank, etc.)	$0	$0	$130,981	$130,981	$130,981	$130,981	$130,981
Other security (e.g., boarding up barns)	$0	$0	$103,881	$103,881	$103,881	$103,881	$103,881
Total	$0	$0	$987,640	$987,640	$987,640	$987,640	$987,640

Assumptions:

Most demolition to date is a condition of the transaction and assigned to the seller. Other site improvement costs included in EBRPD operations and maintenance costs to date.

$6,000	Demolition of old facilities per 500 acres
$4,700	Repair and replacement of gates per 100 acres
$2,900	Signs (boundary, landbank, etc.) per 100 acres
$2,300	Other security (e.g., boarding up barns) per 100 acres
230	Estimated number of parcels acquired years 6 - 30 assuming 100 acres per parcel
15,000	Average parcel boundary length in linear feet (from GIS analysis, grouping adjacent parcels with the same landowner)
$4.70	Average cost per linear foot for boundary fence repair
15%	Proportion of boundary fence that needs repair

HCP/NCCP Management, Restoration, and Recreation Planning and Design for Maximum Urban Development Area 2012 Update

	Implementation Period (Years)							
Capital costs	0	1-5	6-10	11-15	16-20	21-25	26-30	Total
Vehicle purchase			$7,333	$22,000	$14,667	$7,333	$7,333	
Capital subtotal			**$7,333**	**$22,000**	**$14,667**	**$7,333**	**$7,333**	
Operational costs								
Program staff and overhead			$382,580	$0	$0	$0	$0	
Technical staff and overhead			$415,167	$987,000	$987,000	$987,000	$830,333	
Travel			$6,667	$6,667	$6,667	$6,667	$6,667	
Vehicle Fuel and Maintenance			$3,833	$11,500	$15,333	$15,333	$11,500	
Contractors			$1,573,977	$362,977	$60,227	$60,227	$60,227	
Operational subtotal	$0	$934,262	**$2,382,223**	**$1,368,143**	**$1,069,227**	**$1,069,227**	**$908,727**	
Total	**$0**	**$934,262**	**$2,389,557**	**$1,390,143**	**$1,083,893**	**$1,076,560**	**$916,060**	**$7,790,475**

Program Staff and Overhead

		Number of FTEs						
Position	Hourly Cost per FTE with Overhead & Support	0	1-5	6-10	11-15	16-20	21-25	26-30
Principal Planner and Suppport	$155			0.10	-	-	-	-
Senior Planner and Support	$126			0.20	-	-	-	-
Total FTEs				0.30	-	-	-	-
Total cost per year				$76,516	$0	$0	$0	$0
Total cost per 5-year period				$382,580	$0	$0	$0	$0

Note: Hourly cost factor includes staff salary and benefits, salaries and benefits of administrative support staff (secretaries, clerks, IT staff, etc.) and associated overhead, including space and utility costs, office furniture, equipment, and supplies, .

Technical Staff and Overhead

		Number of FTEs						
Position	Hourly Cost per FTE with Overhead & Support	0	1-5	6-10	11-15	16-20	21-25	26-30
Senior scientist and support	$130			0.17	0.33	0.33	0.33	0.33
Project Manager and support	$85			0.17	0.33	0.33	0.33	0.33
Technical support	$50			0.17	0.67	0.67	0.67	0.33
Total FTEs				0.50	1.33	1.33	1.33	1.00
Total cost per year				$83,033	$197,400	$197,400	$197,400	$166,067
Total cost per 5-year period				$415,167	$987,000	$987,000	$987,000	$830,333

Notes/Assumptions:

Hourly cost factor includes staff salary and benefits, salaries and benefits of administrative support staff (secretaries, clerks, IT staff, etc.) and associated overhead, including space and utility costs, office furniture, equipment, and supplies, .

1,880 hours per year

Travel (shared with restoration and monitoring)

	Implementation Period (years)						
	0	1-5	6-10	11-15	16-20	21-25	26-30
Total cost per 5-year period			$6,667	$6,667	$6,667	$6,667	$6,667

Assumption:

$4,000	annual cost based on actual Conservancy experience through 2012
0.33	Proportion of travel costs that are used for planning (one third are used for restoration, and are included in the restoration spreadsheet,and one-third are used for monitoring, and are included in the monitoring spreadsheet).

Vehicles and Fuel (shared with restoration and monitoring)

	Number of vehicles						
	0	1-5	6-10	11-15	16-20	21-25	26-30
Total FTEs (Shared Technical)			1.50	4.00	4.00	4.00	3.00
Number of vehicles purchased			1	3	2	1	1
Number of vehicles retired			-	1	1	1	2
Total number of vehicles			1	3	4	4	3
Total vehicle purchase cost per period			$7,333	$22,000	$14,667	$7,333	$7,333
Total vehicle fuel and maintenance per year			$767	$2,300	$3,067	$3,067	$2,300
Total vehicle fuel and maintenance per 5-year period			$3,833	$11,500	$15,333	$15,333	$11,500

Assumptions:

$22,000	Vehicle purchase price
$1,100	Fuel cost per vehicle per year
$1,200	Maintenance cost per vehicle per year
0.33	Proportion of vehicle and fuel costs that are used for planning (one third are used for restoration, and are included in the restoration spreadsheet, and one-third are used for monitoring, and are included in the monitoring spreadsheet).

Contractors

	Contract value per 5-year period						
Contractor category	0	1-5	6-10	11-15	16-20	21-25	26-30
Management planning			$908,250	$181,650	$0	$0	$0
Restoration planning			$605,500	$121,100	$0	$0	$0
Restoration design			$60,227	$60,227	$60,227	$60,227	$60,227
Total per 5-year period			$1,573,977	$362,977	$60,227	$60,227	$60,227

Assumptions:

$727	Cost per acre for restoration design (does not include conceptual restoration planning or creation of plans, specifications, and engineering documents).

The total area of restoration that occurs in each 5-year period will be designed as three different projects (approximately 14 acres each).
Restoration designs will be created in the 5-year period in which construction takes place.

The management and restoration planning and design staff and contractors will conduct the following activities:

Management Planning
Management plans prepared for cropland/pasture preserves
Management plans prepared for natural area preserves
Grazing leases developed or renewed
Jurisdictional wetland delineation
Exotic Plant Control Program (Preserve System-wide)
Fire management/control plan (System-wide)

Restoration Planning & Design
Pond creation plan and construction designs
Wetland creation plan and construction designs
Stream restoration plan and construction designs
Oak savanna restoration plan and construction designs
Riparian woodland/scrub restoration plan and construction designs

HCP/NCCP Habitat Restoration/Creation for Maximum Urban Development Area
2012 Update

	Implementation Period (Years)							
Capital Costs	0	1-5	6-10	11-15	16-20	21-25	26-30	Total
Creation/Restoration			$4,757,403	$4,757,403	$4,757,403	$4,757,403	$4,757,403	
Vehicle purchase			$7,333	$22,000	$14,667	$7,333	$7,333	
Capital Subtotal			**$4,764,737**	**$4,779,403**	**$4,772,070**	**$4,764,737**	**$4,764,737**	
Operational Costs								
Program staff and overhead			$382,580	$0	$0	$0	$0	
Technical staff and overhead			$415,167	$987,000	$987,000	$987,000	$830,333	
Travel			$6,667	$6,667	$6,667	$6,667	$6,667	
Vehicle Fuel and Maintenance			$3,833	$11,500	$15,333	$15,333	$11,500	
Contractors			$2,307,341	$2,307,341	$2,307,341	$2,307,341	$2,307,341	
Operational Subtotal	$0	**$1,822,840**	**$3,115,587**	**$3,312,507**	**$3,316,341**	**$3,316,341**	**$3,155,841**	
Total	**$0**	**$1,822,840**	**$7,880,324**	**$8,091,911**	**$8,088,411**	**$8,081,077**	**$7,920,577**	**$41,885,140**

Land Cover Type Restored/Created

	Implementation Period (Years)							
Land Cover Type (acres)	0	1-5	6-10	11-15	16-20	21-25	26-30	Total
oak savanna	-	-	33.0	33.0	33.0	33.0	33.0	165.0
riparian woodland/scrub	-	0.9	10.8	10.8	10.8	10.8	10.8	55.0
perennial wetland	-	0.2	6.5	6.5	6.5	6.5	6.5	32.5
seasonal wetland	-	8.2	9.1	9.1	9.1	9.1	9.1	53.6
alkali wetland	-	2.5	4.2	4.2	4.2	4.2	4.2	23.6
slough/channel	-	-	14.4	14.4	14.4	14.4	14.4	72.0
open water	-	-	-	-	-	-	-	-
ponds	-	0.4	4.3	4.3	4.3	4.3	4.3	22.0
streams (miles)	-	0.9	1.0	1.0	1.0	1.0	1.0	5.8
Total (acres)	-	12.8	82.9	82.9	82.9	82.9	82.9	427.2

Cost of Restoration/Creation Construction

			Implementation Period (Years)						
Land Cover Type	Units	Cost per unit	0	1-5	6-10	11-15	16-20	21-25	26-30
oak savanna	acres	$2,600			$102,960	$102,960	$102,960	$102,960	$102,960
riparian woodland/scrub	acres	$38,800			$503,779	$503,779	$503,779	$503,779	$503,779
perennial wetland	acres	$63,300			$490,702	$490,702	$490,702	$490,702	$490,702
seasonal wetland	acres	$75,500			$821,923	$821,923	$821,923	$821,923	$821,923
alkali wetland	acres	$76,400			$386,890	$386,890	$386,890	$386,890	$386,890
slough/channel	acres	$57,500			$993,600	$993,600	$993,600	$993,600	$993,600
open water	acres	$83,900			$0	$0	$0	$0	$0
ponds	acres	$83,900			$434,938	$434,938	$434,938	$434,938	$434,938
streams	linear feet	$164			$1,022,612	$1,022,612	$1,022,612	$1,022,612	$1,022,612
	Total				$4,757,403	$4,757,403	$4,757,403	$4,757,403	$4,757,403

Assumptions:

Construction costs depend mostly on the amount, depth, and linear extent of earthwork expected, and whether water control structure are required. Plant propagation, seeding, and watering also included.

20%	Contingency factor for restoration projects; assumed higher than the standard contingency because of the higher degree of uncertainty in this portion of the conservation program.

Program Staff and Overhead

Position	Hourly Cost per FTE with Overhead & Support	Number of FTEs						
		0	1-5	6-10	11-15	16-20	21-25	26-30
Principal Planner and Support	$155			0.10	-	-	-	-
Senior Planner and Support	$126			0.20	-	-	-	-
Total FTEs				0.30	-	-	-	-
Total cost per year				$76,516	$0	$0	$0	$0
Total cost per 5-year period				$382,580	$0	$0	$0	$0

Note: Hourly cost factor includes staff salary and benefits, salaries and benefits of administrative support staff (secretaries, clerks, IT staff, etc.) and associated overhead, including space and utility costs, office furniture, equipment, and supplies, .

1,880 hours per year

Technical Staff and Overhead

Position	Hourly Cost per FTE with Overhead &	Number of FTEs						
		0	1-5	6-10	11-15	16-20	21-25	26-30
Senior scientist and support	$130			0.17	0.33	0.33	0.33	0.33
Project Manager and support	$85			0.17	0.33	0.33	0.33	0.33
Technical support	$50			0.17	0.67	0.67	0.67	0.33
Total FTEs				0.50	1.33	1.33	1.33	1.00
Total cost per year				$83,033	$197,400	$197,400	$197,400	$166,067
Cost per 5-year period				$415,167	$987,000	$987,000	$987,000	$830,333

Assumptions:

Habitat Conservancy staff select sites, hire and oversee consultants for plans, specs., and implementation, and conduct some monitoring. Staff shared with other implementation tasks; the amount listed is the estimated portion to support wetland mitigation creation/restoration.

Cost includes staff salary and benefits, salaries and benefits of administrative support staff (secretaries, clerks, IT staff, etc.) and associated overhead, including space and utility costs, office furniture, equipment, and supplies.

Travel (shared with planning and monitoring)

	Implementation Period (years)						
	0	1-5	6-10	11-15	16-20	21-25	26-30
Total cost per 5-year period			$6,667	$6,667	$6,667	$6,667	$6,667

Assumption:

$4,000 annual cost based on actual Conservancy experience through 2012

0.33 Proportion of travel costs that are used for restoration (one third are used for planning, and are included in the planning spreadsheet, and one-third are used for monitoring, and are included in the monitoring spreadsheet).

Vehicles and Fuel (shared with planning and monitoring)

	Implementation Period (years)						
	0	1-5	6-10	11-15	16-20	21-25	26-30
Vehicle purchase, per period			$7,333	$22,000	$14,667	$7,333	$7,333
Vehicle fuel and maintenace, per period			$3,833	$11,500	$15,333	$15,333	$11,500

See Planning and Design worksheet for more detail on vehicle purchase and fuel/maintenance assumptions.

0.33 Proportion of vehicle and fuel costs that are used for restoration (one third are used for planning, and are included in the planning spreadsheet, and one-third are used for monitoring, and are included in the monitoring spreadsheet).

Contractors

	Contract value per 5-year period						
Contractor category	0	1-5	6-10	11-15	16-20	21-25	26-30
Plans, specifications, and engineering			$1,427,221	$1,427,221	$1,427,221	$1,427,221	$1,427,221
Bid assistance			$71,361	$71,361	$71,361	$71,361	$71,361
Construction oversight			$333,018	$333,018	$333,018	$333,018	$333,018
Post-construction maintenance			$475,740	$475,740	$475,740	$475,740	$475,740
Cost per 5-year period			$2,307,341	$2,307,341	$2,307,341	$2,307,341	$2,307,341

Assumptions:

30%	percent of total construction cost required to complete plans, specifications, engineering and provide allowance for remedial measures
1.50%	percent of total construction cost required for bid assistance
7%	percent of total construction cost required for construction oversight
10%	percent of total construction cost required for post construction maintenance

The total area of restoration that occurs in each 5-year period will be designed as three different projects (approximately 14 acres each).

Plan, specification, and engineering work, bid assistance, and construction oversight will be conducted in the 5-year period in which construction takes place.

