

Public Review Draft

ECONOMIC ANALYSIS OF NATOMAS BASIN  
HABITAT CONSERVATION PLAN

Prepared for:

Sacramento Area Flood Control Agency (SAFCA)

Prepared by:

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## TABLE OF CONTENTS

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	<u>Page</u>
I. INTRODUCTION AND SUMMARY	
Introduction	1
Description of Mitigation Fee	2
Purpose of Economic Analysis	2
Summary of Economic Findings	2
Summary of Sensitivity Analysis Findings	3
Legislative Requirements	4
Overview of Natomas Basin Habitat Conservation Plan (NBHCP)	5
II. DEFINITION & ANALYSIS OF BASE SCENARIO	
Overview	10
Assumptions	16
Cash Flow and Summary of Findings	25
III. SENSITIVITY ANALYSIS	
Land Acquisition & Restoration/Enhancement	33
Operations, Maintenance & Administration	35
IV. ESTIMATION OF NATOMAS BASIN HABITAT CONSERVATION MITIGATION FEE	
Purpose	38
Estimation of NBHCP Mitigation Fee	38
Adjustments to the Fee	39
APPENDIX A -- Development Projection Assumptions	
APPENDIX B -- 50-Year Annual Projections	
BIBLIOGRAPHY	
PERSONS AND ORGANIZATIONS CONSULTED	

## LIST OF FIGURES

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	<u>Page</u>	
Figure 1	Urban Development versus Required Habitat Mitigation	6
Figure 2	Required Mitigation versus Acquired Lands First Ten Years	7
Figure 3	Summary of Habitat Acreage	9
Figure 4	Land Acquisition and Restoration/Enhancements Cost and Acquired Habitat Land Utilization Assumptions	11
Figure 4A	Summary of Rice Farm Land Utilization	12
Figure 5	Operations and Maintenance Assumptions and Estimation of Habitat Mitigation Fee	13
Figure 6	Operations and Maintenance Costs by Land Use Activity	14
Figure 7	Estimated Annual Natomas Basin Conservancy (NBC) Administrative Costs	15
Figure 8	Habitat Lands Acquired and Restored/Enhanced	18
Figure 9	Acquisition and Restoration/Enhancement	26
Figure 10	Operations and Maintenance Costs	27
Figure 11	Operating Revenues	28
Figure 12	Cash Flow-1995 \$	29
Figure 13	Operating Revenues Versus Costs	30
Figure 14	Accumulation of Endowment Fund	32
Figure 15	Mitigation Fee as a Function of Land Acquisition Cost	34
Figure 16	Summary of Operations and Maintenance Costs Compared to Operations and Maintenance Revenues	36

## I. INTRODUCTION AND SUMMARY

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### INTRODUCTION

Urban development within the 53,342-acre interior area of the Natomas Basin will impact wildlife habitat. Proposed development projects include buildout of South Natomas, Natomas West and North Natomas in the City of Sacramento, North Natomas and the Sacramento Metro Airport expansion in the County of Sacramento and three new "towns" in south Sutter County. Portions of the South Sutter County General Plan amendment were rejected by voters in 1992, but some parcels in the planning area may yet develop. The Natomas Basin Habitat Conservation Plan (NBHCP) addresses the potential for 17,500 gross acres of urban development during the next fifty years. Although the Plan references current development proposals, the Plan can mitigate for future urban development that occurs anywhere in the Basin if the project developer chooses to participate in the Plan.

The purpose of the NBHCP is the preservation, enhancement, and management of wildlife habitat values in the Natomas Basin along with economic development and the continuation of agriculture. Although the NBHCP covers a variety of plant and animal species, the Plan focuses on "two listed species known to be widely distributed in the Basin that would be impacted by anticipated urbanization - the giant garter snake and the Swainson's hawk. The giant garter snake inhabits rice fields and drainage canals in the Basin. The Swainson's hawk generally nests along the Sacramento River but may forage in the Basin. Other species are more localized or believed to be present by association with particular habitats such as vernal pools or elderberry bushes." (NBHCP) This economic analysis focuses primarily on giant garter snake (GGS) habitat values since it is not anticipated that substantial development will occur in Swainson's hawk nesting and foraging areas (see Figure 17 of NBHCP - Swainson's Hawk Mitigation Zone).

The Natomas Basin Conservancy (NBC), a non-profit corporation, has been established to ensure that sufficient habitat land is acquired, restored/ enhanced and maintained in accordance with the provisions of the Plan. In addition, income-generating activities on NBC lands will ensure long-term funding of the operations and maintenance of habitat lands. By incidentally providing habitat for migratory wintering waterfowl, the NBC will generate revenues from the sale of waterfowl hunting rights. The NBC will also lease rice lands to farmers for additional long-term revenues.

Participation in the NBHCP is voluntary and requires that urban development mitigate its impact on habitat loss by paying a mitigation fee providing funds for land acquisition, habitat restoration/ enhancement and continued operations and maintenance of the habitat lands. Per the NBHCP, each jurisdiction will require all new development in the Natomas Basin to demonstrate suitable protected species mitigation and compliance with state and federal law. This will take the form of a notice from the NBC that a fee has been paid for a specific acreage and map, or that some alternative mitigation or exemption from mitigation has been approved by the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG).



## **DESCRIPTION OF MITIGATION FEE**

The NBHCP provides for a mitigation fee paid by developing property owners to fund the acquisition and restoration/enhancement cost of habitat lands. The fee is currently estimated at \$2,240 per gross acre. The majority of the operation and management activities will be funded from activities on the land such as duck, pheasant and dove hunting in combination with the leasing of rice lands. In addition, a portion of the mitigation fee provides for management and administration of the habitat lands plus an operations and maintenance endowment fund and a 2% administrative allowance for the collection of the fee. The portion of the fee set aside for land acquisition, restoration/enhancement, and operations may be used for any of these functions based on the priorities established by the NBHCP. The shares for the endowment fund and 2% administrative component are to be used entirely and exclusively for their respective purposes.

The cost estimates presented in this report are in 1995 dollars and are based on the best cost estimates available at this time. The NBHCP provides that every year, an appropriate inflation adjustment factor will be applied to the fee, not to exceed 10% in any one year.

After the initial base fee is established, the NBC may conduct an annual or other periodic review of acquisition, restoration/enhancement, operations/maintenance and administrative costs. Based on these reviews, necessary adjustments to the fee program will occur. If land acquisition or restoration/enhancement costs change significantly in either direction, or if other funding becomes available, the fee should be adjusted accordingly. The total adjustment is limited to a 50% cumulative increase over the base fee adjusted for inflation.

## **PURPOSE OF ECONOMIC ANALYSIS**

The purpose of this economic analysis is to determine if the mitigation fees and on-going revenues from the Natomas Basin HCP will be sufficient to fund the land acquisition and the on-going costs to restore and enhance habitat land for the preservation and proliferation of the giant garter snake and other species. The analysis breaks down the acquisition, restoration/enhancement and operating cost and revenue activities of the NBHCP to test whether or not the Plan is financially viable. This information will be used to satisfy the USFWS required finding that the Plan is adequately funded, in order to approve a Section 10(a) Permit.

## **SUMMARY OF ECONOMIC FINDINGS**

The general conclusions of this analysis are summarized below. The detailed assumptions and analysis are fully described in the body of the report.

1. The proposed mitigation fee is adequate to fund land acquisition on a timely basis in conjunction with the level of anticipated urban development. The ability to acquire the

necessary mitigation lands at an affordable price depends in part on the ability to acquire mitigation lands out of the Natomas Basin. The fee is adjustable to a 50% increase above the base amount if the average land acquisition price increases.

2. The mitigation fee is adequate to provide restoration and enhancement of habitat lands in conjunction with the amount of lands acquired annually.
3. The operations, maintenance and administrative responsibilities of the NBC must have some level of both on-going hunting and rice cultivation to be fully funded. The share of habitat lands used for rice are fairly constant over time while the total amount of rice acreage owned by the NBC increases. The share of land necessary for hunting declines as the total amount of habitat acreage increases.
4. An initial acquisition prior to any development requiring mitigation is required by the NBHCP. The initial acquisition of habitat land (approximately 400 acres) proposed in the HCP requires some advanced funding such as advanced development mitigation fees, Federal and State grants, or some other source. The restoration and enhancement also requires an initial up-front funding source. The majority of the lands acquired after the initial acquisition need to be utilized for rice and hunting during the first five to ten years after the first 400 acres (initial acquisition) have been converted to marsh.

## **SUMMARY OF SENSITIVITY ANALYSIS FINDINGS**

1. The most significant variable affecting the ability of the mitigation fee to fund the HCP is the land acquisition cost component. The Plan limits the fee increases to 50% of the annually adjusted base fee. Under the Plan, the fee would exceed this cap if land acquisition costs increased from \$3,325 (1995\$) per acre to approximately \$5,500 per acre (1995\$), an increase of 65%. As stated earlier, the Plan provides for out-of-basin mitigation to relieve market pressure if the demand/supply pressures cause land prices in the basin to increase significantly. In addition, any operating surpluses generated from the revenue generating activities (rice and hunting) could be used to supplement the acquisition funding.
2. Some rice cultivation and waterfowl hunting is required to provide funding for the cost of on-going operation and maintenance of the acquired habitat land. This analysis assumes 75% of the mitigation lands are in rice cultivation and 40-50% of the lands are hunted for waterfowl. These levels are necessary during the early years of the NBHCP but may be reduced after the program is established. If the levels of revenue generating activities decrease, the fee may be adjusted up to the cap or the management program may be adjusted within minimum biological objectives. In addition, the endowment fund and operating surpluses from prior years are also available to supplement operating costs in years where operating costs exceed revenues.
3. The continuation of rice cultivation and waterfowl hunting provide the greatest assurance for the long term viability of the NBHCP. Other mechanisms that help

maintain the program include setting aside surpluses into the endowment fund, additional revenue generating activities, the out-of-basin mitigation and cost-effective management practices.

## LEGISLATIVE REQUIREMENTS

The giant garter snake is currently protected by the Federal Endangered Species Act (FESA) and the California Endangered Species Act (CESA). The purpose of FESA is to "provide a means whereby the ecosystem upon which endangered and threatened species depend may be conserved, [and] to provide a program for the conservation of such endangered and threatened species..." FESA, as enacted in 1973, has four major provisions 1) Section 4 which covers provisions for listing threatened species, 2) Section 7 which requires consultation with USFWS by federal agencies on federal projects, 3) Section 9 and 11 which prohibit the "taking" of listed endangered species and 4) Sections 7 and 10 which contain provisions for permits to allow "incidental taking" of threatened and endangered species. Once a species has been listed as endangered, FESA provides protection against "takings" and commercial trade.

The only exceptions to these prohibitions on "takings" are Authorized Take Permits and Incidental Take Permits pursuant to Habitat Conservation Plans. Under a HCP, governmental agencies or private landowners may be permitted to "take" threatened and endangered species if the taking is incidental to, and not the purpose of, carrying out an otherwise lawful activity. An applicant for an incidental take permit must submit an HCP to the USFWS for approval. A Section 10(a) permit may be granted if the Secretary finds that:

1. The taking will be incidental;
2. The HCP will minimize and mitigate impacts of the taking;
3. The applicant will provide adequate long term funding for the conservation plan; and
4. The taking will not appreciably reduce the likelihood of survival and recovery of the species in the wild.

Similarly, CDFG under CESA may provide a similar incidental take authorization under Section 2081 of the California Fish and Game Code.

The mandate for the development of the NBHCP is also found in part in the U.S. Army Corps of Engineer's 404 permit provisions for the Sacramento Area Flood Control Agency's (SAFCA) Local Project. "The permit applicant shall not begin construction on the pumping station along the East Main Drain or otherwise complete the proposed project by providing 100-year flood protection for the lower American Basin until the Service first issues an incidental take permit and associated implementing agreement pursuant to Section 10(a) (1) (b) of the Act to the City and County of Sacramento, Sutter County and any other parties necessary to guarantee the successful implementation of a habitat conservation plan for the giant garter snake resident in the American Basin. This plan shall be compatible with and a component of the multi-species habitat management plan otherwise required by the Department of the Army as a condition of permit authorization."

The U.S. Army Corps of Engineers will allow for construction of the pumping station as long as the HCP is in the process of being submitted to the USFWS. The pump station may not be utilized until the HCP has been implemented. For timely completion of the pump station, the HCP needs to be submitted to the USFWS by December 1995.

## **OVERVIEW OF NATOMAS BASIN HABITAT CONSERVATION PLAN (NBHCP)**

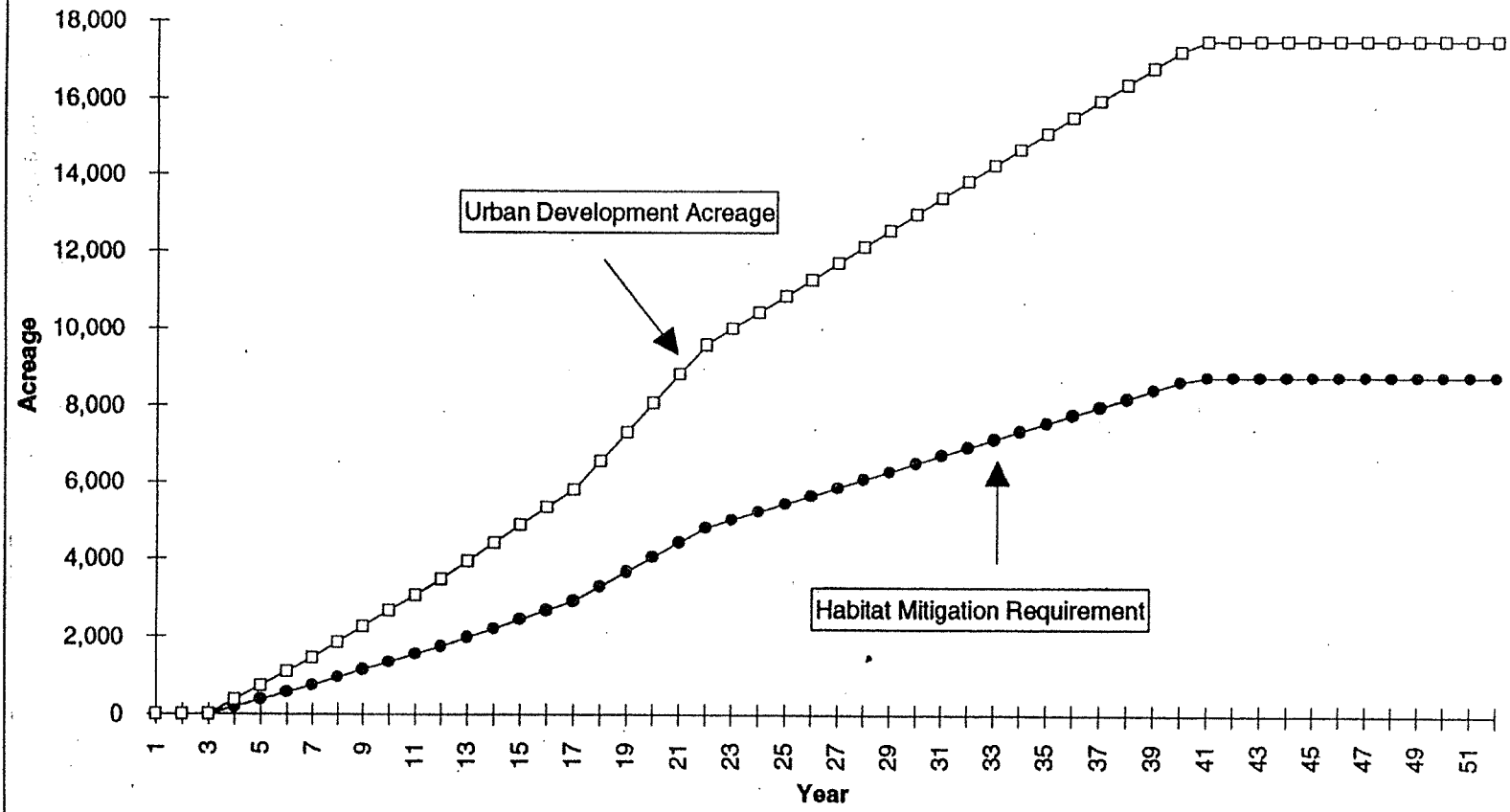
The NBHCP requires that the loss of giant garter snake and Swainson's hawk habitat be mitigated at a 0.5 to 1.0 ratio meaning that for every gross acre of urban development, a half acre must be acquired, preserved, restored/enhanced and managed for giant garter snake or Swainson's hawk habitat. The habitat lands must be acquired within one year of the disturbance of land due to urban development. **Figure 1** shows a projection of the cumulative development versus required habitat acreage for the 50 year permit period. **Figure 2** shows the cumulative acreage acquired versus the total required habitat acreage for the first ten years including the initial acquisition of 400 acres. Because the initial acquisition is converted entirely to marsh within five years, additional land acquisition is allowed to fall short of the mitigation requirement until year five.

Lands may be acquired by the NBC anywhere within the Natomas Basin that are designated as agriculture or open space on the General Plans (allowing for appropriate urban buffers). In addition, up to 20% may be acquired in "Area B" which is located in Sutter County north and east of the Cross Canal, including the Pleasant Grove "triangle" given scientific demonstration that this area provides adequate habitat values (see Figure 22 of NBHCP - Out-Of-Basin Mitigation Zone). Up to 30% of the mitigation lands can be acquired in "Area C" which is within a 50-mile radius of the Basin to achieve the Plan's multi-species habitat goals.

The habitat will be developed into managed rice lands, uplands, and permanent perennial and seasonal marshes. Overall, about 90 percent of the acquired lands will be maintained as a combination of natural marsh, managed wetlands and cultivated rice. These wetlands may be managed such that the amount of water kept on the land and on every acre of land will vary throughout the year. The remaining 10 percent will be managed as upland habitat within the marsh and rice lands. The upland habitat will provide winter hibernacula for the giant garter snake, as well as provide important forage, nesting and escape cover for a variety of other wildlife species, including the Swainson's Hawk.

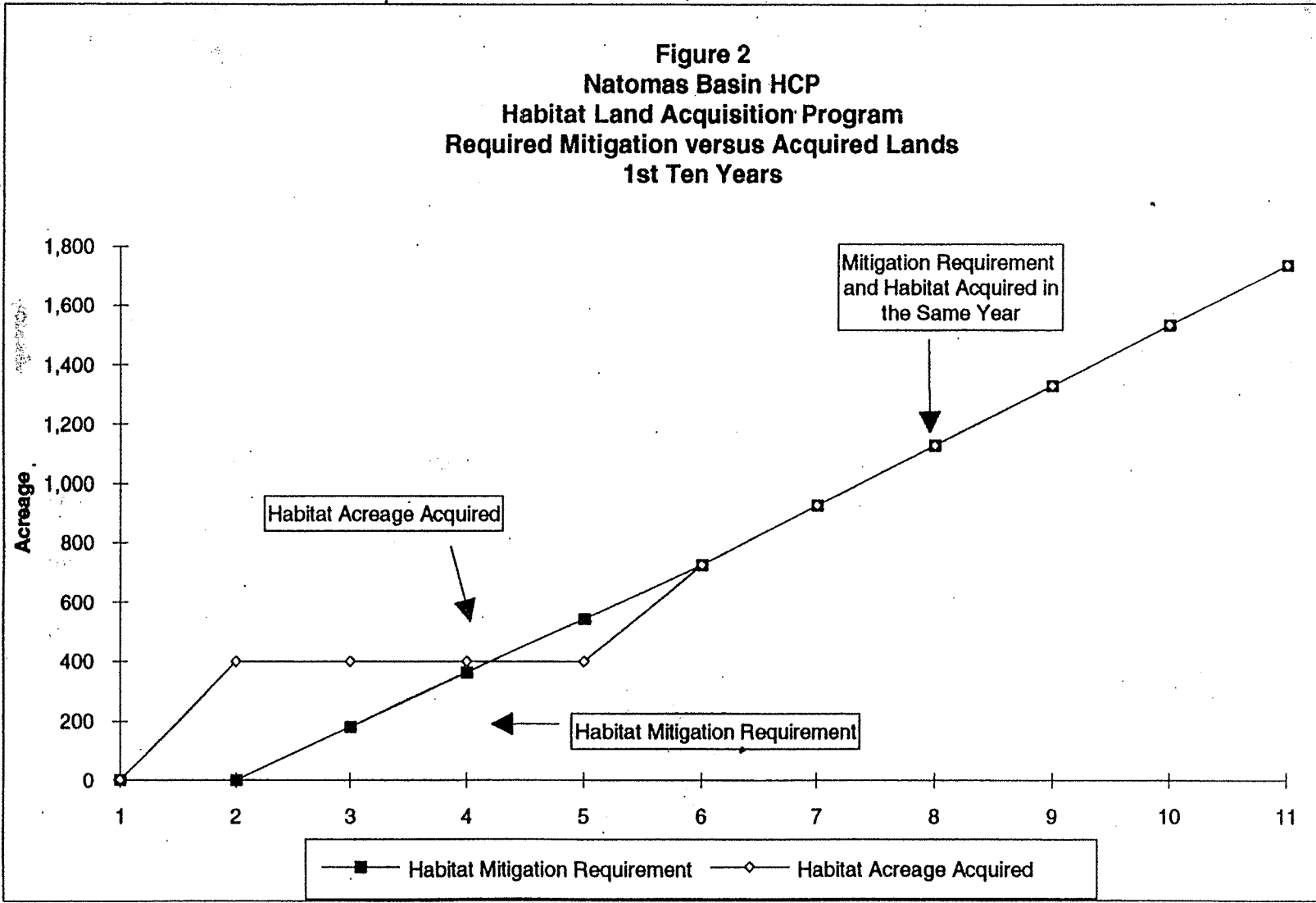
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Figure 1  
Natomas Basin HCP  
Habitat Land Acquisition Program  
Urban Development versus Required Habitat Mitigation



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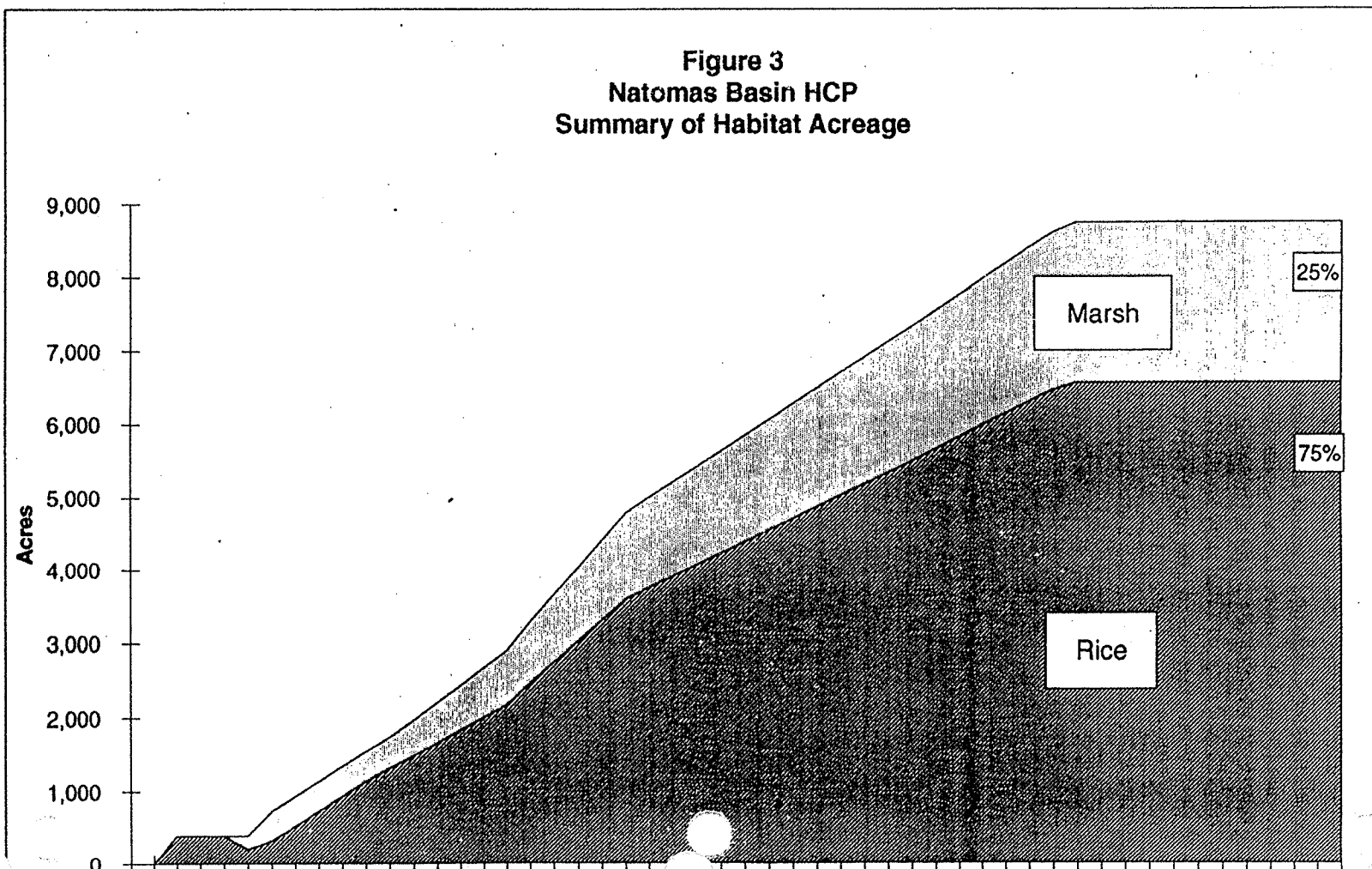
**Figure 2**  
**Natomas Basin HCP**  
**Habitat Land Acquisition Program**  
**Required Mitigation versus Acquired Lands**  
**1st Ten Years**