Two years of post-construction maintenance will be conducted in the 5-year period after construction takes place to maintain irrigation systems, conducting weeding, etc. Management costs after success criteria are met is included in development fee paid for same site (wetland mitigation fee is in addition).

HCP/NCCP Environmental Compliance for Maximum Urban Development Area
2012 Update

	Implementation Period (Years)							
Operational Costs	0	1-5	6-10	11-15	16-20	21-25	26-30	Total
NEPA/CEQA			$460,200	$460,200	$460,200	$460,200	$0	
CWA 404			$0	$0	$0	$0	$0	
CWA 401			$13,200	$13,200	$13,200	$13,200	$0	
CDFG 1602			$10,100	$10,100	$10,100	$10,100	$0	
NHPA			$49,700	$49,700	$49,700	$49,700	$0	
Other	$0	$512,855	$34,400	$34,400	$34,400	$34,400	$0	
Total	**$0**	**$512,855**	**$567,600**	**$567,600**	**$567,600**	**$567,600**	**$0**	**$2,783,255**

Number of Projects Requiring Environmental Compliance

		Number							
Project size	Size Range	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total**
Small/simple	up to 10 acres or up to 0.1 stream miles			4	4	4	4	-	20
Medium/more complex	10.1-50 acres or 0.1-0.5 stream miles			4	4	4	4	-	20
Large/most complex	over 50 acres or 0.5 stream miles			2	2	2	2	-	10
	Total projects			10	10	10	10	-	40

Assumptions:

Of the total of approximately 50 projects that would require environmental compliance, 1/5 would require compliance in each 5-year period between years 1 and 25.

Environmental Compliance Cost per Project Size and Compliance Category (2012 dollars)

Project size	Size Range	Estimate Project Cost within DFG jurisdiction		Project Impacts to Wetlands for CWA 401		Compliance Category					
				Minimum	Maximum	CEQA	CWA 404	CWA 401	CDFG 1602	NHPA	Other
Small/simple	up to 10 acres or up to 0.1 stream miles	$ 2,000	$ 20,000	0.001	0.01	$6,055	$0	$993	$392	$3,028	$2,870
Medium/more complex	10.1-50 acres or 0.1-0.5 stream miles	$ 20,001	$ 100,000	0.0121	0.07	$48,440	$0	$1,236	$700	$4,239	$3,444
Large/most complex	over 50 acres or 0.5 stream miles	$ 100,001	$500,000 or more	0.073	0.30	$121,100	$0	$2,162	$2,858	$10,294	$4,592

Assumptions:

Assumed wetland impact determined by AECOM based experience with typical projects that would be expected to be implemented by the Conservancy. For example wetland restoration/creation projects, stream restoration projects, adaptive management measures for existing wetland features and facilities improvements. In general, it is expected that impacts to wetlands and streams would be avoided if at all possible. Of the stream length indicated, assumed only 10% of that length would be impacted and an average stream width of 10 feet.
For NEPA/CEQA, 401/404 and 1602 compliance, varying costs have more to do with project complexity than with project size.
Clean Water Act 401 and 1602 permits will be done on a per-project basis
Cultural compliance permits will be done on a per-project basis.
Contra Costa Conservancy staff will prepare permit applications and notification for the 401, 404 and 1600 applications, thereby resulting in no consultant cost for permit preparation. This table also assumes that the permits for Water Quality Certification (CWA 401) and Streambed Alteration Agreement (DFG 1602) will not be secured under programmatic or Master permit processes.
Permitted projects would be completed within the time limit allotted for the permits; no extensions or re-application would be required.
The "other" compliance category could include county grading permits, road encroachment permits, or other local approvals.

NEPA/CEQA

Depending on the level of detail that is provided for specific projects, they may or may not be able to be covered under the HCP EIR/EIS.
For those without sufficient detail, additional environmental documentation may need to be prepared.
It is likely that the majority of those would be in the form of mitigated negative declarations.
Because it is difficult to provide a cost estimate for a project without knowing details such as location, size, etc., the following are some rough numbers based on level of controversy:
Small scale non-controversial projects = Cat Excl/Cat Exemp
Medium scale more controversial projects = IS MND/EA FONSI
Larger scale more controversial projects = EIR/EIS
All land acquisitions would be a categorical exemption under CEQA as well as under NEPA, when NEPA applies.

401/404

The cost of conducting wetland delineations is not included under CWA 404/401 compliance; it is expected that delineation would be covered under land acquisition costs.
Each project implemented under the HCP will qualify for compliance under the USACE 404 regional permit program for the inventory area; there is no fee for 404 permit applications
Tasks associated with Section 402 compliance are not included in this cost estimate.

CWA 401 fee cost estimate is based on impacts to jurisdictional waters of the state rather than project size. Fee is an average based on the minimum and maximum expected impacts. Central Valley Regional Water Quality Control Board Water Quality Certification Dredge and Fill Fee Calculator – v9 9/21/2011. Available: http://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/dredgefillfeecalculator.xls

NHPA

Archaeological surveys can be conducted at an intensive level at a rate of 40 acres per person per day.
No more than one cultural resource will be identified per 40 acres or part thereof.
This scope of work and cost estimate does not include tasks necessary for significance evaluations and resolution of adverse effects.

CDFG 1602

DFG 1602 costs are estimated based on the assumed cost of project activities within DFG jurisdiction per Fish and Game Code Sections 1600-1616, and the fee schedule corresponding to the project costs. Average cost based on mean of minimum and maximum fee amounts.
California Department of Fish and Game Lake and Streambed Alteration Agreements and Fees, Fee Schedule – Updated September 2011. Available: http://www.dfg.ca.gov/habcon/1600/forms.html

HCP/NCCP Preserve Management and Maintenance for Maximum Urban Development Area
2012 Update

	Implementation Period (Years)							
Capital Costs	0	1-5	6-10	11-15	16-20	21-25	26-30	Total
Vehicle purchase			$271,200	$166,700	$283,000	$231,200	$241,900	
Equipment - capital			$175,000	$262,500	$350,000	$437,500	$525,000	
Field facilities			$500,000	$500,000	$0	$500,000	$0	
Contractors - capital			$530,000	$795,000	$1,060,000	$1,325,000	$1,590,000	
Recreation facilities			$0	$0	$0	$0	$0	
Capital Subtotal			**$1,476,200**	**$1,724,200**	**$1,693,000**	**$2,493,700**	**$2,356,900**	
Operational Costs								
Program staff and overhead			$382,580	$0	$0	$0	$0	
Preserve staff and overhead			$2,444,000	$2,820,000	$3,572,000	$4,324,000	$4,700,000	
Vehicle maintenance and fuel			$71,300	$147,400	$199,900	$225,800	$245,300	
Equipment - operational			$380,000	$570,000	$760,000	$950,000	$1,140,000	
Facilities maintenance and utilities			$67,500	$135,000	$135,000	$202,500	$202,500	
Water pumping			$22,024	$33,037	$44,049	$55,061	$66,073	
Contractors - operational			$639,270	$972,630	$1,305,990	$1,639,340	$1,972,700	
Recreation - operational			$0	$0	$0	$0	$0	
Operational Subtotal	$0	$92,002	**$4,006,674**	**$4,678,067**	**$6,016,939**	**$7,396,701**	**$8,326,573**	
Total	**$0**	**$92,002**	**$5,482,874**	**$6,402,267**	**$7,709,939**	**$9,890,401**	**$10,683,473**	**$40,260,956**

Program Staff and Overhead

Position	Hourly Cost per FTE with Overhead & Support	Number of FTEs						
		0	1-5	6-10	11-15	16-20	21-25	26-30
Principal Planner and Support	$155			0.10	-	-	-	-
Senior Planner and Support	$126			0.20	-	-	-	-
Total FTEs				0.30	-	-	-	-
Total cost per year				$76,516	$0	$0	$0	$0
Total cost per 5-year period				$382,580	$0	$0	$0	$0

Note: Hourly cost factor includes staff salary and benefits, salaries and benefits of administrative support staff (secretaries, clerks, IT staff, etc.) and associated overhead, including space and utility costs, office furniture, equipment, and supplies, .

Preserve Staff and Overhead

Position	Preserve area per position (acres)	Hourly Cost per FTE with Overhead & Support	Number of FTEs						
			0	1-5	6-10	11-15	16-20	21-25	26-30
Preserve Manager and Support		$100			1.0	1.0	1.0	1.0	1.0
Preserve maintenance staff	3,000	$40			4.0	5.0	7.0	9.0	10.0
Total FTEs					5.0	6.0	8.0	10.0	11.0
Total cost per year					$488,800	$564,000	$714,400	$864,800	$940,000
Total cost per 5-year period					$2,444,000	$2,820,000	$3,572,000	$4,324,000	$4,700,000

Notes/Assumptions:

Hourly cost factor includes staff salary and benefits, salaries and benefits of administrative support staff (secretaries, clerks, IT staff, etc.) and associated overhead, including space and utility costs, office furniture, equipment, and supplies, .

1,880 hours per year

Vehicles, Maintenance, and Fuel

	Purchase price per vehicle	Fuel cost per vehicle per year	Maintenance cost per vehicle per year	Number of vehicles, per period						
				0	1-5	6-10	11-15	16-20	21-25	26-30
Total number of FTEs				0	0	5	6	8	10	11
New trucks purchased	$24,700	$1,100	$1,200			1	1	1	0	1
Old trucks retired						0	0	1	0	1
Total trucks						1	2	2	2	2
New 4WDs purchased	$41,100	$2,100	$1,800			2	3	4	5	5
Old 4WDs retired						0	0	2	4	4
Total 4WDs						2	5	7	8	9
New ATVs purchased	$7,000	$290	$350			1	1	0	2	0
Old ATVs retired						0	0	0	0	0
Total ATVs						1	2	2	4	4
New dump trucks purchased	$35,200	$470	$470			1	0	1	0	0
Old dump trucks retired						0	0	0	0	0
Total dump trucks						1	1	2	2	2
New tractors purchased	$47,000	$590	$1,170			1	0	1	0	0
Old tractors retired						0	0	0	0	0
Total tractors						1	1	2	2	2
New auger, mower, scraper for tractor	$47,000	$0	$120			1	0	0	0	0
Old auger, mower, scraper retired						0	0	0	0	0
Total auger, mower, scraper						1	1	1	1	1
New small tractors	$16,400	$350	$350			1	0	0	0	0
Old small tractors retired						0	0	0	0	0
Total small tractors						1	1	1	1	1
New light 4WD vehicles	$11,700	$290	$290			1	1	1	1	1
Old light 4WD vehicles retired						1	0	1	1	1
Total light 4WD vehicles						0	1	1	1	1
Total vehicle purchase cost per 5-year period						$271,200	$166,700	$283,000	$231,200	$241,900
Total vehicle fuel and maintenance per year						$14,260	$29,480	$39,980	$45,160	$49,060
Total vehicle fuel and maintenance per 5-year period						$71,300	$147,400	$199,900	$225,800	$245,300

Assumptions:

Cost of 4WD truck includes cost of fire pumper, chain saw, sprayer, and small tool set for vehicle.

Equipment and Materials

	Number of new units bought per period						
	0	1-5	6-10	11-15	16-20	21-25	26-30
New preserve area managed per period	-	5,000	5,000	5,000	5,000	5,000	5,000
Total preserve area managed per period	-	5,000	10,000	15,000	20,000	25,000	30,000
Capital cost of equipment and materials per year			$35,000	$52,500	$70,000	$87,500	$105,000
Operational cost of equipment and materials per year			$76,000	$114,000	$152,000	$190,000	$228,000
Total capital cost per 5-year period			$175,000	$262,500	$350,000	$437,500	$525,000
Total operational cost per 5-year period			$380,000	$570,000	$760,000	$950,000	$1,140,000

Assumptions:

$3,500	Capital cost of equipment and materials per 1,000 preserve acres per year.
$7,600	Operational cost of equipment and materials per 1,000 preserve acres per year.

Capital costs include the capital component of fire fighting equipment/gear, small tools (pliers, wrenches, screwdrivers, etc.), glasses, gloves, hard hats, rain gear, irrigation supplies, cargo container, landscape plants and grass, oak trees, lumber, and truck hauling services.

Operational costs include the operational component of fire fighting equipment/gear, small tools (pliers, wrenches, screwdrivers, etc.), glasses, gloves, hard hats, rain gear, irrigation supplies, cargo container, landscape plants and grass, oak trees, lumber, and truck hauling services.

Operational costs also include portable radios, small pumps, piping, generator, saw, and demolition hammers.

Field Facilities

	0	1-5	6-10	11-15	16-20	21-25	26-30
Total preserve area managed per period	-	5,000	10,000	15,000	20,000	25,000	30,000
Total field offices/parking areas	-	-	1	2	2	3	3
New field offices/parking areas	-	-	1	1	-	1	-
Cost per 5-year period for offices/workshops	$0	$0	$500,000	$500,000	$0	$500,000	$0

Assumptions:

10,000	Number of acres per workshop/parking area
$500,000	Cost to build a workshop/parking area

Note: Field facilities contain an area for equipment storage, a manager's office, a shared office, a locker room, and restrooms.
Based on experience to date, cost assumes donated portable building, with costs representing transportation, installation, utilities, etc.