The existing status of the land impacts the amount of land types acquired. Almost 90% of the undeveloped lands in the Natomas Basin are currently used for agriculture which produces rice (31%), row crops (28%), grain (25%) and various other crops. Although existing wetlands exist in the form of irrigated rice fields, irrigation ditches and drainage canals, the NBHCP requires that new wetlands be created in the form of additional new rice fields or perennial marshes so that up to 75% of the mitigation lands would be in rice and 25% of the mitigation lands would be in marsh. **Figure 3** demonstrates the accumulation of acreage over time resulting in 25% marsh and 75% rice at the end of the 50 year permit period.

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**Figure 3  
Natomas Basin HCP  
Summary of Habitat Acreage**





## II. DEFINITION & ANALYSIS OF BASE SCENARIO

### OVERVIEW

This economic analysis defines a base scenario incorporating the major provisions of the NBHCP into a working model to indicate whether the Plan is financially viable under a specific set of conditions. This scenario is not intended to depict exactly how the NBHCP will be implemented on an annual basis. This analysis utilizes the framework outlined in the NBHCP to demonstrate how the program may operate from a funding perspective. Figures 4, 4A and 5 summarize the key assumptions utilized for the economic analysis. Support details for operations and management costs plus administrative cost are provided in Figures 6 and 7.

In many cases, the base scenario is defined by percentages of various activities such as the percentages of type of land acquired and use of habitat lands at certain points in time. In general, the NBHCP does not limit the quantities or percentage relationships used in this analysis. Where limits are established such as the percent of marsh lands owned by the NBC at the end of the program (25%), the scenario reflects them. In addition, the scenario assumes that some percentages and quantities are constant over time which may not be the case in practice.

The base scenario does not attempt to maximize revenues from rice or hunting, but is close to a break even analysis. Further, a variety of additional revenue generating activities (discussed on page 24) may be utilized by the NBC which are not included in the base scenario. Any additional revenues from rice, hunting or other activities would enhance the long term viability of the program. The NBC will be responsible for optimizing the operations to maximize revenues while maximizing habitat values.

Once the base scenario has been defined and analyzed, alternatives will be tested to evaluate the sensitivity of the program to changing assumptions. The NBHCP contains provisions to adjust the program and the mitigation fee depending upon future economic and environmental conditions. Adjustments may be made on an annual basis as necessary to achieve the goals established by the NBHCP.

The tables that follow analyze the program over the next fifty years in ten year increments. The charts demonstrate general trends during the 50-year program assuming average annual development of approximately 400-800 acres per year during the first twenty years based on SACOG data and 425 acres per year after the twenty-year period up to 17,500 total acres by year 40. Detailed tables showing the acquisitions, cost and revenues over the fifty-year program in annual increments are contained in Appendix B.

The following sections describe the parameters and assumptions used to create the NBHCP funding scenario.

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**Figure 4**  
**Natomas Basin HCP**  
**Land Acquisition and Restoration/Enhancements Cost**  
**and Acquired Habitat Land Utilization Assumptions**

<i>Part A - Assumptions</i>				Notes:
Inflation	0%			
Interest Rate	2%			
<b>Land Acquisition Values per Acre</b>	<u>Land Value</u>			
In-Basin Lands	\$3,325	80%		\$3,250-\$3,400 per acre range \$1,500-\$2,500 per acre range per Dutra Appraisal Service
Out-of-Basin Lands	\$2,000	20%		
<b>Average Land Value (1)</b>	<b>\$3,325</b>	<b>20%</b>		
Plus Transaction Costs	\$333			10% of Land Value
<b>Total Land Cost</b>	<b>\$3,658 per acquired acre</b>			
<b>Initial Use of In-Basin Lands</b>				
Marsh	25%			includes 10% uplands area includes 10% uplands area includes 10% uplands area
Existing Rice	50%			
Dry Converted to Rice	25%			
Other	0%			
<b>Total Initial Use</b>	<b>100%</b>			
Rice Converted to Marsh	5% 400 acre initial acquisition only			includes 10% uplands area
<b>Rice Lands</b>				
Not Farmable/Uplands	10%			See Figure 4A for detail
Set-Aside/Fallow	9%			See Figure 4A for detail
Leased for Other Crops	30%			See Figure 4A for detail
Leased Rice Base Land	51%			See Figure 4A for detail
<b>Total Rice Lands</b>	<b>100%</b>			
<b>Initial Restoration/Enhancement</b>	<u>Use of Land</u>	<u>Initial Costs</u>	<u>Weighted Cost</u>	
Marsh	20%	\$350	\$71	DFG estimate of \$200-500/acre
Existing Rice	54%	\$200	\$107	DFG estimate of \$200-500/acre
Dry Converted to Rice	26%	\$350	\$90	DFG estimate of \$200-500/acre
Other	0%	\$350	\$0	DFG estimate of \$200-500/acre
<b>Subtotal</b>	<b>100%</b>		<b>\$269</b>	
Rice Converted to Marsh	5%	\$200	\$9	DFG estimate of \$200-500/acre
<b>Average Cost per Habitat Acre</b>			<b>\$279</b>	weighted average cost per acre

*\*assumptions\**

(1) Assumes all acquisitions occur at the average in-basin land value. Since the primary purpose of out-of-basin mitigation is to relieve the pressure on land prices within the basin, acquiring lands out of the basin off-sets land prices increases within the basin.

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Figure 4A  
 Natomas Basin HCP  
 Summary of Rice Farm Land Utilization

	Line #	Relationship Btwn. Lands (1)	Percentage Multiplier	% of Total Rice Lands (2)
		<i>a</i>	<i>b</i>	<i>c = a x b</i>
<b>Total Rice Lands:</b>				
Not Farmable	1	10%		10%
Farmable	2	90%		90%
<b>Total Rice Lands</b>		<b>100%</b>		<b>100%</b>
<b>Farmable Rice Lands:</b>				
Without Rice Base (Other crops)	3	25%	90%	23%
With Rice Base	4	75%	90%	68%
<b>Total Farmable Lands</b>		<b>100%</b>		<b>90%</b>
<b>Farm Lands without Rice Base:</b>				
Fallow	5	10%	23%	2%
Other Crops	6	90%	23%	20%
<b>Total Non Rice Base Land</b>	equals line 3	<b>100%</b>		<b>23%</b>
<b>Rice Base Land:</b>				
Set-aside (Fallow)	7	10%	68%	7%
Non-pmt. acreage (Flex - other crops)	8	15%	68%	10%
Leased Rice Base Land (planted)	9	75%	68%	51%
<b>Total Rice Base Land</b>	equals line 4	<b>100%</b>		<b>68%</b>
<b>Rice Lands:</b>				
Not Farmable/Uplands	10 = 1			10%
Set-Aside/Fallow	11 = 5 + 7			9%
Leased for Other Crops	12 = 6 + 8			30%
Leased Rice Base Land	13 = 9			51%
<b>Total Rice Lands</b>				<b>100%</b>

- (1) Relationship between lands refers to the proportion of uses for a specific use within the total farm acreage.
- (2) Percent of total rice lands estimates the share of specific uses as a proportion of the total farm acreage.

\*rice\_lands\*

# DRAFT

Figure 5  
 Natomas Basin HCP  
 Operations & Maintenance Assumptions  
 and Estimation of Habitat Mitigation Fee

Part A - Assumptions Con't			Notes:																														
<p><b>Operations &amp; Maintenance Costs</b></p> <p>Marsh \$124 per acre            Not farmable ag. land \$72 per acre            Fallow Rice \$82 per acre            Land Leased for Planted Rice Base \$72 per acre            Land Leased for Other Crops \$72 per acre            Other \$0 per acre            Hunting Blinds \$47 per acre</p> <p><b>Administrative Costs</b></p> <p>Initial 400 Acre Acquisition \$50,000 per year            Subsequent Acquisitions \$200,000 per year            After All Land Acquired \$100,000 per year</p> <p><b>Operations &amp; Maintenance Revenues</b></p> <p><b>Crop Land Leases</b></p> <p>Planted Rice Base Acreage \$175 per acre/year normal ag. practices            Other Crops (Flex. acreage) \$88 per acre/year normal ag. practices</p> <p><b>Hunting</b></p> <p>Ducks \$1,250 per hunter/year \$166.67 per acre            Dove \$50 per hunter/year \$3.33 per acre            Pheasants \$70 per hunter/year \$3.50 per acre</p>			<p>Figure 6 for detail            roads, drainageways, sheds, etc.            sugar beets, safflower, etc.</p> <p>Figure 7 for detail            phased in over 3- 5 years</p> <p>\$150- \$200 range            \$150 - \$200 range over 2 years</p> <p>30-acre avg./4-person blinds            1 hunter per 15 acres            1 hunter per 20 acres</p>																														
<p><b>Part B - Estimation of Mitigation Fee</b></p> <p><b>Habitat Mitigation Fee</b></p> <table border="1" data-bbox="284 1176 1203 1690"> <thead> <tr> <th></th> <th>Cost per Acre of Habitat a</th> <th>Mitigation Fee per Acre of Development <math>b = a \times 0.5</math></th> </tr> </thead> <tbody> <tr> <td>Land Acquisition (LA)</td> <td>\$3,660</td> <td>\$1,830</td> </tr> <tr> <td>Restoration/Enhancement (RE)</td> <td>\$280</td> <td>\$140</td> </tr> <tr> <td>Administration/O &amp; M</td> <td>\$300</td> <td>\$150</td> </tr> <tr> <td>O &amp; M Endowment Fund</td> <td>\$150</td> <td>\$75</td> </tr> <tr> <td><b>Subtotal Mitigation Fee</b></td> <td><b>\$4,390</b></td> <td><b>\$2,195</b></td> </tr> <tr> <td>Fee Collection Administration</td> <td>\$90</td> <td>\$45</td> </tr> <tr> <td><b>Estimated Total (1995\$)</b></td> <td><b>\$4,480</b></td> <td><b>\$2,240</b></td> </tr> <tr> <td><b>Maximum Adjustment (1995\$)</b></td> <td><b>\$2,240</b></td> <td><b>\$1,120</b></td> </tr> <tr> <td><b>Maximum Total (1995\$)</b></td> <td><b>\$6,720</b></td> <td><b>\$3,360</b></td> </tr> </tbody> </table>		Cost per Acre of Habitat a	Mitigation Fee per Acre of Development $b = a \times 0.5$	Land Acquisition (LA)	\$3,660	\$1,830	Restoration/Enhancement (RE)	\$280	\$140	Administration/O & M	\$300	\$150	O & M Endowment Fund	\$150	\$75	<b>Subtotal Mitigation Fee</b>	<b>\$4,390</b>	<b>\$2,195</b>	Fee Collection Administration	\$90	\$45	<b>Estimated Total (1995\$)</b>	<b>\$4,480</b>	<b>\$2,240</b>	<b>Maximum Adjustment (1995\$)</b>	<b>\$2,240</b>	<b>\$1,120</b>	<b>Maximum Total (1995\$)</b>	<b>\$6,720</b>	<b>\$3,360</b>			<p>2% of fee for collection</p> <p>50% of Base Fee (annually adj.)</p>
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\*assumptions\*