Facilities Maintenance and Utilities

	Cost per facility per year	0	1-5	6-10	11-15	16-20	21-25	26-30
Total facilities per period		-	-	1	2	2	3	3
Maintenance cost per year	$8,800			$8,800	$17,600	$17,600	$26,400	$26,400
Utilities cost per year	$4,700			$4,700	$9,400	$9,400	$14,100	$14,100
Total cost per year				$13,500	$27,000	$27,000	$40,500	$40,500
Total cost per 5-year period				$67,500	$135,000	$135,000	$202,500	$202,500

Water Pumping

	0	1-5	6-10	11-15	16-20	21-25	26-30
Total preserve area managed	-	5,000	10,000	15,000	20,000	25,000	30,000
Total cost per year			$4,405	$6,607	$8,810	$11,012	$13,215
Total cost per 5-year period			$22,024	$33,037	$44,049	$55,061	$66,073

$440	Annual cost for pump and well drilling per 1,000 acres

Contractors - operational

	Contract value per 5-year period						
Contractor category	0	1-5	6-10	11-15	16-20	21-25	26-30
Total pond area managed	-	3	10	17	24	31	38
Total preserve area managed	-	5,000	10,000	15,000	20,000	25,000	30,000
Routine dirt road maintenance			$26,400	$39,600	$52,800	$66,000	$79,200
Feral pig management			$67,500	$101,250	$135,000	$168,750	$202,500
Pond maintenance			$70,370	$119,280	$168,190	$217,090	$266,000
Weed management			$35,000	$52,500	$70,000	$87,500	$105,000
Other maintenance services			$440,000	$660,000	$880,000	$1,100,000	$1,320,000
Total per 5-year period			$639,270	$972,630	$1,305,990	$1,639,340	$1,972,700

Assumptions:

$7,000	Cost for pond maintenance (dredging) per acre of pond every 5 years.
$17,600	Cost of dirt road maintenance per 100 miles of road per year.
100	miles of dirt roads on preserves
3	miles of dirt roads per 1,000 acres of preserve
$1,350	Cost of feral pig management per year per 1,000 acres managed
$700	Cost of weed management per 1,000 acres of preserve per year.
$8,800	Cost for other maintenance services per 1,000 acres of preserve per year.

Other maintenance services include mowing, grading, pest control, disking for fire breaks, fencing, alarms, janitorial services (pond maintenance subtracted based on the yearly pond maintenance costs above)

Contractors - capital

	Contract value per 5-year period						
Contractor category	0	1-5	6-10	11-15	16-20	21-25	26-30
Total preserve area managed	-	5,000	10,000	15,000	20,000	25,000	30,000
Construction services			$530,000	$795,000	$1,060,000	$1,325,000	$1,590,000

Assumptions:

$10,600	Cost for construction services per 1,000 preserve acres per year

Construction services includes roadway design, paving, fencing, grading, weather station, and boundary surveying services

Recreation Facilities and Maintenance

	0	1-5	6-10	11-15	16-20	21-25	26-30
Total facilities per period	-	-	-	-	-	-	-
Facilities cost - capital, per period	-	-	$0	$0	$0	$0	$0
Facilities cost - maintenance and operations	-	-	$0	$0	$0	$0	$0
Total facilities capital cost			$0	$0	$0	$0	$0
Total cost per year			$0	$0	$0	$0	$0
Total cost per 5-year period			$0	$0	$0	$0	$0

Assumptions:

For this estimate, assumed costs covered by the East Bay Parks and Recreation District.

$0	Cost per unit for recreation facilities.
$0	Annual maintenance and operations cost for recreation facilities

HCP/NCCP Monitoring, Research, and Adaptive Management for Maximum Urban Development Area
2012 Update

	Implementation Period (Years)							
Capital costs	0	1-5	6-10	11-15	16-20	21-25	26-30	Total
Vehicle purchase			$7,333	$22,000	$14,667	$7,333	$7,333	
Capital Subtotal			**$7,333**	**$22,000**	**$14,667**	**$7,333**	**$7,333**	
Operational Costs								
Program staff and overhead			$118,440	$0	$0	$0	$0	
Technical staff and overhead			$415,167	$987,000	$987,000	$987,000	$830,333	
Travel			$6,667	$6,667	$6,667	$6,667	$6,667	
Vehicle Fuel and Maintenance			$3,833	$11,500	$15,333	$15,333	$11,500	
Field data collection (contractors)			$1,087,239	$1,609,058	$2,118,931	$2,573,056	$3,027,181	
Directed research			$454,000	$454,000	$454,000	$454,000	$454,000	
Adaptive management			$181,500	$181,500	$181,500	$181,500	$181,500	
Operational Subtotal	$0	$456,421	**$2,266,845**	**$3,249,724**	**$3,763,431**	**$4,217,556**	**$4,511,181**	
Total	$0	$456,421	**$2,274,179**	**$3,271,724**	**$3,778,097**	**$4,224,889**	**$4,518,514**	**$18,523,823**

Program Staff and Overhead

		Number of FTEs						
Position	Hourly Cost per FTE with Overhead & Support	0	1-5	6-10	11-15	16-20	21-25	26-30
Senior Planner and Support	$126			0.10	-	-	-	-
Total FTEs				0.10	-	-	-	-
Total cost per year				$23,688	$0	$0	$0	$0
Total cost per 5-year period				$118,440	$0	$0	$0	$0

Note: Hourly cost factor includes staff salary and benefits, salaries and benefits of administrative support staff (secretaries, clerks, IT staff, etc.) and associated overhead, including space and utility costs, office furniture, equipment, and supplies, .

1,880 hours per year

Technical Staff and Overhead (shared with planning and restoration/creation)

		Number of FTEs						
Position	Hourly Cost per FTE with Overhead &	0	1-5	6-10	11-15	16-20	21-25	26-30
Senior scientist and support	$130			0.17	0.33	0.33	0.33	0.33
Project Manager and support	$85			0.17	0.33	0.33	0.33	0.33
Technical support	$50			0.17	0.67	0.67	0.67	0.33
Total FTEs				0.50	1.33	1.33	1.33	1.00
Total cost per year				$83,033	$197,400	$197,400	$197,400	$166,067
Cost per 5-year period				$415,167	$987,000	$987,000	$987,000	$830,333

Assumptions:

Hourly cost factor includes staff salary and benefits, salaries and benefits of administrative support staff (secretaries, clerks, IT staff, etc.) and associated overhead, including space and utility costs, office furniture, equipment, and supplies, .

Travel (shared with planning and restoration/creation)

	Implementation Period (years)						
	0	1-5	6-10	11-15	16-20	21-25	26-30
Total cost per 5-year period			$6,667	$6,667	$6,667	$6,667	$6,667

Assumption:

$4,000 annual cost based on actual Conservancy experience through 2012

0.33 Proportion of travel costs that are used for monitoring (one third are used for planning, and are included in the planning spreadsheet, and one-third are used for restoration and are included in the restoration spreadsheet).

Vehicles and Fuel (shared with planning and restoration)

	Implementation Period (years)						
	0	1-5	6-10	11-15	16-20	21-25	26-30
Vehicle purchase, per period			$7,333	$22,000	$14,667	$7,333	$7,333
Vehicle fuel and maintenace, per period			$3,833	$11,500	$15,333	$15,333	$11,500

See Planning and Design worksheet for more detail on vehicle purchase and fuel/maintenance assumptions.

0.33 Proportion of vehicle and fuel costs that are used for monitoring (one third are used for planning, and are included in the planning spreadsheet, and one-third are used for restoration, and are included in the restoration spreadsheet).

Field Data Collection (Contractors)

On-going and Construction Monitoring

	0	1-5	6-10	11-15	16-20	21-25	26-30
Total acres of land added to reserve for management and monitoring each 5-year period	-	5,000	5,000	5,000	5,000	5,000	5,000
New acres created/restored per 5-year period	-	13	83	83	83	83	83
Number of restoration sites per 5-year period	-	9	19	19	19	19	19
Number of preserve covered activities requiring pre-construction surveys and construction monitoring per 5 - year period (sites)	-	2	5	5	5	5	5

				Average area requiring monitoring **per year** (acres or sites) and average annual cost per period						
Monitoring type	Cost per unit	Unit		0	1-5	6-10	11-15	16-20	21-25	26-30
pre-construction surveys	$1,991	1	site			5	5	5	5	5
subtotal						$9,955	$9,955	$9,955	$9,955	$9,955
construction monitoring	$5,289	1	site			1	1	1	1	1
subtotal						$5,289	$5,289	$5,289	$5,289	$5,289
post-acquisition biological inventories	$18	1	acre			1,000	1,000	1,000	1,000	1,000
subtotal						$18,165	$18,165	$18,165	$18,165	$18,165
monitoring: restoration, creation and enhancement sites	$7,964	10	acres			3	20	34	34	34
subtotal						$2,389	$15,928	$27,078	$27,078	$27,078
status and trends monitoring: key covered species and ecosystems	$18	1	acre			10,000	15,000	20,000	25,000	30,000
subtotal						$181,650	$272,475	$363,300	$454,125	$544,950
Total cost per year						$217,448	$321,812	$423,786	$514,611	$605,436
Total cost per 5-year period						$1,087,239	$1,609,058	$2,118,931	$2,573,056	$3,027,181

Assumptions:

Implementing entity monitoring staff will plan, coordinate, and report on the monitoring categories described below.

Contractors will conduct the field monitoring and data analysis.

Implementation monitoring will be conducted by the GIS/Database technician in conjunction with the other monitoring staff. The cost for the GIS/database technician's time will be covered by the program administration cost category. The cost for the monitoring staffs' time is assumed to be included in the other monitoring categories.

Preconstruction surveys are assumed to occur prior to construction of covered activites on the Preserve System. Preconstruction surveys are for the following species only: Townsend's big-eared bat, San Joaquin kit fox, golden eagle, burrowing owl, Swainson's hawk, and covered shrimp species. Surveys are assumed to require **one visit by two biologists** at **$121/hour** each. They are assumed to occur in the same 5-year period in which construction occurs. Assumes negative findings.

Construction monitoring is assumed to occur periodically during construction of covered activities and conservation measures. An average of **seven visits by one biologist** at **$91/hour** is assumed.

10%	% of times construction surveys are anticipated to be required for covered activities within the preserve system (it is anticipated that Implementing Entity will whenever possible avoid habitat and breeding season of covered species).
0.25	Ratio of area of other covered activities in preserves to area created/restored.

Planning, preconstruction surveys and construction monitoring for covered activities outside of preserves will be paid for by developers.

Post-acquisition inventories will build on planning surveys. Inventory will include mapping of noxious weeds.

Monitoring of restoration, creation, and enhancement sites is assumed to occur **4 times per year** for the 5-year period following the restoration activity and will require **two biologists at $121/hr for one 8-hour day each visit**. It will include species-response monitoring. It is assumed to begin in the 5-year period after the creation/restoration/enhancement takes place.

Status and trends monitoring is assumed to occur after preserve land is purchased through year 30. Status and trend monitoring will build on planning surveys and post-acquisition inventories, when appropriate.

Directed Research

	0	1-5	6-10	11-15	16-20	21-25	26-30
Average cost per year to fund directed research			$90,800	$90,800	$90,800	$90,800	$90,800
Total cost per 5-year period			$454,000	$454,000	$454,000	$454,000	$454,000

Adaptive Management

	0	1-5	6-10	11-15	16-20	21-25	26-30
Average Independent Conservation Assessment Team cost per 5-year period			$30,500	$30,500	$30,500	$30,500	$30,500
Average Science Advisors cost per 5-year period			$151,000	$151,000	$151,000	$151,000	$151,000
Total cost per 5-year period			$181,500	$181,500	$181,500	$181,500	$181,500

Assumptions:

Adaptive management experiments are covered under the monitoring staff and directed research categories.

It is assumed that the Independent Conservation Assessment Team will meet once every 4 years and have:

5	members
$6,100	stipend per member per 5-year period

It is assumed that the Science Advisors will contain:

10	members
$15,100	stipend per member per 5-year period

Field monitoring and analysis contractors

Base cost per hour	$121	$91	$ per hour
Travel	$28	$28	$ per day
assuming	50	50	miles
and	$0.550	$0.550	$ per mile
Hours per day	8	8	hours per day
Total cost per hour including amortized per diem and travel (assuming 10-hour days)	$124.44	$94.44	$ per hour

Assumptions:

Bay Area billing rate, assuming all work will be conducted from a local office (no per diem needed).

Remedial Measures for Maximum Urban Development Area
2012 Update

	Implementation Period (Years)							
Capital costs	0	1-5	6-10	11-15	16-20	21-25	26-30	**Total**
Remedial measures	$0	$0	$30,000	$82,736	$537,318	$537,318	$1,488,799	$2,676,172
Total	**$0**	**$0**	**$30,000**	**$82,736**	**$537,318**	**$537,318**	**$1,488,799**	**$2,676,172**

Remedial Measures

	0	1-5	6-10	11-15	16-20	21-25	26-30
Cost of created/restored habitat per 5-year period	$0	$0	$4,757,403	$4,757,403	$4,757,403	$4,757,403	$4,757,403
Cost for remedial measures for created/restored habitat per 5-year period	$0	$0	$0	$0	$475,740	$475,740	$1,427,221
Area of new preserve not including created/restored habitat per 5-year period	-	7,404	4,434	4,434	4,434	4,434	4,434
Cost for remedial measures for preserves per 5-year period			$0	$52,736	$31,578	$31,578	$31,578
Cost for other remedial measures per 5-year period			$30,000	$30,000	$30,000	$30,000	$30,000
Total cost per 5-year period			$30,000	$82,736	$537,318	$537,318	$1,488,799

Assumptions:

2%	Percent of annual preserve management and maintenance cost assumed to be needed for preserve remedial actions.
10%	Percent of created/restored habitat for which remedial measures will be required.
$356	Cost per acre for preserve management and maintenance in years 26-30.

Remedial actions are assumed to occur in the second 5-year period after habitat is created/restored or preserve land is purchased, with the exception of remedial actions for habitat created/restored in years 21-30. The cost for these remedial actions is included in years 26-30 so that it can be included in this cost estimate.

The remedial cost for preserve lands is assumed to be a percentage of the cost per acre for preserve management and maintenance in years 26-30, and is assumed to be needed once, in the second 5-year period after the preserve land is purchased.

The cost for other remedial measures includes the costs for restoration or maintenance of preserve areas because of other changed circumstances,

Contingency Fund for Maximum Urban Development Area
2012 Update

Contingency Fund

	0	1-5	6-10	11-15	16-20	21-25	26-30	Total
Total cost of program excluding land acquisition and habitat restoration capital costs	$0	$0	$17,343,157	$18,441,362	$20,415,868	$23,044,084	$24,209,290	$103,453,760
Contingency fund	**$0**	**$0**	**$867,158**	**$922,068**	**$1,020,793**	**$1,152,204**	**$1,210,464**	**$5,172,688**

Assumptions:

5.0% Percent of total program funding needed for contingency fund

F. APPENDIX: ACTUAL HCP/NCCP PLAN REVENUE

The following tables provide detail for revenue received in Year 0-5 (2007 through 2012) of the Plan. Revenue for the last two months of 2012 is estimated. **Table F.1** shows revenue summarized by source and adjusted to 2012$. **Table F.2** shows the transaction detail.

Table F.1: Revenue Summary 2007-2012 (Years 0-5)

	2007	2008	2009	2010	2011	2012	Total
Current Dollars (Year Received)							
Mitigation Fees							
Development Fee	$ -	$ -	$ 880,435	$ 10,731	$ 122,013	$ 695,532	$ 1,708,711
Wetland Mitigation	-	236	11,987	183,652	48,555	181,371	425,801
Rural Infrastructure	-	-	1,468	296,982	52,799	270,080	621,329
Temporary Impacts	-	25,542	551,862	92,713	132,484	59,586	862,187
Subtotal	$ -	$ 25,778	$ 1,445,752	$ 584,078	$ 355,851	$ 1,206,569	$ 3,618,028
Other Fees & Exactions							
Administrative Charges	1,585	4,806	10,000	40,000	69,725	45,546	171,662
Payments For Non-Covered Activities	2,999,960	280,217	1,070	-	-	216	3,281,463
Other Development Exactions	-	-	49,131	257,337	216,359	368,517	891,344
Subtotal	$ 3,001,545	$ 285,023	$ 60,201	$ 297,337	$ 286,084	$ 414,279	$ 4,344,469
Local, State & Federal Funds							
State & Federal Funds	-	1,335,695	4,234,992	9,476,928	7,629,700	6,288,144	28,965,459
Local Funds	2,586,358	21,607	1,544,622	7,065,742	3,686,671	3,439,049	18,344,049
Other Public Funds	-	-	-	-	100,000	30,000	130,000
Subtotal	$ 2,586,358	$ 1,357,302	$ 5,779,614	$ 16,542,670	$ 11,416,371	$ 9,757,193	$ 47,439,508
Total	**$ 5,587,903**	**$ 1,668,103**	**$ 7,285,567**	**$ 17,424,085**	**$ 12,058,306**	**$ 11,378,041**	**$ 55,402,005**
Inflation Index To 2012 (see App. B and C)	*0.9074*	*0.9356*	*0.9424*	*0.9554*	*0.9802*	*1.0000*	
Constant Dollars (2012$)							
Mitigation Fees							
Development Fee	-	-	934,248	11,232	124,478	695,532	$ 1,765,490
Wetland Mitigation	-	252	12,720	192,225	49,536	181,371	436,104
Rural Infrastructure	-	-	1,558	310,846	53,866	270,080	636,350
Temporary Impacts	-	27,300	585,592	97,041	135,160	59,586	904,679
Subtotal	$ -	$ 27,552	$ 1,534,118	$ 611,344	$ 363,040	$ 1,206,569	$ 3,742,623
Other Fees & Exactions							
Administrative Charges	1,747	5,137	10,611	41,867	71,133	45,546	176,041
Payments For Non-Covered Activities	3,306,105	299,505	1,135	-	-	216	3,606,961
Other Development Exactions	-	-	52,134	269,350	220,729	368,517	910,730
Subtotal	$ 3,307,852	$ 304,642	$ 63,880	$ 311,217	$ 291,862	$ 414,279	$ 4,693,732
Local, State & Federal Funds							
State & Federal Funds	-	1,427,635	4,493,837	9,919,330	7,783,820	6,288,144	29,912,766
Local Agency / Foundation Grants	2,850,295	23,094	1,639,030	7,395,585	3,761,142	3,439,049	19,108,195
Other Public Funds	-	-	-	-	102,020	30,000	132,020
Subtotal	$ 2,850,295	$ 1,450,729	$ 6,132,867	$ 17,314,915	$ 11,646,982	$ 9,757,193	$ 49,152,981
Total	**$ 6,158,147**	**$ 1,782,923**	**$ 7,730,865**	**$ 18,237,476**	**$ 12,301,884**	**$ 11,378,041**	**$ 57,589,336**

Sources: Appendices D (for inflation index) (same assumptions in Appendix E); Table F.2.

Table F.2: Revenue Detail 2007-2012 (Years 0-5) (current $)

Fiscal year	Description	Development Impact Fees			
		Permanent Impacts			
		Urban Develop-ment	Wetland Impacts	Rural Infra-structure Impacts	Temporary Impacts
Actual Comservancy Revenues Through October 31, 2012					
2007	CCC PWD Pre-HCP Mitigation: SR4 Extention Segment 1				
2007	Development Fee Interest				
2007	*1 DP452319 dated 10/5/05 HCP Doc				
2007	CCC PWD Pre-HCP Mitigation: SR4 Extention Segment 3				
2007	Development Fee Interest				
2007	Development Fee Interest				
2007	*1 DP484583 dated 6/11/07 HCP/NCCP Book				
2007	*1 DP484928 dated 6/18/07 NCP/NCCP book				
2007	*1 CCC PWD Pre-HCP Mitigation: SR4 Extension Segment 2 Phase 1 + interest JV6459 dated 6/26/07(499300)				
2007	*1 DP486715 dated 7/17/07 HCP/NCCP Books				
2007	Development Fee Interest				
2007	*1 DP487560 dated 8/2/07 4 Vol Set				
2007	*1 DP487756 dated 8/7/08 HCP/NCCP Volume 1				
2007	*2 HCP Pond BIDS				
2007	Remaining funds from HCPA				
2007	Pre-HCP Mitigation from City of Brentwood: John Muir Parkway Project				
2007	*2 HCP Pond Vasco Caves				
2007	Pre-HCP Mitigation from City of Brentwood: John Muir Parkway Project				
2007	Pre-HCP Mitigation from PINN BROS CONSTRUCTION: Cemtral Blvd Bridge				
2007	Sheppard Mullin Receipt # 8210 (HCP Vol 1 & 2)				
2007	Moore Biological Consultants Receipt #8243 (HCP Vol 1 & 2)				
2007	*3 Investment Interest 10/25/07				
2008	*3 Investment Interest 4/22/08				
2008	*3 Investment Interest 1/23/08				
2008	Pre-HCP Mitigation from DISCOVERY BUILDERS, INC DP#499220: SAA 1600 Permit for Bancroft Gardens Project in Pittsburg				
2008	Nomad Ecology HCP Vol I & II				
2008	PSE: Ameresco Keller Canyon Landfill Gas Power Plant Project- Impact Fees				14,493.00
2008	*2 Investment interest				
2008	State of California, Dept of Fish and Game				
2008	PSE: Ameresco Keller Canyon Landfill Gas Power Plant Project- Staff Time				
2008	Purchase of HCP/NCCP Books by PG&E				
2008	CCC PWD: Marsh Creek Emergency Bridge Repair Project; JV1551 dd 10/22/08- Impact Fees		236.00		984.00

Table F.2: Revenue Detail 2007-2012 (Years 0-5) (current $)

Fiscal year	Description	Other Project Fees & Exactions		
		Adminis-trative Charges	Payments For Non-covered Activities	Other Develop-ment Exactions
Actual Comservancy Revenues Through October 31, 2012				
2007	CCC PWD Pre-HCP Mitigation: SR4 Extention Segment 1		1,140,000.00	
2007	Development Fee Interest		21,536.55	
2007	*1 DP452319 dated 10/5/05 HCP Doc	128.50		
2007	CCC PWD Pre-HCP Mitigation: SR4 Extention Segment 3		1,245,000.00	
2007	Development Fee Interest		30,610.12	
2007	Development Fee Interest		28,722.63	
2007	*1 DP484583 dated 6/11/07 HCP/NCCP Book	84.00		
2007	*1 DP484928 dated 6/18/07 NCP/NCCP book	84.00		
2007	*1 CCC PWD Pre-HCP Mitigation: SR4 Extension Segment 2 Phase 1 + interest JV6459 dated 6/26/07(499300)		377,232.30	
2007	*1 DP486715 dated 7/17/07 HCP/NCCP Books	84.00		
2007	Development Fee Interest		28,891.59	
2007	*1 DP487560 dated 8/2/07 4 Vol Set	128.00		
2007	*1 DP487756 dated 8/7/08 HCP/NCCP Volume 1	33.00		
2007	*2 HCP Pond BIDS	820.00		
2007	Remaining funds from HCPA			
2007	Pre-HCP Mitigation from City of Brentwood: John Muir Parkway Project		62,336.00	
2007	*2 HCP Pond Vasco Caves	45.00		
2007	Pre-HCP Mitigation from City of Brentwood: John Muir Parkway Project		17,000.00	
2007	Pre-HCP Mitigation from PINN BROS CONSTRUCTION: Cemtral Blvd Bridge		19,191.00	
2007	Sheppard Mullin Receipt # 8210 (HCP Vol 1 & 2)	89.00		
2007	Moore Biological Consultants Receipt #8243 (HCP Vol 1 & 2)	89.00		
2007	*3 Investment Interest 10/25/07		29,439.69	
2008	*3 Investment Interest 4/22/08		13,217.37	
2008	*3 Investment Interest 1/23/08		17,174.33	
2008	Pre-HCP Mitigation from DISCOVERY BUILDERS, INC DP#499220: SAA 1600 Permit for Bancroft Gardens Project in Pittsburg		243,725.00	
2008	Nomad Ecology HCP Vol I & II	91.00		
2008	PSE: Ameresco Keller Canyon Landfill Gas Power Plant Project- Impact Fees			
2008	*2 Investment interest		6,100.60	
2008	State of California, Dept of Fish and Game			
2008	PSE: Ameresco Keller Canyon Landfill Gas Power Plant Project- Staff Time	4,150.00		
2008	Purchase of HCP/NCCP Books by PG&E	273.00		
2008	CCC PWD: Marsh Creek Emergency Bridge Repair Project; JV1551 dd 10/22/08- Impact Fees			

Table F.2: Revenue Detail 2007-2012 (Years 0-5) (current $)

Fiscal year	Description	Local, State & Federal Funds			Total
		State & Federal Grants	Local Funds	Other Public Funds For Non-Plan Costs	
Actual Comservancy Revenues Through October 31, 2012					
2007	CCC PWD Pre-HCP Mitigation: SR4 Extention Segment 1				1,140,000.00
2007	Development Fee Interest				21,536.55
2007	*1 DP452319 dated 10/5/05 HCP Doc				128.50
2007	CCC PWD Pre-HCP Mitigation: SR4 Extention Segment 3				1,245,000.00
2007	Development Fee Interest				30,610.12
2007	Development Fee Interest				28,722.63
2007	*1 DP484583 dated 6/11/07 HCP/NCCP Book				84.00
2007	*1 DP484928 dated 6/18/07 NCP/NCCP book				84.00
2007	*1 CCC PWD Pre-HCP Mitigation: SR4 Extension Segment 2 Phase 1 + interest JV6459 dated 6/26/07(499300)				377,232.30
2007	*1 DP486715 dated 7/17/07 HCP/NCCP Books				84.00
2007	Development Fee Interest				28,891.59
2007	*1 DP487560 dated 8/2/07 4 Vol Set				128.00
2007	*1 DP487756 dated 8/7/08 HCP/NCCP Volume 1				33.00
2007	*2 HCP Pond BIDS				820.00
2007	Remaining funds from HCPA		10,911.96		10,911.96
2007	Pre-HCP Mitigation from City of Brentwood: John Muir Parkway Project				62,336.00
2007	*2 HCP Pond Vasco Caves				45.00
2007	Pre-HCP Mitigation from City of Brentwood: John Muir Parkway Project				17,000.00
2007	Pre-HCP Mitigation from PINN BROS CONSTRUCTION: Cemtral Blvd Bridge				19,191.00
2007	Sheppard Mullin Receipt # 8210 (HCP Vol 1 & 2)				89.00
2007	Moore Biological Consultants Receipt #8243 (HCP Vol 1 & 2)				89.00
2007	*3 Investment Interest 10/25/07				29,439.69
2008	*3 Investment Interest 4/22/08				13,217.37
2008	*3 Investment Interest 1/23/08				17,174.33
2008	Pre-HCP Mitigation from DISCOVERY BUILDERS, INC DP#499220: SAA 1600 Permit for Bancroft Gardens Project in Pittsburg				243,725.00
2008	Nomad Ecology HCP Vol I & II				91.00
2008	PSE: Ameresco Keller Canyon Landfill Gas Power Plant Project- Impact Fees				14,493.00
2008	*2 Investment interest				6,100.60
2008	State of California, Dept of Fish and Game	10,694.70			10,694.70
2008	PSE: Ameresco Keller Canyon Landfill Gas Power Plant Project- Staff Time				4,150.00
2008	Purchase of HCP/NCCP Books by PG&E				273.00
2008	CCC PWD: Marsh Creek Emergency Bridge Repair Project; JV1551 dd 10/22/08- Impact Fees				1,220.00

Table F.2: Revenue Detail 2007-2012 (Years 0-5) (current $)

		Development Impact Fees			
		Permanent Impacts			
Fiscal year	Description	Urban Develop-ment	Wetland Impacts	Rural Infra-structure Impacts	Temporary Impacts
2008	City of Pittsburg: Mount Diablo Recycling Center Project- Impact Fees				10,065.00
2008	Purchase of HCP Vol 1&2				
2008	Purchase of HCP Vol 1&2				
2009	PSE: Bypass Authority for SR4 Bypass, Segment 4, Phase 2 Project- Impact Fees	880,435.48	11,774.11		
2009	*2 Investment interest				
2009	CCC PWD: Marsh Creek Emergency Bridge Repair Project; Additional pymt JV3800- Impact Fees		212.44		
2009	PSE: PG&E for Contra Costa-Las Positas Reconductoring Project; DP#520095- Impact Fees				491,314.72
2009	CCC LP07-2033: Verizon Wireless Martin Cell Tower Project - Impact Fees			652.19	33,527.14
2009	Dept. of Fish and Game DP524372 5/20/09				
2009	US BOR Grant, DP523129 4/30/09				
2009	Dept of F& G DP#527658				
2009	Dept. of F & G DP#527658				
2009	CCC LP09-2002: SBA Cell Tower Project- Impact Fees			815.56	16,955.15
2009	City of Pittsburg: Rilemart Company (Illegal Grading Site)- Impact Fees				10,065.00
2009	CA Dept of Fish & Game				
2009	Gordon and Betty Moore Foundation grant funds pass through for Fox Ridge				
2009	USDOI federal section 6 grant funds via CA WCB; pass through for Fox Ridge				
2009	USDOI federal section 6 grant funds via CA WCB; pass through for Vaquero Farms South				
2010	PSE: PG&E for Contra Costa-Las Positas Reconductoring Project				
2010	PSE: PG&E for Contra Costa-Las Positas Reconductoring Project		115,311.36	217,160.04	
2010	CCWD(pass thru from State WRCB IRWMP Grant,Souza II acquisition & restoration)#				
2010	PSE: PG&E for Contra Costa-Las Positas Reconductoring Project		68,340.95	78,766.31	13,228.36
2010	State of California, Dept of Fish and Game				
2010	PSE: BART for the eBART Phase I Project- Impact Fees, CTR	10,731.10			
2010	PSE: Equilon Enterprises DBA Shell Oil Products US for Coalinga-Avon Pipeline Repair Project- Staff Time				
2010	PSE: Equilon Enterprises DBA Shell Oil Products US for Coalinga-Avon Pipeline Repair Project- Impact Fees, CTR				5,701.32
2010	PSE: Contra Costa Generating Station for Oakley Generating Station Project- Downpayment for Project (will be credit on final application)				
2010	City Of Pittsburg: JBM Construction for use of 2515 Ant-Pit HWY Site- Impact Fees				4,411.67
2010	City Of Pittsburg: US Posco for Site LA-Stockpile Project- Impact Fees				8,269.23