Figure 6  
 Natomas Basin HCP  
 Operations & Maintenance Costs by Land Use Activity

	Total Annual Cost	RD1000, NCMWC & SAFCA O & M	Habitat O & M	Winter Water	Spring/Summer Water	Property Taxes
		(1)	(2)	(3)	(4)	(5)
	<i>per acre</i>			<i>per acre</i>		
Marsh	\$124	\$45	\$13	\$0	\$46	\$
Unfarmable Rice Land	\$72	\$45	\$6	\$0	\$0	\$
Fallow farmland	\$82	\$45	\$6	\$0	\$0	\$
Land Leased for Rice	\$72	\$45	\$6	\$0	\$0	\$
Land Leased for Other Crops	\$72	\$45	\$6	\$0	\$0	\$
Other	\$0	\$0	\$0	\$0	\$0	\$
Hunting	\$47	\$0	\$0	\$33	\$0	\$

**Notes:**

(1) RD-1000 assesses \$17 annually for operations and maintenance of its drainage system and the Central Mutual Water Company (NCMWC) assesses \$26 annually for operations and maintenance of delivery system. SAFCA levies approximately \$2.00 per ag. acre for Operations & Maintenance A.D.

(2) Habitat O & M includes discing of ponds and dredging the canals to remove bog and other undergrowth. The cost is estimated at \$35 per acre, but spread over 3 years because only one-third of acreage needs to be discing annually. Since rice cultivation includes discing, only 50% of the habitat O & M cost is in addition to normal operating costs reflected above. In addition, security is estimated at \$1 per acre.

(3) Winter water supplied to lands subject to hunting. Assumes cost is 50% of summer water rate.

(4) The current cost of water for rice lands is \$66 per acre. The NCMWC has not done a formal analysis of water needs for marsh, but estimates that it would be similar in nature to rice production. In practice, the marsh and fallow rice lands would not necessarily be kept wet all summer due to rotation of wet/dry wetland management practices. This analysis assumes that 70% of the area is kept wet all summer and the land is dry uplands.

(5) Rice lands would be subject to property taxes generally based on capitalized net income of the land under the Williamson Act. The Sacramento County Assessor's office estimates the average assessed value of rice lands at \$800 per acre. If land is not enrolled in Williamson, the A.V. will be based on the land's market value equivalent to the purchase price. Since Sutter County does not participate in Williamson, this analysis assumes that 50% of the lands are enrolled in Williamson. Marsh lands may be exempt from property taxes on the basis of no income producing activity (i.e. hunting). This analysis assumes that the marsh does remain on the same basis as similar to rice lands.

(6) Other annual costs reflect on-going costs unique to a land use. (a) Biological solutions to reduce mosquito populations will be sought and utilized. NBC marsh land may be subject to additional mosquito abatement costs of \$26 per acre minimum (four aerial applications of larvicide) per Sac/Yolo Mosquito & Vector Control District. Mosquito abatement on rice and marsh lands would be funded from the District's property tax allocation unless the NBC lands generated more than average mosquito larvae compared to non-NBC rice lands.

(b) The 30-acre hunting blinds require an investment of \$1,300 every five years plus \$5 allowance per acre per year for management of the blinds.

(c) Fallow farmland may require annual discing at a cost of approximately \$10 per acre.

# DRAFT

**Figure 7**  
**Natomas Basin HCP**  
**Estimated Annual Natomas Basin Conservancy (NBC) Administrative Costs**

	Annual Cost	Notes
<b>Administrative Expenses</b>		
Administrator/Biologist	\$60,000	\$5,000/month including benefits
Secretary	\$10,400	1/2 time, \$10/hour
Benefits	\$3,500	33.5% of salary for sec'try
<b>Subtotal</b>	<b>\$73,900</b>	
<b>Office Expense</b>		
Rent	15,360 \$6,000	1,280 \$500 / month
Telephone	\$1,800	\$150 / month
Copying	\$2,000	
Office Supplies	\$2,000	
Postage	\$2,000	
Auto Expense	\$7,300	500 miles/week @28 cents/mile
<b>Subtotal</b>	<b>\$21,100</b>	
<b>Miscellaneous Expense</b>		
Insurance	\$2,500	Liability and E&O
Accounting	\$1,500	
Legal	\$5,000	
Corporate Taxes	\$1,000	
<b>Subtotal</b>	<b>\$10,000</b>	
Contract Work	\$45,000	
Monitoring/Reports, etc.	\$50,000	
<b>Total Administration</b>	<b>\$200,000</b>	

\*admin\*

Source: Cribbs and Associates

Note: Total annual administrative costs highly variable based upon annual activities. This budget represents a typical early year once the program is up and running.

$$600 \text{ hr} \times \$1.60 = \$1,200$$

## ASSUMPTIONS

### LAND ACQUISITION

#### Land Acquisition Costs and Revenues

The value of land in and around the Basin depends upon its development potential (speculative value), determined by proximity to other existing or potential urban development and its level of flood protection (100-year protection after the SAFCA Local Project). To aid in the investigation of land values for the majority of agricultural lands to be purchased by the NBC, Dutra Appraisal Service investigated lands with prime giant garter snake habitat in Sacramento County north of Elverta Road. The October 1994 Dutra Appraisal Service appraisal, updated July 5, 1995, indicated an in-basin value between \$3,250 and \$3,400 per acre with an average value of \$3,325 per acre.

In addition, transaction costs (title, legal, etc.) are estimated at 10% of the acquisition price. The land acquisition fee (LA fee) is based on new development providing funds for one-half acre of habitat for every one acre of development. Therefore, the total estimated land acquisition cost is \$3,660 per habitat acre which represents a mitigation fee of \$1,830 per gross developable acre ( $\$3,660 \times 0.5$ ).

For purposes of this analysis, the average value of in-basin lands are used to calculate the land acquisition portion of the mitigation fee although out-of-basin acquisitions may occur at a lower cost. A subsequent study by Dutra Appraisal Service estimated values out-of-basin ranging from a low of \$800 per acre in the low-lying areas of the bypass up to \$3,500 per acre for agriculture lands with some speculative value. The likely acquisition price is in the \$1,500 to \$2,500 range for out-of-basin lands. This analysis assumes that 20% of all lands acquired in any given year occur out of the basin in either Area B or C. Since the primary purpose of out-of-basin mitigation is to relieve the pressure on land prices within the basin, acquiring lands out of basin off-sets land price increases within the basin.

The NBHCP provides that approximately 400 acres will be acquired prior to additional urban development in the Basin. This initial acquisition enables the NBC to have a reserve of acreage to jump-start the program by generating operating revenues from hunting and rice. Since no development mitigation fees will have been collected, another funding source is necessary to secure this acquisition. Federal, State or advanced development funding could be used to fund the acquisition of the initial 400 acres. For example, the City of Sacramento will be applying for a state Environmental Enhancement and Mitigation grant for \$500,000. In addition, several federal grants have recently been awarded for other HCPs in California. Such grants could reduce the amount of funding from other sources.

**Note:** This analysis of the base scenario does not directly account for the increase in land values as land for habitat becomes more scarce in the Basin due to urban development. As stated earlier, up to 50% of the mitigation lands may be purchased in Area B and Area C. As the projected development nears buildout, development pressure may exist for the remaining acreage not already acquired by the NBC. The land acquisition fee will adjust for

increased land acquisition costs up to 50% of the inflation adjusted fee. The Plan's sensitivity to land prices is addressed in the Sensitivity Analysis chapter.

### Land Acquisition Program

Figure 8 demonstrates the land acquisition program and accumulation of acreage by habitat type over time for the base scenario. The projected urban development was provided from Sacramento Area Council of Governments (SACOG) housing unit and employee projections in five-year increments through 2015. The SACOG projections assume urban development in South Sutter County based on the proposed General Plan Amendment which has since been partially rejected by voters. This analysis includes the South Sutter development to examine the Plan under a higher level of acquisition requirements. If less development occurs or if development occurs more slowly, the Plan adjusts accordingly (i.e. less land acquired or land acquired more slowly). The detailed development assumptions are provided in Appendix A of this report.

The annual mitigation requirement is based on a half acre of habitat acquired for every acre of urban development. This analysis assumes that an initial 400 acres is acquired for rice cultivation and converted to marsh over the next five years. Beginning in year 5, additional mitigation lands will be acquired to mitigate above the 400 acres for the urban development that occurred previously. (The HCP provides that subsequent acquisitions occur within the latter of five years or 1,500 acres of development.) At the time additional lands need to be acquired, the marsh lands are counted towards the total mitigation requirement. Since, the initial 400 acres are in marsh at this time, the additional acquisitions can be entirely rice in every year until the total mitigation lands consist of 25% marsh and 75% rice. Once the initial acreage has been utilized for mitigation, additional acreage will be acquired at approximately the same time as urban development.

### Use of Acquired Lands

The location of the lands acquired by the NBC effect the acquisition cost. Figure 8 shows the annual acquisition of acreage based on its usage and the bottom shows the cumulative acreage in rice and marsh as an indicator for the amount of marsh versus rice lands that the NBC manages. As stated above, the NBHCP requires that new wetlands be created in the form of additional new rice fields or perennial marshes in combination with the maintenance of existing rice fields so that up to 75% of the mitigation lands would be in rice and 25% would be in marsh.

In addition, Figure 8 shows the percent of acquired lands used for hunting and the number of duck hunters that this represents. This scenario assumes that in the early years, the majority of the land (70-80%) is leased in the winter for duck, pheasant and dove hunting. As the acreage grows, the percent of acreage hunted declines although the number of total acres hunted increases. In later years, sufficient land is assumed to be leased out to meet the annual operation and maintenance expenses of the NBC. Although this analysis shows only 40% of the lands hunted in the later years, the NBHCP does not limit the amount of acreage potentially hunted as long as it is not in conflict with the overriding goals of the NBHCP.



Figure 8  
 Natomas Basin HCP  
 Habitat Lands Acquired & Restored/Enhanced

	Total 1994-2045	0 1994	1 1996	5 2000	10 2005	20 2015	30 2025	40 2035	50 2045
<b>Annual Developed Acreage</b>	17,500.0	0.0	0.0	363.0	403.2	754.6	425.0	0.0	0.0
<b>Cumulative Developed Acreage</b>		0.0	0.0	1,452.0	3,468.1	9,581.7	13,831.7	17,500.0	17,500.0
<b>Annual Mitigation Requirement</b>	8,750.0	0.0	0.0	181.5	201.6	377.3	212.5	0.0	0.0
<b>Cumulative Mitigation</b>		0.0	0.0	726.0	1,734.0	4,790.9	6,915.9	8,750.0	8,750.0
<b>Habitat Acquired (1)</b>	8,750.0	0.0	400.0	326.0	201.6	377.3	212.5	0.0	0.0
<b>Cumulative Habitat Acreage</b>		0.0	400.0	726.0	1,734.0	4,790.9	6,915.9	8,750.0	8,750.0
<b>Surplus</b>		0.0	400.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Land Acquisition</b>									
Out-of-Basin Lands	1,750.0	0.0	80.0	65.2	40.3	75.5	42.5	0.0	0.0
In-Basin Lands	7,000.0	0.0	320.0	260.8	161.3	301.8	170.0	0.0	0.0
<b>Initial Use of Acquired Land</b>									
Marsh		0%	0%	0%	16%	25%	25%	25%	25%
Existing Rice		0%	70%	70%	60%	50%	50%	50%	50%
Other Converted to Rice		0%	30%	30%	24%	25%	25%	25%	25%
Other		0%	0%	0%	0%	0%	0%	0%	0%
<b>Use of Land</b>									
Marsh	1,787.1	0.0	0.0	0.0	33.1	94.3	53.1	0.0	0.0
Existing Rice Base	4,701.7	0.0	280.0	228.2	121.0	188.7	106.3	0.0	0.0
Other Converted to Rice	2,261.3	0.0	120.0	97.8	47.6	94.3	53.1	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Subtotal</b>	<b>8,750.0</b>	<b>0.0</b>	<b>400.0</b>	<b>326.0</b>	<b>201.6</b>	<b>377.3</b>	<b>212.5</b>	<b>0.0</b>	<b>0.0</b>
Rice Converted to Marsh	400.0	0.0	0.0	200.0	0.0	0.0	0.0	0.0	0.0
<b>Cumulative Acreage</b>									
Marsh		0.0	0.0	400.0	433.1	1,197.3	1,728.5	2,187.1	2,187.1
Rice		0.0	400.0	326.0	1,301.0	3,593.6	5,187.4	6,563.0	6,563.0
Other		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Subtotal</b>		<b>0.0</b>	<b>400.0</b>	<b>726.0</b>	<b>1,734.0</b>	<b>4,790.9</b>	<b>6,915.9</b>	<b>8,750.0</b>	<b>8,750.0</b>
<b>Hunting Acreage as Percent of Total (2)</b>		0%	80%	70%	70%	50%	40%	40%	40%
<b>Hunting Acreage</b>		0.0	320.0	508.2	1,213.8	2,395.4	2,766.3	3,500.0	3,500.0
<b>Total Duck Hunters</b>		0	43	68	162	319	369	467	467
<b>Cumulative Acreage</b>									
Marsh		0%	0%	55%	25%	25%	25%	25%	25%
Rice		0%	100%	45%	75%	75%	75%	75%	75%
Other		0%	0%	0%	0%	0%	0%	0%	0%

18

Source: SACOG Housing and Employment Forecasts

\*land\_cost\_50\*

(1) After the first 400 acres is acquired, each year additional habitat is acquired based on the amount of urban development from the prior year.

(2) The HCP does not limited the number of acres eligible for hunting. The percentages represent how much may be hunted under this economic analysis, not what necessarily can or will be hunted.

A prominent waterfowl hunting guide felt that sufficient demand exists to fill the available blinds. Currently, duck hunters from the Sacramento metropolitan area travel 80 to 100 miles to the Suisun marshes or Butte sink, but cannot take advantage of changing weather conditions or daily outings due to the distance. Quality hunting areas within a thirty minute drive would likely capture the necessary hunters to fill the blinds.

### HABITAT RESTORATION / ENHANCEMENT

The average cost to restore/enhance each acre of land is based on the weighted average of the cost of each land use type. This analysis assumes that each year, 25% of acquired acreage is converted to marsh, 50% of acquired rice fields remain in rice and 25% of acquired non-rice fields are converted to rice land. The one exception is the assumption that the initial 400 acres acquired will be used entirely for rice cultivation to jump-start the operating revenues. This 400 acres would be converted to marsh over the next five years. The 10% uplands requirement will be provided in both the marsh and rice fields. At the end of the program, the base scenario assumes the habitat will consist of approximately 25% marsh and 75% rice lands.

The cost to restore or enhance the acquired habitat lands depends upon the existing use of the land and the proposed conversion. The Department of Fish and Game estimates that it costs \$200 to \$500 per acre to restore/enhance wetlands. The majority of the cost involves creating topography to control the flow of water and the construction of levees, checks and/or berms for the retention of water. The least expensive lands to enhance are the existing rice lands which have been contoured and developed for water delivery, retention and drainage. Enhancement costs applicable to rice fields may include the construction of checks/berms to optimize the edge for the GGS for refuge, hibernacula and forage. The base scenario assumes that over 50%, on average, of the acquired land would be existing rice fields at an average restoration/enhancement cost of \$200 per acre.

Since the majority of other lands in the Basin have had productive agricultural uses, the topography is fairly level with most parcels having access to irrigation and drainage facilities. Therefore, the cost to convert dry land to managed rice lands, uplands or marsh has been estimated in the middle of the range at \$350 per acre. Twenty-five percent of acquired lands not currently cultivating rice will be converted to managed rice fields to increase the amount of wetlands in the Basin. Based on the above proportions of the various land use types, the weighted average cost per acre is calculated in Figure 6 and recreated on the following page.

<u>Initial Land Use Type</u>	<u>Initial Use of Land</u>	<u>Initial Cost Per Acre</u>	<u>Weighted Cost Per Acre</u>
Marsh	20%	\$350	\$71
Existing Rice	54%	\$200	\$107
Dry Converted to Rice	26%	\$350	\$90
<b>Subtotal</b>	<b>100%</b>		<b>\$275</b>
Plus Rice Converted to Marsh	5%	\$200	\$9
<b>Average Cost per Habitat Acre</b>			<b>\$279</b>

Therefore, the mitigation fee levied to off-set this cost is \$140 per gross developed acre.

### ANNUAL OPERATIONS, MAINTENANCE AND ADMINISTRATION

#### **Operating Costs**

The NBC is responsible for the on-going operations, maintenance and administration of the habitat lands. The following table summarizes the average annual cost per acre associated with the various habitat lands during the projected 40-year development period. The percentage of various uses will differ at any point in time. As such, the average cost per habitat acre of managing all habitat lands may vary on an annual basis. Figure 6 provides additional detail and key assumptions for this analysis.

<u>Use Type</u>	<u>40-Year Average Use of Land</u>	<u>Average Annual O &amp; M Cost</u>	<u>Average Annual Weighted Cost</u>
Marsh	25%	\$124	\$31
Unfarmable Ag. Land	7%	\$72	\$5
Fallow Rice	7%	\$82	\$6
Rice Lands Leased for Other Crops	23%	\$72	\$17
Leased Rice Base Land	38%	\$72	\$27
<b>Subtotal</b>	<b>100%</b>		<b>\$86</b>
Hunting	44%	\$47	\$21
<b>Average Annual Cost per Habitat Acre</b>			<b>\$107</b>

The base scenario assumes out-of-basin marsh has the same cost functions as land in the Natomas Basin. Our research has indicated that the costs will likely be less outside of the basin which would improve the viability of the Plan, but cannot be accurately estimated due to the variability among locations.

### Income and Property Taxes

The NBC is a non-profit organization under Section 501(c)(3) of the Internal Revenue Code of 1954. As such, income generating activities of the NBC are exempted from federal income taxes. Land held by a non-profit organization is exempt from property taxes if the land qualifies for the Welfare Exemption as defined by Section 214 of the California Revenue and Taxation Code. In general, the land should be used for a "charitable" purpose meaning that the activities on the NBC lands must strictly relate to the purpose of the NBC which is to preserve endangered and threatened species. Although the NBC intends to demonstrate the rice fields do contribute to the proliferation of the giant garter snake, an economic value may be realized for these lands above the habitat value created. If the land is converted to a non-agricultural use such as marsh, the land would have limited economic value (unless waterfowl hunting occurs on these lands) and may therefore qualify for the Welfare Exemption. The base scenario assumes that the marsh lands remain on the tax roll.

A couple of actions could be taken by the NBC to reduce property taxes payable on NBC agricultural lands. The NBC could place a "deed restriction" on the acquired lands to prohibit the lands from developing into urban uses. Then, the NBC can apply to the assessor's office for a reduction in the assessed value from market value to an agricultural value. This restriction essentially removes the speculative value from the land value since this land is prohibited from developing. The deed restriction also assures the public agencies that NBC lands will be maintained for habitat.

Another option to reduce assessed values and property taxes is for the NBC to enroll NBC lands in Sacramento County into the Williamson Act program. Sutter County does not participate in the Williamson Act. The base scenario assumes that 50% of the acquired lands are maintained or enrolled in Williamson. The Act enables counties to offer reduced property taxes to agricultural and open space landowners. By signing a contract with the county, the landowner is taxed based on the value of land held for agricultural or open spaces uses, as opposed to urban uses. In return, the landowner commits to keeping the contracted land in open space or agricultural uses for at least ten years. Since the NBC intends to hold its habitat lands permanently, the Williamson Act would secure the property tax reduction for the long-term. Counties participating in the Williamson Act receive subvention payments from the State to at least partially off-set the property tax loss. In the past years, the State has reimbursed approximately 50% of the property tax value and up to 75% in the most recent years (Source: California Dept. of Conservation - Office of Land Conservation). The base scenario does not address the impact of potential property tax reductions to the City and Counties due solely to the NBHCP.

### Mosquito Abatement

Two mosquito abatement districts are responsible for eliminating mosquito larvae and mosquitoes within the Basin - the Sacramento-Yolo and the Sutter-Yuba Mosquito and Vector Control Districts. For that land that produces mosquitoes as a normal part of its activities (rice fields), the application of pesticides to kill mosquito larvae and mosquitoes is funded by the Districts' share of the property tax base. For those that actually create mosquito habitat at a risk to public health and safety (irrigated pastures), that property

owner will have to fund the District's expenses to abate mosquitoes, excluding labor costs. Rice lands are currently not charged in addition to the portion of property taxes allocated to the District because summer water is a necessary component to the cultivation of rice and normal agricultural practices typically minimize the generation of mosquitoes. Practices to reduce mosquitoes include keeping the levees and borders clear of vegetation, the farmers' use of pesticides, and lack of vegetation during early growing season. Given best efforts by farmers to minimize mosquitoes, the District does apply pesticides throughout the summer on rice fields, especially if proximate to an urban area.

Biological solutions to reduce the threat of mosquitoes will be sought and utilized on marsh lands such as the use of mosquito fish which eat the mosquito larvae. As stated above, the most successful technique to reduce mosquitoes is in control of the vegetation and terrain. At this time, it is not known what kind of mosquitoes will be produced in the marshes and the proximity to urban areas. The NBC will work with the mosquito abatement districts to minimize mosquitoes through effective management practices. The primary objective is to maximize GGS habitat and minimize mosquitoes.

The base scenario assumes that the NBC will not be charged above the property tax collections to fund mosquito abatement on the marshes unless the management of these lands poses a greater health risk than currently created by the rice lands. Actual experience in the Basin will determine how the Districts, with direction from the Sacramento-Yolo and Sutter-Yuba Board of Trustees, will minimize the generation of mosquitoes and fund their abatement.

#### Water Supply and Costs

The sustainability of the marsh land and the ability to provide attractive waterfowl hunting opportunities relies on the availability of summer and winter water at a reasonable cost. Since the NBC will be a landowner within the Natomas Central Mutual Water Company's (NCMWC) service area, it is entitled to receive its proportionate share of water owned by the Company in accordance with the number of shares owned. NBC lands would be entitled to receive water during the agricultural season extending from March through October with the cost per acre depending upon the crop. The NCMWC has not conducted a formal analysis of the water needs for the marsh, but estimates that it would be similar in nature to the water usage of rice production. The current cost of water for rice farms is \$66 per acre. Unlike rice farms, the marsh may retain water on its lands from winter/spring rains. In addition, the marsh may not be flooded up as large ponds. Therefore, every acre of marsh ground may not require summer water from the NCMWC, nor will every acre remain wet all summer. As a result, the base scenario assumes that 70% of the marsh lands require the purchase of summer water from the NCMWC. Actual water usage will depend upon the marsh management regime.

The NBC will need to secure water during the winter season to flood up the rice fields and marsh to attract waterfowl for hunting opportunities. The NCMWC has historically not supplied a significant amount of water during the winter period of October to March. Due to more stringent air quality standards requiring the phasing out of rice straw burning at 10% per year (currently, 30% cannot be burned), other methods for disposing of this straw have

been utilized. The common alternative is the "degradation" of the straw with the application of water to support decomposition. Obviously, this practice requires the farmer to obtain water from NCMWC or construct wells (fairly expensive). The NCMWC believes that the objectives of the NBHCP are consistent with demands posed by air quality standards and will thus be able to provide water to the NBC during the winter months.