Table F.2: Revenue Detail 2007-2012 (Years 0-5) (current $)

Fiscal year	Description	Other Project Fees & Exactions		
		Adminis-trative Charges	Payments For Non-covered Activities	Other Develop-ment Exactions
2008	City of Pittsburg: Mount Diablo Recycling Center Project- Impact Fees			
2008	Purchase of HCP Vol 1&2	98.90		
2008	Purchase of HCP Vol 1&2	193.15		
2009	PSE: Bypass Authority for SR4 Bypass, Segment 4, Phase 2 Project- Impact Fees	10,000.00		
2009	*2 Investment interest		1,070.11	
2009	CCC PWD: Marsh Creek Emergency Bridge Repair Project; Additional pymt JV3800- Impact Fees			
2009	PSE: PG&E for Contra Costa-Las Positas Reconductoring Project; DP#520095- Impact Fees			49,131.47
2009	CCC LP07-2033: Verizon Wireless Martin Cell Tower Project - Impact Fees			
2009	Dept. of Fish and Game DP524372 5/20/09			
2009	US BOR Grant, DP523129 4/30/09			
2009	Dept of F& G DP#527658			
2009	Dept. of F & G DP#527658			
2009	CCC LP09-2002: SBA Cell Tower Project- Impact Fees			
2009	City of Pittsburg: Rilemart Company (Illegal Grading Site)- Impact Fees			
2009	CA Dept of Fish & Game			
2009	Gordon and Betty Moore Foundation grant funds pass through for Fox Ridge			
2009	USDOI federal section 6 grant funds via CA WCB; pass through for Fox Ridge			
2009	USDOI federal section 6 grant funds via CA WCB; pass through for Vaquero Farms South			
2010	PSE: PG&E for Contra Costa-Las Positas Reconductoring Project	20,000.00		
2010	PSE: PG&E for Contra Costa-Las Positas Reconductoring Project			
2010	CCWD(pass thru from State WRCB IRWMP Grant,Souza II acquisition & restoration)#			
2010	PSE: PG&E for Contra Costa-Las Positas Reconductoring Project			227,300.00
2010	State of California, Dept of Fish and Game			
2010	PSE: BART for the eBART Phase I Project- Impact Fees, CTR	5,000.00		3,219.33
2010	PSE: Equilon Enterprises DBA Shell Oil Products US for Coalinga-Avon Pipeline Repair Project- Staff Time	5,000.00		
2010	PSE: Equilon Enterprises DBA Shell Oil Products US for Coalinga-Avon Pipeline Repair Project- Impact Fees, CTR			5,701.32
2010	PSE: Contra Costa Generating Station for Oakley Generating Station Project- Downpayment for Project (will be credit on final application)	10,000.00		
2010	City Of Pittsburg: JBM Construction for use of 2515 Ant-Pit HWY Site- Impact Fees			
2010	City Of Pittsburg: US Posco for Site LA-Stockpile Project- Impact Fees			

Table F.2: Revenue Detail 2007-2012 (Years 0-5) (current $)

Fiscal year	Description	Local, State & Federal Funds			Total
		State & Federal Grants	Local Funds	Other Public Funds For Non-Plan Costs	
2008	City of Pittsburg: Mount Diablo Recycling Center Project- Impact Fees				10,065.00
2008	Purchase of HCP Vol 1&2				98.90
2008	Purchase of HCP Vol 1&2				193.15
2009	PSE: Bypass Authority for SR4 Bypass, Segment 4, Phase 2 Project- Impact Fees				902,209.59
2009	*2 Investment interest				1,070.11
2009	CCC PWD: Marsh Creek Emergency Bridge Repair Project; Additional pymt JV3800- Impact Fees				212.44
2009	PSE: PG&E for Contra Costa-Las Positas Reconductoring Project; DP#520095- Impact Fees				540,446.19
2009	CCC LP07-2033: Verizon Wireless Martin Cell Tower Project - Impact Fees				34,179.33
2009	Dept. of Fish and Game DP524372 5/20/09	60,000.00			60,000.00
2009	US BOR Grant, DP523129 4/30/09	1,241,631.00			1,241,631.00
2009	Dept of F& G DP#527658	16,030.90			16,030.90
2009	Dept. of F & G DP#527658	69,305.30			69,305.30
2009	CCC LP09-2002: SBA Cell Tower Project- Impact Fees				17,770.71
2009	City of Pittsburg: Rilemart Company (Illegal Grading Site)- Impact Fees				10,065.00
2009	CA Dept of Fish & Game	119,025.00			119,025.00
2009	Gordon and Betty Moore Foundation grant funds pass through for Fox Ridge		880,000.00		880,000.00
2009	USDOI federal section 6 grant funds via CA WCB; pass through for Fox Ridge	555,000.00			555,000.00
2009	USDOI federal section 6 grant funds via CA WCB; pass through for Vaquero Farms South	2,174,000.00			2,174,000.00
2010	PSE: PG&E for Contra Costa-Las Positas Reconductoring Project				20,000.00
2010	PSE: PG&E for Contra Costa-Las Positas Reconductoring Project				332,471.40
2010	CCWD(pass thru from State WRCB IRWMP Grant,Souza II acquisition & restoration)#	675,000.00			675,000.00
2010	PSE: PG&E for Contra Costa-Las Positas Reconductoring Project				387,635.62
2010	State of California, Dept of Fish and Game	23,969.10			23,969.10
2010	PSE: BART for the eBART Phase I Project- Impact Fees, CTR				18,950.43
2010	PSE: Equilon Enterprises DBA Shell Oil Products US for Coalinga-Avon Pipeline Repair Project- Staff Time				5,000.00
2010	PSE: Equilon Enterprises DBA Shell Oil Products US for Coalinga-Avon Pipeline Repair Project- Impact Fees, CTR				11,402.64
2010	PSE: Contra Costa Generating Station for Oakley Generating Station Project- Downpayment for Project (will be credit on final application)				10,000.00
2010	City Of Pittsburg: JBM Construction for use of 2515 Ant-Pit HWY Site- Impact Fees				4,411.67
2010	City Of Pittsburg: US Posco for Site LA-Stockpile Project- Impact Fees				8,269.23

Table F.2: Revenue Detail 2007-2012 (Years 0-5) (current $)

		Development Impact Fees			
		Permanent Impacts			
Fiscal year	Description	Urban Develop-ment	Wetland Impacts	Rural Infra-structure Impacts	Temporary Impacts
2010	PSE: ConocoPhillips Pipe Line Company for Line 200 Repair Project- Impact Fees, CTR.				42,232.00
2010	Moore Foundation (Pass thru Funding for Land Acquistions)				
2010	CCC LP09-2033: Horizon Cell Tower Project- Impact Fees			1,055.81	18,870.83
2010	USDOI federal section 6 grant funds via CA WCB; pass through for Vaquero Farms North				
2010	USDOI federal section 6 grant funds via CA WCB; pass through for Grandma's Quarter				
2010	USDOI federal section 6 grant funds via CA WCB; pass through for Martin				
2010	USDOI federal section 6 grant funds via CA WCB; pass through for Ang				
2010	Gordon and Betty Moore Foundation grant funds pass through for Souza 3				
2010	USDOI federal section 6 grant funds via CA WCB; pass through for Souza 3				
2010	USDOI federal section 6 grant funds via CA WCB; pass through for Irish Canyon - Chopra				
2011	City of Pittsburg: Bay Cities Paving & Grading for Ca Ave Widening Temp Contractors Storage Site- Impact Fee				689.85
2011	USDOI federal section 6 grant funds via CA WCB; pass through for Barron property (FY07 Section 6 Grant E-21-HL-3; WCB subgrant # SG-1024JW)				
2011	CA WCB Proposition 84 Funds pass through for Barron Property (WCB grant # WC-1073JW)				
2011	USDOI federal section 6 grant funds via CA WCB; pass through for Land Waste Management property (FY08 Section 6 Grant E-26_HL-3; WCB subgrant # SG-1005JW)				
2011	USDOI federal section 6 grant funds via CA WCB; pass through for Thomas property (includes Austin 1 and 2) (FY07 & FY 08 Section 6 Grants (E-21-HL-3 and E-26_HL-3) WCB subgrant # SG-1026JW)				
2011	CA WCB Proposition 84 Funds pass through for Thomas property (includes Austin 1 and 2) (WCB grant # WC-1096JW)				
2011	USDOI federal section 6 grant funds via CA WCB; pass through for Thomas Expansion 1 (PGE lease revenue) (FY 08 Section 6 Grants (E-26-HL-3; WCB subgrant # SG-1027JW)				
2011	Transfer increase in Wetland Fees from 7863 to 7902 JV #2794	(2.24)	2.24		
2011	PSE: Bypass Authority for SR4 Bypass, Segment 4, Phase 2 Project- Refund To Bypass Authority JV# 2793	(98,159.26)			

Table F.2: Revenue Detail 2007-2012 (Years 0-5) (current $)

Fiscal year	Description	Other Project Fees & Exactions		
		Adminis-trative Charges	Payments For Non-covered Activities	Other Develop-ment Exactions
2010	PSE: ConocoPhillips Pipe Line Company for Line 200 Repair Project- Impact Fees, CTR.			21,116.00
2010	Moore Foundation (Pass thru Funding for Land Acquistions)			
2010	CCC LP09-2033: Horizon Cell Tower Project- Impact Fees			
2010	USDOI federal section 6 grant funds via CA WCB; pass through for Vaquero Farms North			
2010	USDOI federal section 6 grant funds via CA WCB; pass through for Grandma's Quarter			
2010	USDOI federal section 6 grant funds via CA WCB; pass through for Martin			
2010	USDOI federal section 6 grant funds via CA WCB; pass through for Ang			
2010	Gordon and Betty Moore Foundation grant funds pass through for Souza 3			
2010	USDOI federal section 6 grant funds via CA WCB; pass through for Souza 3			
2010	USDOI federal section 6 grant funds via CA WCB; pass through for Irish Canyon - Chopra			
2011	City of Pittsburg: Bay Cities Paving & Grading for Ca Ave Widening Temp Contractors Storage Site- Impact Fee			
2011	USDOI federal section 6 grant funds via CA WCB; pass through for Barron property (FY07 Section 6 Grant E-21-HL-3; WCB subgrant # SG-1024JW)			
2011	CA WCB Proposition 84 Funds pass through for Barron Property (WCB grant # WC-1073JW)			
2011	USDOI federal section 6 grant funds via CA WCB; pass through for Land Waste Management property (FY08 Section 6 Grant E-26_HL-3; WCB subgrant # SG-1005JW)			
2011	USDOI federal section 6 grant funds via CA WCB; pass through for Thomas property (includes Austin 1 and 2) (FY07 & FY 08 Section 6 Grants (E-21-HL-3 and E-26_HL-3) WCB subgrant # SG-1026JW)			
2011	CA WCB Proposition 84 Funds pass through for Thomas property (includes Austin 1 and 2) (WCB grant # WC-1096JW)			
2011	USDOI federal section 6 grant funds via CA WCB; pass through for Thomas Expansion 1 (PGE lease revenue) (FY 08 Section 6 Grants (E-26-HL-3; WCB subgrant # SG-1027JW)			
2011	Transfer increase in Wetland Fees from 7863 to 7902 JV #2794			
2011	PSE: Bypass Authority for SR4 Bypass, Segment 4, Phase 2 Project- Refund To Bypass Authority JV# 2793			

Table F.2: Revenue Detail 2007-2012 (Years 0-5) (current $)