Since the practice of providing water during the winter is fairly new, the cost of providing this water as a standard practice has not been determined. The NCMWC estimates that the cost will include: 1) \$10.00 per acre for power, 2) maintenance costs, 3) any increase in maintenance costs caused by continually running water without repairing ditches, and 4) a possible increase in personnel for running water. Without any more information, the base scenario assumes that the cost for winter water will be 50% of the cost of summer water (50% of \$66) or \$33 per acre. The actual cost will be determined by NCMWC after further analysis and additional experience with winter water delivery.

### Administrative Costs

The administrative cost of the NBC is a relatively fixed cost that does not substantially increase with the accumulation of acreage, although the total cost may inflate over time. The base scenario projects the total annual cost at \$50,000 until the first 400 acres is converted to marsh and then \$200,000 per year phased in over the next three years. After all habitat lands have been acquired, the administration cost is assumed to decrease by half or to \$100,000 per year. The following summarizes the primary costs associated with administering the NBHCP. The detail for each component is provided in Figure 7.

	Estimated Annual Administration Cost - 1995\$ After Year 5
Administrative Staff	\$74,000
Office Expense	\$21,000
Insurance, Accounting, Legal	\$10,000
Contract Work	\$45,000
Monitoring, Reports, etc.	\$50,000
<b>Total</b>	<b>\$200,000</b>

Source: Cribbs & Associates

### Operating Revenues

The operating revenues of the rice and other crops associated with rice lands (sugar beets) and from hunting represent the bulk of the annual funding requirement. Since the rice lands are acquired from land acquisition fee proceeds, leasing the rice land to farmers is the most profitable rice venture. Figure 4A provides a matrix to estimate the relative proportions of rice farm land which are not farmable, set-aside/fallow lands, leased rice base land (planted acreage) and leased for other crops on average during any given year. Of the total rice farm acreage, approximately 10% represents roads, irrigation and drainage systems, sheds, etc. which cannot be farmed. The remaining 90% can be farmed, but its actual use will depend

upon the Federal Deficiency Payment Program (federal subsidy) terms and normal crop rotation practices.

The base scenario assumes of the net farmable acreage, 75% on average is enrolled in the Federal Deficiency Payment Program based on a 3-year average of rice lands enrolled. The lands enrolled in the Program are rice "base lands" eligible to receive funding from the federal government to cover the difference between the target rate and the loan rate. The requirements for the amount of rice kept out of cultivation vary from 0% to 35% due to market conditions. Over the past twenty years the average has been 10% to 15%.

The majority of hunting revenues are derived from duck hunting. A representative from the California Waterfowl Association stated that good quality blinds close to a metropolitan area could generate gross revenues of \$1,500 per hunter per year. To be conservative, the base scenario assumes \$1,250 as the average annual lease rate for a 30-acre duck blind. Actual duck blinds may range in size from 30 to 50 acres depending upon the interface of water and edge in the marsh and rice fields. For purposes of estimating total annual revenues from leasing blinds, approximately 200 - 250 hunters per year are necessary to support the O & M activities of the NBC at buildout.

The activities of the NBC on the habitat lands in the form of rice cultivation and hunting leases fund the costs associated with these activities plus generate additional revenues to support operations of the marshes and the NBC. For the overall operations and maintenance program to be viable in the long run, rice and hunting would need to be maintained at the minimum level reflected in this analysis.

The mitigation fee contains a component to fund a portion of the NBC administration cost. This component of the fee is based on an average level of funding to support 30% of the administration costs annually although it may also supplement habitat operations and maintenance costs. This mitigation amount protects against reduced revenues from hunting or rice.

#### Other Potential Revenue Sources

Not incorporated into this analysis are other potential revenues sources (with their respective costs) that may be utilized by the NBC to enhance its funding base. Of course, the compatibility with the maintenance of giant garter snake populations would have to be evaluated on a case by case basis.

- Aquaculture - the production and sale of aquatic organisms (clams, mussels, catfish, sturgeon, etc.).
- Day-use fishing permits on ponds for striped bass, black bass, catfish and other fish.
- Skeet range for shooting clay pigeons.
- Sale of trespassing permits for the hunting of pheasants in a licensed pheasant club.
- Field dog trials.
- Mineral extractions (i.e. natural gas).

## **CASH FLOW AND SUMMARY OF FINDINGS**

The following tables provide the detail cost and revenue information by line item for each NBC activity. **Figure 9** shows the detailed acquisition and restoration/enhancement costs plus the mitigation fee revenues funding these expenses. **Figure 10** and **11** show the annual operating expenses and revenues of the NBC by activity. In practice, the actual costs will be determined each year as acquisition, restoration/enhancement and operation/maintenance of habitat lands occur. The fee may be adjusted upwards by a cumulative total of 50% (excluding inflation) of the base fee although no adjustment has been made in the base scenario. The operating revenues from hunting and rice may vary each year depending upon market conditions.

**Figure 12** summarizes the cash flow position of all three NBC activities - acquisition, restoration/enhancement and operations/maintenance/administration. The cash flow shows that the NBC is able to fully fund each of its activities throughout the fifty-year program. The land acquisition and restoration/enhancement have positive ending balances in each year due to the acquisition and the up-front funding of 400 acres prior to additional urban development. If an up-front funding source is reduced or not available, the initial acquisition program will have to be revised to ensure habitat acquisition prior to additional urban development.

**Figure 12** also shows a significant ending balance in the operations and management program after fifty years. This occurs because revenues are growing faster than the expenses due to the maintenance of 75% rice within the NBC lands. The accumulation of funds guards against potential future revenue losses or decreases. If sufficient fund balances are maintained, a decrease in revenues in one year will not necessarily mean a reduction in the level of maintenance or operations of the habitat lands. Funding balances may also be transferred to the endowment fund or other reserve fund to supplement the operating program. The base scenario assumes that the market conditions for rice will continue in the future (market demand and price subsidy). If rice cultivation becomes diseconomic to produce (reduction or elimination of subsidy), all NBC rice lands will be converted to marsh. The base scenario does not address the elimination of rice cultivation.

**Figure 13** compares annual operating costs and revenues during the fifty-year permit period to demonstrate that sufficient revenues are available to fund the annual operating costs. At buildout, the base scenario projects annual revenues to exceed operating costs by 50%. The primary reason for continued increases in operating revenues is the assumed increase in the hunting acreage and maintenance of lands in rice cultivation. Overall, the mitigation fee funds a small share of the operating revenues. The security for the continued operations of the habitat lands rests in the perpetual hunting and rice revenues from the lands. In addition, neither rice or hunting alone can support the program and if neither occur, the operations and maintenance program would not be fully funded without an adjustment to the habitat land management program



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**Figure 9**  
**Natomas Basin HCP**  
**Acquisition and Restoration/Enhancement**

Constant 1995\$

	Total 1994-2045	0 1994	1 1996	5 2000	10 2005	20 2015	30 2025	40 2035	50 2045
<b>Land Acquisition Cost</b>									
Land Cost - 1995\$	\$29,093,830	\$0	\$1,330,000	\$1,083,938	\$670,351	\$1,254,534	\$706,563	\$0	\$0
Plus Transaction Costs	\$2,909,383	\$0	\$133,000	\$108,394	\$67,035	\$125,453	\$70,656	\$0	\$0
<b>Total Acquisition Cost - 1995\$</b>	<b>\$32,003,213</b>	<b>\$0</b>	<b>\$1,463,000</b>	<b>\$1,192,332</b>	<b>\$737,386</b>	<b>\$1,379,987</b>	<b>\$777,219</b>	<b>\$0</b>	<b>\$0</b>
<b>Inflated Acquisition Cost</b>	<b>\$32,003,213</b>	<b>\$0</b>	<b>\$1,463,000</b>	<b>\$1,192,332</b>	<b>\$737,386</b>	<b>\$1,379,987</b>	<b>\$777,219</b>	<b>\$0</b>	<b>\$0</b>
<b>LA Fee Revenue - 1995\$</b>	<b>\$32,025,049</b>	<b>\$0</b>	<b>\$0</b>	<b>\$664,277</b>	<b>\$737,890</b>	<b>\$1,380,931</b>	<b>\$777,750</b>	<b>\$0</b>	<b>\$0</b>
<b>Inflated LA Fee Revenue</b>	<b>\$32,025,049</b>	<b>\$0</b>	<b>\$0</b>	<b>\$664,277</b>	<b>\$737,890</b>	<b>\$1,380,931</b>	<b>\$777,750</b>	<b>\$0</b>	<b>\$0</b>
<b>Restoration/Enhancement Costs</b>									
Marsh	\$625,471	\$0	\$0	\$0	\$11,572	\$33,014	\$18,594	\$0	\$0
Existing Rice	\$940,332	\$0	\$56,000	\$45,640	\$24,193	\$37,730	\$21,250	\$0	\$0
Other Converted to Rice	\$791,457	\$0	\$42,000	\$34,230	\$16,853	\$33,014	\$18,594	\$0	\$0
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Rice Converted to Marsh	\$80,000	\$0	\$0	\$40,000	\$0	\$0	\$0	\$0	\$0
<b>Total Cost - 1995\$</b>	<b>\$2,437,259</b>	<b>\$0</b>	<b>\$98,000</b>	<b>\$119,869</b>	<b>\$52,418</b>	<b>\$103,758</b>	<b>\$58,438</b>	<b>\$0</b>	<b>\$0</b>
<b>Inflated Development Cost</b>	<b>\$2,437,259</b>	<b>\$0</b>	<b>\$98,000</b>	<b>\$119,869</b>	<b>\$52,418</b>	<b>\$103,758</b>	<b>\$58,438</b>	<b>\$0</b>	<b>\$0</b>
<b>RE Fee Rev. - 1995\$</b>	<b>\$2,450,004</b>	<b>\$0</b>	<b>\$0</b>	<b>\$50,819</b>	<b>\$56,451</b>	<b>\$105,645</b>	<b>\$59,500</b>	<b>\$0</b>	<b>\$0</b>
<b>Inflated RE Fee Revenue</b>	<b>\$2,450,004</b>	<b>\$0</b>	<b>\$0</b>	<b>\$50,819</b>	<b>\$56,451</b>	<b>\$105,645</b>	<b>\$59,500</b>	<b>\$0</b>	<b>\$0</b>