Fiscal year	Description	Local, State & Federal Funds			Total
		State & Federal Grants	Local Funds	Other Public Funds For Non-Plan Costs	
2010	PSE: ConocoPhillips Pipe Line Company for Line 200 Repair Project- Impact Fees, CTR.				63,348.00
2010	Moore Foundation (Pass thru Funding for Land Acquistions)		250,000.00		250,000.00
2010	CCC LP09-2033: Horizon Cell Tower Project- Impact Fees				19,926.64
2010	USDOI federal section 6 grant funds via CA WCB; pass through for Vaquero Farms North	2,770,000.00			2,770,000.00
2010	USDOI federal section 6 grant funds via CA WCB; pass through for Grandma's Quarter	471,475.00			471,475.00
2010	USDOI federal section 6 grant funds via CA WCB; pass through for Martin	1,115,579.00			1,115,579.00
2010	USDOI federal section 6 grant funds via CA WCB; pass through for Ang	1,243,725.00			1,243,725.00
2010	Gordon and Betty Moore Foundation grant funds pass through for Souza 3		2,000,000.00		2,000,000.00
2010	USDOI federal section 6 grant funds via CA WCB; pass through for Souza 3	2,385,180.00			2,385,180.00
2010	USDOI federal section 6 grant funds via CA WCB; pass through for Irish Canyon - Chopra	792,000.00			792,000.00
2011	City of Pittsburg: Bay Cities Paving & Grading for Ca Ave Widening Temp Contractors Storage Site- Impact Fee				689.85
2011	USDOI federal section 6 grant funds via CA WCB; pass through for Barron property (FY07 Section 6 Grant E-21-HL-3; WCB subgrant # SG-1024JW)	1,328,670.00			1,328,670.00
2011	CA WCB Proposition 84 Funds pass through for Barron Property (WCB grant # WC-1073JW)	973,930.00			973,930.00
2011	USDOI federal section 6 grant funds via CA WCB; pass through for Land Waste Management property (FY08 Section 6 Grant E-26_HL-3; WCB subgrant # SG-1005JW)	1,372,500.00			1,372,500.00
2011	USDOI federal section 6 grant funds via CA WCB; pass through for Thomas property (includes Austin 1 and 2) (FY07 & FY 08 Section 6 Grants (E-21-HL-3 and E-26_HL-3) WCB subgrant # SG-1026JW)	1,634,634.00			1,634,634.00
2011	CA WCB Proposition 84 Funds pass through for Thomas property (includes Austin 1 and 2) (WCB grant # WC-1096JW)	1,842,966.00			1,842,966.00
2011	USDOI federal section 6 grant funds via CA WCB; pass through for Thomas Expansion 1 (PGE lease revenue) (FY 08 Section 6 Grants (E-26-HL-3; WCB subgrant # SG-1027JW)	477,000.00			477,000.00
2011	Transfer increase in Wetland Fees from 7863 to 7902 JV #2794				-
2011	PSE: Bypass Authority for SR4 Bypass, Segment 4, Phase 2 Project- Refund To Bypass Authority JV# 2793				(98,159.26)

Table F.2: Revenue Detail 2007-2012 (Years 0-5) (current $)

		Development Impact Fees			
		Permanent Impacts			
Fiscal year	Description	Urban Develop-ment	Wetland Impacts	Rural Infra-structure Impacts	Temporary Impacts
2011	CCC LP09-2033: Horizon Tower Project- Staff Fees:Transfer revenue from LP092033 to 7863 JV#3384				
2011	PSE: Caltrans for SR4 Median Buffer and Shoulder Widening Project - Staff Time (Work done for 2010, ACQU PAR MC-20087 04 CC 4 PM43.9-48.1)				
2011	PSE: ConocoPhillips Pipe Line Company for Line 200 Repair Project Second Amendment- Impact Fees				1,066.22
2011	CCC PWD: Vasco Camino Diablo Project- Impact Fees			41,347.82	6,894.86
2011	PSE: ConocoPhillips Pipe Line Company for Line 200 Repair Project Original and First Amendment- Refund of Development Fees				(24,518.64)
2011	PSE: Contra Costa Generating Station for Oakley Generating Station Project- Impact Fees, CTR, Antioch, Admin	178,057.91			52,383.15
2011	Adjust Cash LAIF Account JV# 4350				
2011	CCC LP10-2082: J4 Byron Hot Springs Communications Facility Project- Impact Fees			639.73	4,847.72
2011	CCC LP09-2037: Camino Diablo Vasco Telecommunications Facility Project- Impact Fees			5,757.56	41,020.85
2011	PSE: Caltrans for SR4 Median Buffer and Shoulder Widening Project First Amendment- Staff Fees				
2011	City of Oakley: Stonewood 3 Project - Unit 1 of Sub# 9183- Impact Fees	23,563.35			
2011	PSE: ConocoPhillips Pipe Line Company for Line 200 Repair Project Second Amendment- Staff Fees				
2011	CCC LP10-2070: Morgan Territory Road Telecommunication Facility Project- Impact Fees			85.30	9,682.65
2011	CCC LP10-2082: J4 Byron Hot Springs Communication Facility Project- Staff Fees (Transfer to 7863 JV#0130)				
2011	City of Pittsburg: Trash Capture Demonstration Project- Impact Fees	213.24	1,767.19		42.65
2011	CCC LP09-2037: Camino Diablo Vasco Communications Facility- Staff Fees				
2011	JV #0789 to adjust cash with Fiscal Agents to reconcile to the LAIF account as of 9/11				
2011	PSE: Equilon Enterprises dba Shell Oil Products US for Coalinga Avon Pipeline Repair Project First Amendment-Impact Fees, CTR				1,066.22
2011	CCC PWD: Byron Hwy Shoulder Widening Project-Impact Fees (JV #4956)			48,407.78	
2011	CCC PWD:Byron Hwy Shoulder Widening Project-Impact Fees (Correction-JV#4956, refer to DCD JV #0134)			(48,407.78)	

Table F.2: Revenue Detail 2007-2012 (Years 0-5) (current $)

Fiscal year	Description	Other Project Fees & Exactions		
		Adminis-trative Charges	Payments For Non-covered Activities	Other Develop-ment Exactions
2011	CCC LP09-2033: Horizon Tower Project- Staff Fees:Transfer revenue from LP092033 to 7863 JV#3384	2,660.00		
2011	PSE: Caltrans for SR4 Median Buffer and Shoulder Widening Project - Staff Time (Work done for 2010, ACQU PAR MC-20087 04 CC 4 PM43.9-48.1)	25,000.00		
2011	PSE: ConocoPhillips Pipe Line Company for Line 200 Repair Project Second Amendment- Impact Fees			
2011	CCC PWD: Vasco Camino Diablo Project- Impact Fees			
2011	PSE: ConocoPhillips Pipe Line Company for Line 200 Repair Project Original and First Amendment- Refund of Development Fees			
2011	PSE: Contra Costa Generating Station for Oakley Generating Station Project- Impact Fees, CTR, Antioch, Admin	25,000.00		200,000.00
2011	Adjust Cash LAIF Account JV# 4350			
2011	CCC LP10-2082: J4 Byron Hot Springs Communications Facility Project- Impact Fees			
2011	CCC LP09-2037: Camino Diablo Vasco Telecommunications Facility Project- Impact Fees			
2011	PSE: Caltrans for SR4 Median Buffer and Shoulder Widening Project First Amendment- Staff Fees	2,000.00		
2011	City of Oakley: Stonewood 3 Project - Unit 1 of Sub# 9183- Impact Fees			
2011	PSE: ConocoPhillips Pipe Line Company for Line 200 Repair Project Second Amendment- Staff Fees	3,000.00		
2011	CCC LP10-2070: Morgan Territory Road Telecommunication Facility Project- Impact Fees			
2011	CCC LP10-2082: J4 Byron Hot Springs Communication Facility Project- Staff Fees (Transfer to 7863 JV#0130)	2,700.00		
2011	City of Pittsburg: Trash Capture Demonstration Project- Impact Fees			
2011	CCC LP09-2037: Camino Diablo Vasco Communications Facility- Staff Fees	4,700.00		
2011	JV #0789 to adjust cash with Fiscal Agents to reconcile to the LAIF account as of 9/11			
2011	PSE: Equilon Enterprises dba Shell Oil Products US for Coalinga Avon Pipeline Repair Project First Amendment-Impact Fees, CTR	1,066.22		
2011	CCC PWD: Byron Hwy Shoulder Widening Project-Impact Fees (JV #4956)			
2011	CCC PWD:Byron Hwy Shoulder Widening Project-Impact Fees (Correction-JV#4956, refer to DCD JV #0134)			

Table F.2: Revenue Detail 2007-2012 (Years 0-5) (current $)

Fiscal year	Description	Local, State & Federal Funds			Total
		State & Federal Grants	Local Funds	Other Public Funds For Non-Plan Costs	
2011	CCC LP09-2033: Horizon Tower Project- Staff Fees:Transfer revenue from LP092033 to 7863 JV#3384				2,660.00
2011	PSE: Caltrans for SR4 Median Buffer and Shoulder Widening Project - Staff Time (Work done for 2010, ACQU PAR MC-20087 04 CC 4 PM43.9-48.1)				25,000.00
2011	PSE: ConocoPhillips Pipe Line Company for Line 200 Repair Project Second Amendment- Impact Fees				1,066.22
2011	CCC PWD: Vasco Camino Diablo Project- Impact Fees				48,242.68
2011	PSE: ConocoPhillips Pipe Line Company for Line 200 Repair Project Original and First Amendment- Refund of Development Fees				(24,518.64)
2011	PSE: Contra Costa Generating Station for Oakley Generating Station Project- Impact Fees, CTR, Antioch, Admin			100,000.00	555,441.06
2011	Adjust Cash LAIF Account JV# 4350		4,698.18		4,698.18
2011	CCC LP10-2082: J4 Byron Hot Springs Communications Facility Project- Impact Fees				5,487.45
2011	CCC LP09-2037: Camino Diablo Vasco Telecommunications Facility Project- Impact Fees				46,778.41
2011	PSE: Caltrans for SR4 Median Buffer and Shoulder Widening Project First Amendment- Staff Fees				2,000.00
2011	City of Oakley: Stonewood 3 Project - Unit 1 of Sub# 9183- Impact Fees				23,563.35
2011	PSE: ConocoPhillips Pipe Line Company for Line 200 Repair Project Second Amendment- Staff Fees				3,000.00
2011	CCC LP10-2070: Morgan Territory Road Telecommunication Facility Project- Impact Fees				9,767.95
2011	CCC LP10-2082: J4 Byron Hot Springs Communication Facility Project- Staff Fees (Transfer to 7863 JV#0130)				2,700.00
2011	City of Pittsburg: Trash Capture Demonstration Project- Impact Fees				2,023.08
2011	CCC LP09-2037: Camino Diablo Vasco Communications Facility- Staff Fees				4,700.00
2011	JV #0789 to adjust cash with Fiscal Agents to reconcile to the LAIF account as of 9/11		133.50		133.50
2011	PSE: Equilon Enterprises dba Shell Oil Products US for Coalinga Avon Pipeline Repair Project First Amendment-Impact Fees, CTR				2,132.44
2011	CCC PWD: Byron Hwy Shoulder Widening Project-Impact Fees (JV #4956)				48,407.78
2011	CCC PWD:Byron Hwy Shoulder Widening Project-Impact Fees (Correction- JV#4956, refer to DCD JV #0134)				(48,407.78)

Table F.2: Revenue Detail 2007-2012 (Years 0-5) (current $)

		Development Impact Fees			
		Permanent Impacts			
Fiscal year	Description	Urban Develop-ment	Wetland Impacts	Rural Infra-structure Impacts	Temporary Impacts
2011	CCC PWD: Byron Hwy Shoulder Widening Project- Impact Fees (Transfer funds to correct PWD JV#4956, refer to DCD JV #0134)		37,269.59	4,691.35	6,446.84
2011	CCC PWD: Balfour Rd. Culvert Repair Project- Impact Fees (JV#0870)		9,515.64	213.24	2,140.26
2011	PSE: ConocoPhillips Pipeline Company for Line 200 Repair and Anode Bed Project- Impact Fees			63.97	29,214.30
2011	PSE: Contra Costa Generating Station for Oakley Generating Station Project First Amendment- Impact Fees, CTR	213.24			1,506.92
2011	CC Water District Reimb. Prof. Svcs- ECCC Integrated Regional Water Mgmt				
2011	CCC LP10-2070: Morgan Territory Road Telecommunication Facility Project- Staff Fees (Transfer revenue from LP102070 to 7863 5BHCAD, JV #1749)				
2011	City of Brentwood: New Meeting House for Brentwood Project- Impact Fees	18,127.17			
2011	ECCCHC (Req #3044) for Enlarging the Mt. Diablo Conservation Lands Network				
2012	Dept. of Fish and Game Reimbursement for Expenses Incurred in 2011				
2012	PSE: BART for the eBART Phase II Project- Impact Fees, CTR, SWHA mitigation (Minus $7511.77 credit owed BART for Phase I)	598,791.58			2,367.00
2012	City Of Pittsburg: US Posco for Site LA-Stockpile Project Extension of Permit Coverage- Impact Fees				51.91
2012	$930,000 Grant pmt from State via CC Water Dist. for Wetland Creation (Souza II) 2009				
2012	$930,000 Grant pmt from the State via CC Water District for Land Purchase 2011				
2012	$930,000 Grant pmt from the State via CC Water District for Wetland Creation (Hess) 2011				
2012	$930,000 Grant pmt from the State via CC Water District for staff time (Hess) 2011				
2012	Adjust Cash LAIF Account JV# 3211				
2012	State of CA, Dept. of Fish & Game				
2012	City Of Pittsburg: US Posco for Site LA-Stockpile Project Extension of Permit Coverage (More Owed)- Impact Fees				6.00
2012	PSE: Equilon Enterprises dba Shell Oil Products US for Coalinga Avon Pipeline Repair Project Second Amendment- Impact Fees				1,066.22
2012	PSE: Equilon Enterprises dba Shell Oil Products US for Coalinga Avon Pipeline Repair Project Second Amendment- CTR				
2012	Dept of F&G, Hess Restoration				
2012	Contra Costa Water District, IRWMP Grant Prop 50				
2012	PSE: ConocoPhillips Pipeline Company for Line 200 Repair and Anode Bed Project- Staff Fees				

Table F.2: Revenue Detail 2007-2012 (Years 0-5) (current $)

Fiscal year	Description	Other Project Fees & Exactions		
		Adminis-trative Charges	Payments For Non-covered Activities	Other Develop-ment Exactions
2011	CCC PWD: Byron Hwy Shoulder Widening Project- Impact Fees (Transfer funds to correct PWD JV#4956, refer to DCD JV #0134)			
2011	CCC PWD: Balfour Rd. Culvert Repair Project- Impact Fees (JV#0870)			
2011	PSE: ConocoPhillips Pipeline Company for Line 200 Repair and Anode Bed Project- Impact Fees			14,639.13
2011	PSE: Contra Costa Generating Station for Oakley Generating Station Project First Amendment- Impact Fees, CTR			1,720.16
2011	CC Water District Reimb. Prof. Svcs- ECCC Integrated Regional Water Mgmt	248.46		
2011	CCC LP10-2070: Morgan Territory Road Telecommunication Facility Project- Staff Fees (Transfer revenue from LP102070 to 7863 5BHCAD, JV #1749)	3,350.00		
2011	City of Brentwood: New Meeting House for Brentwood Project- Impact Fees			
2011	ECCCHC (Req #3044) for Enlarging the Mt. Diablo Conservation Lands Network			
2012	Dept. of Fish and Game Reimbursement for Expenses Incurred in 2011			
2012	PSE: BART for the eBART Phase II Project- Impact Fees, CTR, SWHA mitigation (Minus $7511.77 credit owed BART for Phase I)			303,151.67
2012	City Of Pittsburg: US Posco for Site LA-Stockpile Project Extension of Permit Coverage- Impact Fees			
2012	$930,000 Grant pmt from State via CC Water Dist. for Wetland Creation (Souza II) 2009			
2012	$930,000 Grant pmt from the State via CC Water District for Land Purchase 2011			
2012	$930,000 Grant pmt from the State via CC Water District for Wetland Creation (Hess) 2011			
2012	$930,000 Grant pmt from the State via CC Water District for staff time (Hess) 2011			
2012	Adjust Cash LAIF Account JV# 3211		216.16	
2012	State of CA, Dept. of Fish & Game			
2012	City Of Pittsburg: US Posco for Site LA-Stockpile Project Extension of Permit Coverage (More Owed)- Impact Fees			
2012	PSE: Equilon Enterprises dba Shell Oil Products US for Coalinga Avon Pipeline Repair Project Second Amendment- Impact Fees			
2012	PSE: Equilon Enterprises dba Shell Oil Products US for Coalinga Avon Pipeline Repair Project Second Amendment- CTR			1,066.22
2012	Dept of F&G, Hess Restoration			
2012	Contra Costa Water District, IRWMP Grant Prop 50			
2012	PSE: ConocoPhillips Pipeline Company for Line 200 Repair and Anode Bed Project- Staff Fees	3,500.00		

Table F.2: Revenue Detail 2007-2012 (Years 0-5) (current $)

Fiscal year	Description	Local, State & Federal Funds			Total
		State & Federal Grants	Local Funds	Other Public Funds For Non-Plan Costs	
2011	CCC PWD: Byron Hwy Shoulder Widening Project- Impact Fees (Transfer funds to correct PWD JV#4956, refer to DCD JV #0134)				48,407.78
2011	CCC PWD: Balfour Rd. Culvert Repair Project- Impact Fees (JV#0870)				11,869.14
2011	PSE: ConocoPhillips Pipeline Company for Line 200 Repair and Anode Bed Project- Impact Fees				43,917.40
2011	PSE: Contra Costa Generating Station for Oakley Generating Station Project First Amendment- Impact Fees, CTR				3,440.32
2011	CC Water District Reimb. Prof. Svcs- ECCC Integrated Regional Water Mgmt				248.46
2011	CCC LP10-2070: Morgan Territory Road Telecommunication Facility Project- Staff Fees (Transfer revenue from LP102070 to 7863 5BHCAD, JV #1749)				3,350.00
2011	City of Brentwood: New Meeting House for Brentwood Project- Impact Fees				18,127.17
2011	ECCCHC (Req #3044) for Enlarging the Mt. Diablo Conservation Lands Network		1,300,000.00		1,300,000.00
2012	Dept. of Fish and Game Reimbursement for Expenses Incurred in 2011	122,130.00			122,130.00
2012	PSE: BART for the eBART Phase II Project- Impact Fees, CTR, SWHA mitigation (Minus $7511.77 credit owed BART for Phase I)			30,000.00	934,310.25
2012	City Of Pittsburg: US Posco for Site LA-Stockpile Project Extension of Permit Coverage- Impact Fees				51.91
2012	$930,000 Grant pmt from State via CC Water Dist. for Wetland Creation (Souza II) 2009	75,000.00			75,000.00
2012	$930,000 Grant pmt from the State via CC Water District for Land Purchase 2011	500,000.00			500,000.00
2012	$930,000 Grant pmt from the State via CC Water District for Wetland Creation (Hess) 2011	330,000.00			330,000.00
2012	$930,000 Grant pmt from the State via CC Water District for staff time (Hess) 2011	25,000.00			25,000.00
2012	Adjust Cash LAIF Account JV# 3211				216.16
2012	State of CA, Dept. of Fish & Game	24,300.00			24,300.00
2012	City Of Pittsburg: US Posco for Site LA-Stockpile Project Extension of Permit Coverage (More Owed)- Impact Fees				6.00
2012	PSE: Equilon Enterprises dba Shell Oil Products US for Coalinga Avon Pipeline Repair Project Second Amendment- Impact Fees				1,066.22
2012	PSE: Equilon Enterprises dba Shell Oil Products US for Coalinga Avon Pipeline Repair Project Second Amendment- CTR				1,066.22
2012	Dept of F&G, Hess Restoration	27,870.00			27,870.00
2012	Contra Costa Water District, IRWMP Grant Prop 50	330,000.00			330,000.00
2012	PSE: ConocoPhillips Pipeline Company for Line 200 Repair and Anode Bed Project- Staff Fees				3,500.00

Table F.2: Revenue Detail 2007-2012 (Years 0-5) (current $)

		Development Impact Fees			
		Permanent Impacts			
Fiscal year	Description	Urban Develop-ment	Wetland Impacts	Rural Infra-structure Impacts	Temporary Impacts
2012	CCC LP10-2009: Clayton Regency Mobile Home Park Project- Impact Fees			10,584.32	3,245.86
2012	$215,000 Check CCWD State IRWMP Grant $75,000 for 2010 expenses				
2012	$215,000 Check CCWD State IRWMP Grant $140,000 for 2011 Hess Restoration				
2012	$76,500 Check- State of CA F&G Maint. & Monitoring various projects, 2011 expenses				
2012	Preserve Mgmnt & Maint for various projects				
2012	Preserve Mgmnt Plan for Byron Hills				
2012	CCC PWD: Upper Sand Creek Detension Basin Excavation Project (JV#4596)				7,550.15
2012	CCC PWD: Deer Valley Rd Safety Imprvmnt Proj. South of Chadbourne- Impact Fees(JV#4608)				5,941.09
2012	CCC PWD: Deer Valley Rd Safety Imprvmnt Proj. South of Chadbourne- Impact Fees(JV#4608)			11,219.38	
2012	CCC PWD: Deer Valley Rd Safety Imprvmnt Proj. South of Chadbourne- Impact Fees(JV#4608)		30,508.45		
2012	Mitigation Funds for the PG&E Line 131 Natural Gas Pipeline Replacement Project				
2012	$76,500 Check- State of CA F&G Maint. & Monitoring various projects, 2012 expenses				
2012	PSE: Equilon Enterprises dba Shell Oil Products US for Coalinga Avon Pipeline Repair Project Second Amendment- Staff Time Fees for First and Second Amendment				
2012	Adjust Cash LAIF Account as of 6/8/12 (April 2012) JV# 5092				
2012	CCC BIG12-004598: Los Vaqueros Communications Facility- Impact Fees, Staff Fee			550.38	11,241.61
2012	EBRPD: Round Valley Pedestrian Bridge Project- Impact Fees			3,175.30	1,171.33
2012	CCC PWD: Marsh Creek Shoulder Widening Project-Impact Fees (JV# 0108)		27,279.54	57,578.71	3,136.27
2012	Adjust Cash LAIF Account as of 7/13/12 (July 2012) JV# 0073				
2012	PSE: Caltrans for SR4 Median Buffer and Shoulder Widening Project Second Amendment- Impact Fees			476.29	699.92
2012	CTR Payment: PG&E Contribution to Recovery of HCP/NCCP covered species for L-57A Dig Site 1 PG&E Project- Per CDFG Mitigation				
2012	PSE: BART for the eBART Phase II Project Second Amendment- Impact Fees, CTR			40,643.79	
2012	PSE: Phillips 66 for Vasco Rd Line 200 Pipeline Emergency Release Project- Impact Fees, Staff Time				26,383.19
2012	PSE: BART for the eBART Phase II Project (Original Project)- Staff Fees				

Table F.2: Revenue Detail 2007-2012 (Years 0-5) (current $)

Fiscal year	Description	Other Project Fees & Exactions		
		Adminis-trative Charges	Payments For Non-covered Activities	Other Develop-ment Exactions
2012	CCC LP10-2009: Clayton Regency Mobile Home Park Project- Impact Fees			
2012	$215,000 Check CCWD State IRWMP Grant $75,000 for 2010 expenses			
2012	$215,000 Check CCWD State IRWMP Grant $140,000 for 2011 Hess Restoration			
2012	$76,500 Check- State of CA F&G Maint. & Monitoring various projects, 2011 expenses			
2012	Preserve Mgmnt & Maint for various projects			
2012	Preserve Mgmnt Plan for Byron Hills			
2012	CCC PWD: Upper Sand Creek Detension Basin Excavation Project (JV#4596)			
2012	CCC PWD: Deer Valley Rd Safety Imprvmnt Proj. South of Chadbourne- Impact Fees(JV#4608)			
2012	CCC PWD: Deer Valley Rd Safety Imprvmnt Proj. South of Chadbourne- Impact Fees(JV#4608)			
2012	CCC PWD: Deer Valley Rd Safety Imprvmnt Proj. South of Chadbourne- Impact Fees(JV#4608)			
2012	Mitigation Funds for the PG&E Line 131 Natural Gas Pipeline Replacement Project			22,809.00
2012	$76,500 Check- State of CA F&G Maint. & Monitoring various projects, 2012 expenses			
2012	PSE: Equilon Enterprises dba Shell Oil Products US for Coalinga Avon Pipeline Repair Project Second Amendment- Staff Time Fees for First and Second Amendment	7,000.00		
2012	Adjust Cash LAIF Account as of 6/8/12 (April 2012) JV# 5092			
2012	CCC BIG12-004598: Los Vaqueros Communications Facility- Impact Fees, Staff Fee	2,741.00		
2012	EBRPD: Round Valley Pedestrian Bridge Project- Impact Fees			
2012	CCC PWD: Marsh Creek Shoulder Widening Project-Impact Fees (JV# 0108)			
2012	Adjust Cash LAIF Account as of 7/13/12 (July 2012) JV# 0073			
2012	PSE: Caltrans for SR4 Median Buffer and Shoulder Widening Project Second Amendment- Impact Fees	1,176.22		
2012	CTR Payment: PG&E Contribution to Recovery of HCP/NCCP covered species for L-57A Dig Site 1 PG&E Project- Per CDFG Mitigation			21,168.64
2012	PSE: BART for the eBART Phase II Project Second Amendment- Impact Fees, CTR			20,321.89
2012	PSE: Phillips 66 for Vasco Rd Line 200 Pipeline Emergency Release Project- Impact Fees, Staff Time	5,000.00		
2012	PSE: BART for the eBART Phase II Project (Original Project)- Staff Fees	26,129.01		

Table F.2: Revenue Detail 2007-2012 (Years 0-5) (current $)

Fiscal year	Description	Local, State & Federal Funds			Total
		State & Federal Grants	Local Funds	Other Public Funds For Non-Plan Costs	
2012	CCC LP10-2009: Clayton Regency Mobile Home Park Project- Impact Fees				13,830.18
2012	$215,000 Check CCWD State IRWMP Grant $75,000 for 2010 expenses	75,000.00			75,000.00
2012	$215,000 Check CCWD State IRWMP Grant $140,000 for 2011 Hess Restoration	140,000.00			140,000.00
2012	$76,500 Check- State of CA F&G Maint. & Monitoring various projects, 2011 expenses	67,000.00			67,000.00
2012	Preserve Mgmnt & Maint for various projects	2,700.00			2,700.00
2012	Preserve Mgmnt Plan for Byron Hills	10,634.15			10,634.15
2012	CCC PWD: Upper Sand Creek Detension Basin Excavation Project (JV#4596)				7,550.15
2012	CCC PWD: Deer Valley Rd Safety Imprvmnt Proj. South of Chadbourne- Impact Fees(JV#4608)				5,941.09
2012	CCC PWD: Deer Valley Rd Safety Imprvmnt Proj. South of Chadbourne- Impact Fees(JV#4608)				11,219.38
2012	CCC PWD: Deer Valley Rd Safety Imprvmnt Proj. South of Chadbourne- Impact Fees(JV#4608)				30,508.45
2012	Mitigation Funds for the PG&E Line 131 Natural Gas Pipeline Replacement Project				22,809.00
2012	$76,500 Check- State of CA F&G Maint. & Monitoring various projects, 2012 expenses	9,500.00			9,500.00
2012	PSE: Equilon Enterprises dba Shell Oil Products US for Coalinga Avon Pipeline Repair Project Second Amendment- Staff Time Fees for First and Second Amendment				7,000.00
2012	Adjust Cash LAIF Account as of 6/8/12 (April 2012) JV# 5092		106.07		106.07
2012	CCC BIG12-004598: Los Vaqueros Communications Facility- Impact Fees, Staff Fee				14,532.99
2012	EBRPD: Round Valley Pedestrian Bridge Project- Impact Fees				4,346.63
2012	CCC PWD: Marsh Creek Shoulder Widening Project-Impact Fees (JV# 0108)				87,994.52
2012	Adjust Cash LAIF Account as of 7/13/12 (July 2012) JV# 0073		100.32		100.32
2012	PSE: Caltrans for SR4 Median Buffer and Shoulder Widening Project Second Amendment- Impact Fees				2,352.43
2012	CTR Payment: PG&E Contribution to Recovery of HCP/NCCP covered species for L-57A Dig Site 1 PG&E Project- Per CDFG Mitigation				21,168.64
2012	PSE: BART for the eBART Phase II Project Second Amendment- Impact Fees, CTR				60,965.68
2012	PSE: Phillips 66 for Vasco Rd Line 200 Pipeline Emergency Release Project- Impact Fees, Staff Time				31,383.19
2012	PSE: BART for the eBART Phase II Project (Original Project)- Staff Fees				26,129.01

Table F.2: Revenue Detail 2007-2012 (Years 0-5) (current $)