26

\*dev\_cost\_50\*

**Figure 10**  
**Natomas Basin HCP**  
**Operations & Maintenance Costs**

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Constant 1995\$

	Total 1994-2045	0 1994	1 1996	5 2000	10 2005	20 2015	30 2025	40 2035	50 2045
<b>Rice Lands</b>									
Not Farmable/Uplands		0%	10%	10%	10%	10%	10%	10%	10%
Set-Aside/Fallow		0%	9%	9%	9%	9%	9%	9%	9%
Leased for Other Crops		0%	30%	30%	30%	30%	30%	30%	30%
Leased Rice Base Land		0%	51%	51%	51%	51%	51%	51%	51%
<b>Rice Lands</b>									
Not Farmable/Uplands		0.0	40.0	32.6	130.1	359.4	518.7	656.3	656.3
Set-Aside/Fallow		0.0	36.0	29.3	117.1	323.4	466.9	590.7	590.7
Leased for Other Crops		0.0	121.5	99.0	395.2	1,091.6	1,575.7	1,993.5	1,993.5
Leased Rice Base Land		0.0	202.5	165.0	658.6	1,819.3	2,626.1	3,322.5	3,322.5
<b>Total Rice Lands</b>		0.0	400.0	326.0	1,301.0	3,593.6	5,187.4	6,563.0	6,563.0
<b>Rice Lands</b>									
Not Farmable/Uplands	\$1,448,643	\$0	\$2,878	\$2,346	\$9,362	\$25,859	\$37,327	\$47,226	\$47,226
Set-Aside/Fallow	\$1,484,964	\$0	\$2,951	\$2,405	\$9,596	\$26,507	\$38,263	\$48,410	\$48,410
Leased for Other Crops	\$4,400,253	\$0	\$8,743	\$7,125	\$28,436	\$78,547	\$113,382	\$143,449	\$143,449
Leased Rice Base Land	\$7,333,756	\$0	\$14,572	\$11,876	\$47,393	\$130,911	\$188,970	\$239,082	\$239,082
<b>Subtotal Rice</b>	<b>\$14,667,616</b>	<b>\$0</b>	<b>\$29,143</b>	<b>\$23,752</b>	<b>\$94,787</b>	<b>\$261,824</b>	<b>\$377,942</b>	<b>\$478,167</b>	<b>\$478,167</b>
Marsh	\$8,415,537	\$0	\$0	\$49,797	\$53,913	\$149,050	\$215,187	\$272,271	\$272,271
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Hunting	\$5,347,273	\$0	\$14,933	\$23,716	\$56,645	\$111,787	\$129,096	\$163,334	\$163,334
Administration	\$8,150,000	\$0	\$50,000	\$100,000	\$200,000	\$200,000	\$200,000	\$100,000	\$100,000
<b>Total O &amp; M Costs</b>	<b>\$36,580,426</b>	<b>\$0</b>	<b>\$94,077</b>	<b>\$197,264</b>	<b>\$405,345</b>	<b>\$722,661</b>	<b>\$922,225</b>	<b>\$1,013,771</b>	<b>\$1,013,771</b>
<b>Inflated O &amp; M Costs</b>	<b>\$36,580,426</b>	<b>\$0</b>	<b>\$94,077</b>	<b>\$197,264</b>	<b>\$405,345</b>	<b>\$722,661</b>	<b>\$922,225</b>	<b>\$1,013,771</b>	<b>\$1,013,771</b>

27

\*O&M\_cost\_50\*

**Figure 11**  
**Natomas Basin HCP**  
**Operating Revenues**

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Constant 1995\$

	Total 1994-2045	0 1994	1 1996	5 2000	10 2005	20 2015	30 2025	40 2035	50 2045
<b>Rice Lands</b>									
Not Farmable/Uplands		0%	10%	10%	10%	10%	10%	10%	10%
Set-Aside/Fallow		0%	9%	9%	9%	9%	9%	9%	9%
Leased for Other Crops		0%	30%	30%	30%	30%	30%	30%	30%
Leased Rice Base Land		0%	51%	51%	51%	51%	51%	51%	51%
<b>Rice Land Acreage</b>									
Not Farmable/Uplands		0.0	40.0	32.6	130.1	359.4	518.7	656.3	656.3
Set-Aside/Fallow		0.0	36.0	29.3	117.1	323.4	466.9	590.7	590.7
Leased for Other Crops		0.0	121.5	99.0	395.2	1,091.6	1,575.7	1,993.5	1,993.5
Leased Rice Base Land		0.0	202.5	165.0	658.6	1,819.3	2,626.1	3,322.5	3,322.5
<b>Subtotal</b>		<b>0.0</b>	<b>400.0</b>	<b>326.0</b>	<b>1,301.0</b>	<b>3,593.6</b>	<b>5,187.4</b>	<b>6,563.0</b>	<b>6,563.0</b>
<b>Rice Lands</b>									
Other Crop Land Lease	\$5,317,509	\$0	\$10,631	\$8,664	\$34,578	\$95,511	\$137,870	\$174,431	\$174,431
Rice Base Land Lease	\$17,835,422	\$0	\$35,438	\$28,881	\$115,259	\$318,371	\$459,567	\$581,438	\$581,438
<b>Subtotal Rice</b>	<b>\$23,152,931</b>	<b>\$0</b>	<b>\$46,069</b>	<b>\$37,546</b>	<b>\$149,836</b>	<b>\$413,882</b>	<b>\$597,437</b>	<b>\$755,869</b>	<b>\$755,869</b>
<b>Admin/O &amp; M, Mitigation Fees</b>									
Base Fee	\$2,625,004	\$0	\$0	\$54,449	\$60,483	\$113,191	\$63,750	\$0	\$0
Maximum Fee Adjustment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Admin/O &amp; M Fees</b>	<b>\$2,625,004</b>	<b>\$0</b>	<b>\$0</b>	<b>\$54,449</b>	<b>\$60,483</b>	<b>\$113,191</b>	<b>\$63,750</b>	<b>\$0</b>	<b>\$0</b>
<b>Hunting</b>	<b>\$19,880,396</b>	<b>\$0</b>	<b>\$55,520</b>	<b>\$88,172</b>	<b>\$210,599</b>	<b>\$415,608</b>	<b>\$479,962</b>	<b>\$607,252</b>	<b>\$607,252</b>
<b>Total Operating Revenues - 1995\$</b>	<b>\$45,658,331</b>	<b>\$0</b>	<b>\$101,589</b>	<b>\$180,167</b>	<b>\$420,918</b>	<b>\$942,681</b>	<b>\$1,141,149</b>	<b>\$1,363,121</b>	<b>\$1,363,121</b>
<b>Inflated Operating Revenues</b>	<b>\$45,658,331</b>	<b>\$0</b>	<b>\$101,589</b>	<b>\$180,167</b>	<b>\$420,918</b>	<b>\$942,681</b>	<b>\$1,141,149</b>	<b>\$1,363,121</b>	<b>\$1,363,121</b>

\*revenues\_50\*

**Figure 12**  
**Natomas Basin HCP**  
**Cash Flow - 1995 \$**

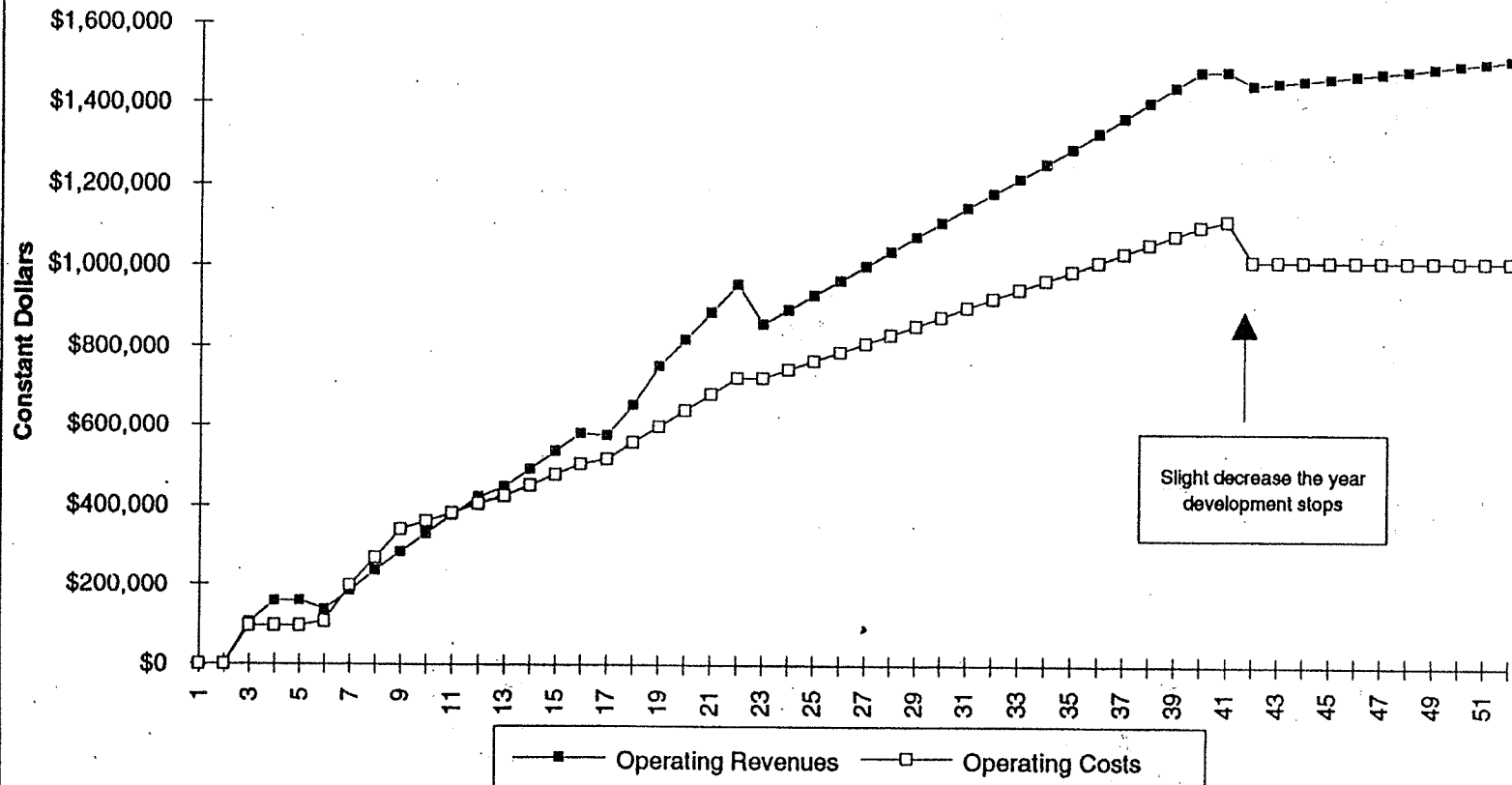
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1995\$

	Total 1994-2045	0 1994	1 1996	5 2000	10 2005	20 2015	30 2025	40 2035	50 2045
<b>LAND ACQUISITION</b>									
<b>Beginning Balance</b>		\$0	\$0	\$2,020,861	\$63,480	\$80,553	\$98,695	\$118,880	\$136,612
Less Land Costs	(\$32,003,213)	\$0	(\$1,463,000)	(\$1,192,332)	(\$737,386)	(\$1,379,987)	(\$777,219)	\$0	\$0
Plus LA Fee Revenue	\$32,025,049	\$0	\$0	\$664,277	\$737,890	\$1,380,931	\$777,750	\$0	\$0
Plus Other Revenues/(Reimb.) (1)	\$0	\$0	\$1,463,000	(\$1,463,000)	\$0	\$0	\$0	\$0	\$0
Plus Interest Earnings (2)	\$116,688	\$0	\$0	\$28,292	\$889	\$1,128	\$0	\$0	\$0
<b>Ending Balance</b>	<b>\$138,525</b>	<b>\$0</b>	<b>\$0</b>	<b>\$58,098</b>	<b>\$64,872</b>	<b>\$82,624</b>	<b>\$100,608</b>	<b>\$120,545</b>	<b>\$138,525</b>
<b>RESTORATION &amp; ENHANCEMENTS</b>									
<b>Beginning Balance</b>		\$0	\$0	\$114,601	\$44,141	(\$1,817)	\$10,194	\$22,643	\$26,020
Less Restoration/Enh. Costs	(\$2,437,259)	\$0	(\$98,000)	(\$119,869)	(\$52,418)	(\$103,758)	(\$58,438)	\$0	\$0
Plus HRE Fee Revenue	\$2,450,004	\$0	\$0	\$50,819	\$56,451	\$105,645	\$59,500	\$0	\$0
Plus Other Revenues/(Reimb.) (1)	\$0	\$0	\$98,000	(\$32,667)	(\$32,667)	\$0	\$0	\$0	\$0
Plus Interest Earnings (2)	\$13,640	\$0	\$0	\$1,604	\$618	\$0	\$143	\$317	\$364
<b>Ending Balance</b>	<b>\$26,385</b>	<b>\$0</b>	<b>\$0</b>	<b>\$14,489</b>	<b>\$16,125</b>	<b>\$69</b>	<b>\$11,399</b>	<b>\$22,960</b>	<b>\$26,385</b>
<b>OPERATIONS &amp; MAINTENANCE</b>									
<b>Beginning Balance</b>		\$0	\$0	\$162,969	\$23,114	\$929,184	\$2,872,430	\$6,115,566	\$10,749,755
Less O & M Costs	(\$36,580,426)	\$0	(\$94,077)	(\$197,264)	(\$405,345)	(\$722,661)	(\$922,225)	(\$1,013,771)	(\$1,013,771)
Plus Admin/O&M Fee Revenue	\$2,625,004	\$0	\$0	\$54,449	\$60,483	\$113,191	\$63,750	\$0	\$0
Plus Rice Revenues	\$23,152,931	\$0	\$46,069	\$37	\$149,836	\$413,882	\$597,437	\$755,869	\$75
Plus Other Revenues	\$19,880,396	\$0	\$55,520	\$86	\$210,599	\$415,608	\$479,962	\$607,252	\$607,252
Plus Interest Earnings (2)	\$2,171,696	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Ending Balance</b>	<b>\$2,171,696</b>	<b>\$0</b>	<b>\$0</b>	<b>\$224</b>	<b>\$13,000</b>	<b>\$13,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