Fiscal year	Description	Development Impact Fees			
		Permanent Impacts			
		Urban Develop-ment	Wetland Impacts	Rural Infra-structure Impacts	Temporary Impacts
Estimated Conservancy Revenues November 1 Through December 31, 2012					
2012	acquisition of Thomas North (state and federal portion)				
2012	City of Oakley: iPark Oakley aka Park and Play Project- Impact Fees	96,740.71			
2012	CCC PWD: Upper Sand Creek Detension Basin Project-Impact Fees		123,582.90	145,851.96	4,276.07
2012	CCC PWD: Upper Sand Creek Detension Basin Project-Credit to Project from Interim Excavation Project				(7,550.15)
	Subtotal Conservancy Revenues Years 0-5	**1,708,712.28**	**425,800.41**	**621,329.01**	**862,187.74**
Non-Conservancy Contributions To Plan Costs Through October 31, 2012					
2007	Moore Foundation Grant (Souza 1 acquisition) (actual funding in 2004)				
2007	Souza 1 (EBRPD non-mitigation funding)				
2007	Lentzner (EBRPD non-mitigation funding)				
2007	EBRPD Land Acquisition Due Diligence cost/funding				
2008	EBRPD Land Acquisition Due Diligence cost/funding				
2008	Chaparral Spring (Coastal Conservancy)				
2009	EBRPD Land Acquisition Due Diligence cost/funding				
2009	Souza 2 (EBRPD non-mitigation funding)				
2009	Schwartz (EBRPD non-mitigation funding)				
2009	Vaquero Farms South (EBRPD non-mitigation funding) (EBRPD contributed $500,000, but the value of the conservation easement portion was $470,000, so their contribution has been reduced to $30,000)				
2009	Fox Ridge (EBRPD non-mitigation funding)				
2010	EBRPD Land Acquisition Due Diligence cost/funding				
2010	Grandma's Quarter (EBRPD non-mitigation funding)				
2010	Martin (EBRPD non-mitigation funding)				
2010	Souza 3 (EBRPD non-mitigation funding) ($75,978 easement cost excluded)				
2010	Ang (EBRPD non-mitigation funding)				
2010	Irish Canyon - Chopra (EBRPD non-mitigation funding)				
2011	Land Waste Management (EBRPD non-mitigation funding)				
2011	Barron (EBRPD non-mitigation funding)				
2011	Austin 1 (Kreigor Peak) Property (aka Southern)--Excluding Lease Revenue (EBRPD non-mitigation funding)				
2011	Austin 2 (aka Central Property) (located to the northeast; adjoins Black Diamond Mines) (EBRPD non-mitigation funding)				
2011	Communication Tower Lease Revenue from Austin 1 (Kreigor Peak or Southern) Property (EBRPD non-mitigation funding)				
2011	EBRPD Land Acquisition Due Diligence cost/funding				

Table F.2: Revenue Detail 2007-2012 (Years 0-5) (current $)

Fiscal year	Description	Other Project Fees & Exactions		
		Adminis-trative Charges	Payments For Non-covered Activities	Other Develop-ment Exactions
Estimated Conservancy Revenues November 1 Through December 31, 2012				
2012	acquisition of Thomas North (state and federal portion)			
2012	City of Oakley: iPark Oakley aka Park and Play Project- Impact Fees			
2012	CCC PWD: Upper Sand Creek Detension Basin Project-Impact Fees			
2012	CCC PWD: Upper Sand Creek Detension Basin Project-Credit to Project from Interim Excavation Project			
	Subtotal Conservancy Revenues Years 0-5	**171,661.46**	**3,281,463.45**	**891,344.83**
Non-Conservancy Contributions To Plan Costs Through October 31, 2012				
2007	Moore Foundation Grant (Souza 1 acquisition) (actual funding in 2004)			
2007	Souza 1 (EBRPD non-mitigation funding)			
2007	Lentzner (EBRPD non-mitigation funding)			
2007	EBRPD Land Acquisition Due Diligence cost/funding			
2008	EBRPD Land Acquisition Due Diligence cost/funding			
2008	Chaparral Spring (Coastal Conservancy)			
2009	EBRPD Land Acquisition Due Diligence cost/funding			
2009	Souza 2 (EBRPD non-mitigation funding)			
2009	Schwartz (EBRPD non-mitigation funding)			
2009	Vaquero Farms South (EBRPD non-mitigation funding) (EBRPD contributed $500,000, but the value of the conservation easement portion was $470,000, so their contribution has been reduced to $30,000)			
2009	Fox Ridge (EBRPD non-mitigation funding)			
2010	EBRPD Land Acquisition Due Diligence cost/funding			
2010	Grandma's Quarter (EBRPD non-mitigation funding)			
2010	Martin (EBRPD non-mitigation funding)			
2010	Souza 3 (EBRPD non-mitigation funding) ($75,978 easement cost excluded)			
2010	Ang (EBRPD non-mitigation funding)			
2010	Irish Canyon - Chopra (EBRPD non-mitigation funding)			
2011	Land Waste Management (EBRPD non-mitigation funding)			
2011	Barron (EBRPD non-mitigation funding)			
2011	Austin 1 (Kreigor Peak) Property (aka Southern)--Excluding Lease Revenue (EBRPD non-mitigation funding)			
2011	Austin 2 (aka Central Property) (located to the northeast; adjoins Black Diamond Mines) (EBRPD non-mitigation funding)			
2011	Communication Tower Lease Revenue from Austin 1 (Kreigor Peak or Southern) Property (EBRPD non-mitigation funding)			
2011	EBRPD Land Acquisition Due Diligence cost/funding			

Table F.2: Revenue Detail 2007-2012 (Years 0-5) (current $)

Fiscal year	Description	Local, State & Federal Funds			Total
		State & Federal Grants	Local Funds	Other Public Funds For Non-Plan Costs	
Estimated Conservancy Revenues November 1 Through December 31, 2012					
2012	acquisition of Thomas North (state and federal portion)	777,510.00			777,510.00
2012	City of Oakley: iPark Oakley aka Park and Play Project- Impact Fees				96,740.71
2012	CCC PWD: Upper Sand Creek Detension Basin Project-Impact Fees				273,710.93
2012	CCC PWD: Upper Sand Creek Detension Basin Project-Credit to Project from Interim Excavation Project				(7,550.15)
	Subtotal Conservancy Revenues Years 0-5	**23,868,959.15**	**4,445,950.03**	**130,000.00**	**36,407,408.36**
Non-Conservancy Contributions To Plan Costs Through October 31, 2012					
2007	Moore Foundation Grant (Souza 1 acquisition) (actual funding in 2004)		1,500,000.00		1,500,000.00
2007	Souza 1 (EBRPD non-mitigation funding)		361,600.00		361,600.00
2007	Lentzner (EBRPD non-mitigation funding)		543,402.00		543,402.00
2007	EBRPD Land Acquisition Due Diligence cost/funding		170,444.00		170,444.00
2008	EBRPD Land Acquisition Due Diligence cost/funding		21,607.00		21,607.00
2008	Chaparral Spring (Coastal Conservancy)	1,325,000.00			1,325,000.00
2009	EBRPD Land Acquisition Due Diligence cost/funding		57,373.00		57,373.00
2009	Souza 2 (EBRPD non-mitigation funding)		200,000.00		200,000.00
2009	Schwartz (EBRPD non-mitigation funding)		127,249.00		127,249.00
2009	Vaquero Farms South (EBRPD non-mitigation funding) (EBRPD contributed $500,000, but the value of the conservation easement portion was $470,000, so their contribution has been reduced to $30,000)		30,000.00		30,000.00
2009	Fox Ridge (EBRPD non-mitigation funding)		250,000.00		250,000.00
2010	EBRPD Land Acquisition Due Diligence cost/funding		211,841.00		211,841.00
2010	Grandma's Quarter (EBRPD non-mitigation funding)		564,725.00		564,725.00
2010	Martin (EBRPD non-mitigation funding)		1,629,816.00		1,629,816.00
2010	Souza 3 (EBRPD non-mitigation funding) ($75,978 easement cost excluded)		839,245.00		839,245.00
2010	Ang (EBRPD non-mitigation funding)		1,520,115.00		1,520,115.00
2010	Irish Canyon - Chopra (EBRPD non-mitigation funding)		50,000.00		50,000.00
2011	Land Waste Management (EBRPD non-mitigation funding)		1,177,500.00		1,177,500.00
2011	Barron (EBRPD non-mitigation funding)		650,000.00		650,000.00
2011	Austin 1 (Kreigor Peak) Property (aka Southern)--Excluding Lease Revenue (EBRPD non-mitigation funding)		324,000.00		324,000.00
2011	Austin 2 (aka Central Property) (located to the northeast; adjoins Black Diamond Mines) (EBRPD non-mitigation funding)		62,400.00		62,400.00
2011	Communication Tower Lease Revenue from Austin 1 (Kreigor Peak or Southern) Property (EBRPD non-mitigation funding)		53,000.00		53,000.00
2011	EBRPD Land Acquisition Due Diligence cost/funding		114,939.14		114,939.14

Table F.2: Revenue Detail 2007-2012 (Years 0-5) (current $)

		Development Impact Fees			
		Permanent Impacts			
Fiscal year	Description	Urban Develop-ment	Wetland Impacts	Rural Infra-structure Impacts	Temporary Impacts
2012	Affinito (EBRPD non-mitigation funding)				
2012	Vauero Farms Central (EBRPD non-mitigation funding)				
2012	Galvin (EBRPD non-mitigation funding)				
2012	Moss Rock (EBRPD non-mitigation funding)				
2012	Fan (EBRPD non-mitigation funding)				
2012	Thomas North (EBRPD non-mitigation funding)				
2012	Affinito--WCB Prop 84				
2012	Affinito--Section 6				
2012	VF Central--WCB Prop 84				
2012	VF central--Section 6				
2012	Galvin Section 6				
2012	Moss Rcok Section 6				
2012	Fan Section 6				
2012	EBRPD Land Acquisition Due Diligence cost/funding (as of Sept 2012)				
2012	EBRPD Land Management Costs Years 0-5 (2012$)				
Non-Conservancy Estimated Contributions To Plan Costs November 1 Through December 31, 2012					
2012	EBRPD Land Acquisition Due Diligence cost/funding (projected remainder of 2012)				
	Subtotal Non-Conservancy Contributions Years 0-5	**-**	**-**	**-**	**-**
	GRAND TOTAL ALL PLAN REVENUE YEAR 0-5	**1,708,712.28**	**425,800.41**	**621,329.01**	**862,187.74**

Note: "PSE" is participating special entity. "CCC" is Contra Costa County. "CTR" is contribution to recovery.

Note: Fiscal year 2007 includes funds received prior to 2007.

Sources: ECCC Habitat Conservancy.

Table F.2: Revenue Detail 2007-2012 (Years 0-5) (current $)

Fiscal year	Description	Other Project Fees & Exactions		
		Adminis-trative Charges	Payments For Non-covered Activities	Other Develop-ment Exactions
2012	Affinito (EBRPD non-mitigation funding)			
2012	Vauero Farms Central (EBRPD non-mitigation funding)			
2012	Galvin (EBRPD non-mitigation funding)			
2012	Moss Rock (EBRPD non-mitigation funding)			
2012	Fan (EBRPD non-mitigation funding)			
2012	Thomas North (EBRPD non-mitigation funding)			
2012	Affinito--WCB Prop 84			
2012	Affinito--Section 6			
2012	VF Central--WCB Prop 84			
2012	VF central--Section 6			
2012	Galvin Section 6			
2012	Moss Rcok Section 6			
2012	Fan Section 6			
2012	EBRPD Land Acquisition Due Diligence cost/funding (as of Sept 2012)			
2012	EBRPD Land Management Costs Years 0-5 (2012$)			
Non-Conservancy Estimated Contributions To Plan Costs November 1 Through Decem				
2012	EBRPD Land Acquisition Due Diligence cost/funding (projected remainder of 2012)			
	Subtotal Non-Conservancy Contributions Years 0-5	**-**	**-**	**-**
	GRAND TOTAL ALL PLAN REVENUE YEAR 0-5	**171,661.46**	**3,281,463.45**	**891,344.83**

Note: "PSE" is participating special entity. "CCC" is Contra Costa County. "CTR" is contribution to recovery.

Note: Fiscal year 2007 includes funds received prior to 2007.

Sources: ECCC Habitat Conservancy.

Table F.2: Revenue Detail 2007-2012 (Years 0-5) (current $)

Fiscal year	Description	Local, State & Federal Funds			Total
		State & Federal Grants	Local Funds	Other Public Funds For Non-Plan Costs	
2012	Affinito (EBRPD non-mitigation funding)		223,500.00		223,500.00
2012	Vauero Farms Central (EBRPD non-mitigation funding)		240,000.00		240,000.00
2012	Galvin (EBRPD non-mitigation funding)		37,000.00		37,000.00
2012	Moss Rock (EBRPD non-mitigation funding)		41,000.00		41,000.00
2012	Fan (EBRPD non-mitigation funding)		22,000.00		22,000.00
2012	Thomas North (EBRPD non-mitigation funding)		86,390.00		86,390.00
2012	Affinito--WCB Prop 84	1,005,750.00			1,005,750.00
2012	Affinito--Section 6	1,005,750.00			1,005,750.00
2012	VF Central--WCB Prop 84	230,000.00			230,000.00
2012	VF central--Section 6	1,080,000.00			1,080,000.00
2012	Galvin Section 6	166,500.00			166,500.00
2012	Moss Rcok Section 6	184,500.00			184,500.00
2012	Fan Section 6	99,000.00			99,000.00
2012	EBRPD Land Acquisition Due Diligence cost/funding (as of Sept 2012)		119,161.70		119,161.70
2012	EBRPD Land Management Costs Years 0-5 (2012$)		2,640,000.00		2,640,000.00
Non-Conservancy Estimated Contributions To Plan Costs November 1 Through Decem					
2012	EBRPD Land Acquisition Due Diligence cost/funding (projected remainder of 2012)		29,790.43		29,790.43
	Subtotal Non-Conservancy Contributions Years 0-5	**5,096,500.00**	**13,898,098.27**	**-**	**18,994,598.27**
	GRAND TOTAL ALL PLAN REVENUE YEAR 0-5	**28,965,459.15**	**18,344,048.30**	**130,000.00**	**55,402,006.62**

Note: "PSE" is participating special entity. "CCC" is Contra Costa County. "CTR" is contribution to recovery.

Note: Fiscal year 2007 includes funds received prior to 2007.

Sources: ECCC Habitat Conservancy.