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Figure 13  
Natomas Basin HCP  
Operating Revenues vs. Costs  
Assumes On-Going Hunting and Rice Operations  
(Assumes 40% Hunting and 25% Rice at Buildout)



30

#### **O & M Endowment Fund**

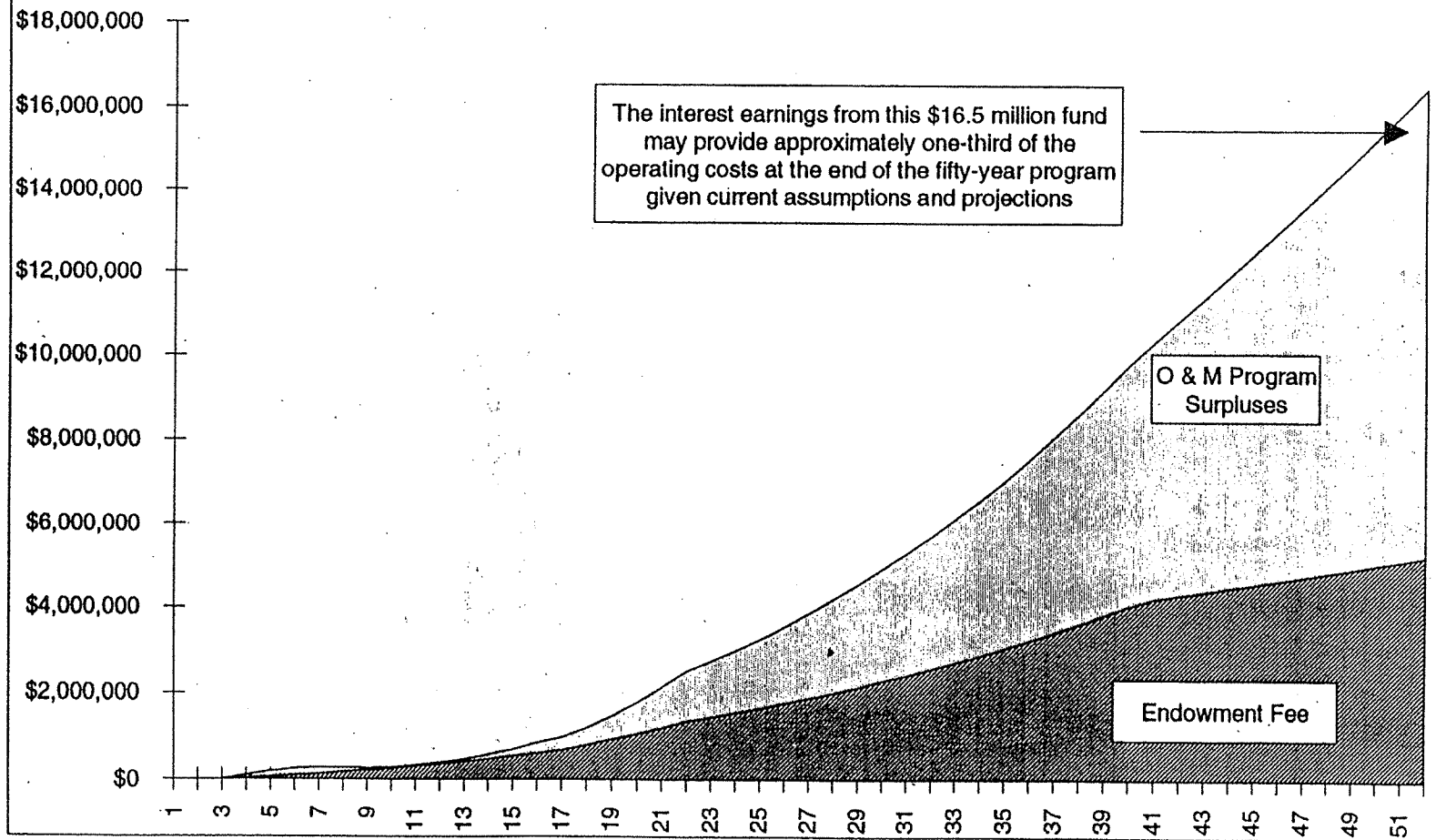
To address the long-term viability of the NBHCP past the permit period, an endowment program has been developed. As urban development occurs, landowners will pay a \$75 O & M endowment fee (adjusted annually) as part of the total mitigation fee to supplement potential reductions in the revenue activities at the end of the permit period. The revenue from this fund will be maintained in a separate account to accumulate earnings so that the interest earnings may be used to supplement operating revenues when necessary. The \$75 fee was based on projected interest earnings needed to fund approximately 10% of the projected operating costs at the end of the 50-year permit period.

Setting a portion of any operating surpluses aside will further enhance the funding certainty for the operations and maintenance program. Based on the base scenario, the operating surplus at the estimated levels plus the endowment fee will fund approximately one-third of the future operating costs from interest earnings. **Figure 14** shows the accumulation of endowment account funds to provide greater revenue surety.

#### **Fee Collection Administrative Cost**

The total habitat mitigation fee includes an allowance to fund administrative costs for collecting the fee by the NBC. This allowance is based on 2% of the fee attributed to the activities of the NBC as shown on the bottom of **Figure 5**. Neither the fee collection administrative costs or associated fee revenues are reflected in this analysis.

**Figure 14**  
**Natomas Basin Habitat Conservation Plan**  
**Accumulation of Endowment Fund**  
**(1995\$)**



Note: The 30% endowment funding is not a benchmark, but a result of the base scenario.

32

### III. SENSITIVITY ANALYSIS

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The purpose of this section is to test the sensitivity of the economic analysis to the key assumptions concerning the NBC activities. As described earlier, a general set of assumptions defined a base scenario to evaluate the NBHCP. The variability of the acquisition and restoration/enhancement program is discussed first. Then the impacts of changes in the operations and maintenance program is discussed.

The adjustment to the fee by 50% over the base amount (adjusted for inflation) is the maximum total adjustment over the life of the permit. The following discussion of sensitivity indicates the changes in the program that would be covered by the 50% adjustment. In practice, the fee adjustment cannot accommodate a significant change of the program components. It would likely off-set minor changes in each of the elements or one major change.

#### LAND ACQUISITION & RESTORATION/ENHANCEMENT

The land acquisition (LA) and restoration/enhancement (RE) components of the fee are anticipated to fully fund these activities and were based on the best available information. If the actual costs are substantially different, the LA and RE components are adjusted to reflect actual costs due to the structure of the mitigation fee. The most variable to the total mitigation fee is the land acquisition cost component. Since inflation adjustments, may only increase by as much as 50%, **Figure 15** shows that the fee would exceed this cap if land cost increased from \$3,325 (1995\$) per acre to approximately \$5,500 (1995\$) per acre, an increase of 65%.

In addition to the fee adjustment, the Plan provides other options to guard against escalation. The Plan provides for out-of-basin mitigation to relieve market pressure. Demand/supply pressures cause land prices in the basin to increase significantly above what the base fee can afford. This will help keep land prices in check by providing additional land supply. In addition land acquisition cost increases could be funded by operating surpluses.

The restoration/enhancement cost is not a significant component of the Plan since existing lands are currently providing valuable habitat. The average cost to restore each acre of acquired land could increase more than five times and still be funded by the fee cap.



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**Figure 15**  
**Natomas Basin HCP**  
**Mitigation Fee as a Function**  
**of Land Acquisition Cost**

Average Land Cost	Land with Acq. Cost	Land Acq. Fee	Other Fee Components (1)	Total Fee
	10%			
\$1,500	\$1,650	\$825	\$410	\$1,235
\$2,000	\$2,200	\$1,100	\$410	\$1,510
\$2,500	\$2,750	\$1,375	\$410	\$1,785
\$3,000	\$3,300	\$1,650	\$410	\$2,060
<b>\$3,325</b>	<b>\$3,658</b>	<b>\$1,830</b>	<b>\$410</b>	<b>\$2,240</b>
\$3,500	\$3,850	\$1,925	\$410	\$2,335
\$4,000	\$4,400	\$2,200	\$410	\$2,610
\$4,500	\$4,950	\$2,475	\$410	\$2,885
\$5,000	\$5,500	\$2,750	\$410	\$3,160
<b>\$5,500</b>	<b>\$6,050</b>	<b>\$3,025</b>	<b>\$410</b>	<b>\$3,435</b>
\$6,000	\$6,600	\$3,300	\$410	\$3,710
\$6,500	\$7,150	\$3,575	\$410	\$3,985
\$7,000	\$7,700	\$3,850	\$410	\$4,260
\$7,500	\$8,250	\$4,125	\$410	\$4,535

Max. Land Cost with Base Fee

Max. Land Cost with Base Fee and 50% Adjustment

(1) Includes restoration/enhancement fee, admin/O & M fee, endowment fee and 2% collection fee.

## OPERATIONS, MAINTENANCE & ADMINISTRATION

The operations and maintenance program depends upon a variety of activities that may vary over time. Figure 16 summarizes the operations and maintenance costs versus revenues at several points in time to demonstrate the importance of the revenue generating activities compared to the respective costs of the program. Overall, the cost of managing the marsh (23%) and the administration of the NBC (22%) represent 45% of the annual costs. Rice (40%) and hunting (14%) represent the other 55% of the annual operating costs. The rice produces almost 50% of the operating revenues. Hunting is estimated to provide 45% of the revenues. Since annual revenues exceed costs, in most years, rice and hunting combined completely off-set the cost of managing the marsh and administering the NBC.

The economic analysis establishes a base scenario to determine the proportions of hunting and rice revenues necessary to make the operations and maintenance program financially viable. This analysis assumes up to 75% rice and 25% marsh. In addition, on average 40% to 60% of the lands are assumed to be hunted. The ability to maintain up to 75% of the lands in rice provides surplus revenues above the estimated operating revenues necessary to fund the estimated annual operating costs. In addition, the base scenario assumes that the O & M cost/revenue functions will be consistent in or out of the Basin although the costs are likely to be less out of the Basin. Any additional revenue generating activity or costs savings further enhances the viability of the overall program.

If operating costs increase or if rice and hunting revenues fall short, the 50% fee adjustment cap can be utilized to supplement the funding of the marsh and administration. The total O&M Admin. fee represents 15% of the combined administration and marsh management costs at \$150 per developed acre. Application of the maximum 50% fee adjustment would generate an additional \$1,100 per year (50% of \$2,240). Under the base scenario, the O&M/Admin. fee would have to increase to about \$1,000 to fund 100% of the combined administration and marsh management costs which is within the amount which the 50% fee cap would provide.

The following paragraphs describe three phases of the program reflecting the levels of hunting and rice acreage needed to fund the NBC administration and other habitat maintenance activities.

### FIRST FIVE YEARS

Figure 16 shows the total O & M costs versus revenues for year 5. With the initial acquisition of 400 acres used entirely for rice cultivation and phased into 100% marsh by the fifth year mixed with additional acquisitions, the total lands in rice and marsh are roughly 50:50. As a result, rice is only supporting approximately 20% of the program. At this time and for the next few years, annual costs are greater than annual revenues until 75% rice is achieved although the program is funded with surplus generated from the initial period of 100% rice.

**Figure 16**  
**Natomas Basin HCP**  
**Summary of Operations & Maintenance Costs**  
**Compared to Operations & Maintenance Revenues**

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*Constant \$'s*

	Years 1-50		Year 5		Year 20	
	Totals	Percentage	Totals	Percentage	Totals	Percentage
<b>O &amp; M COSTS</b>						
<b>Rice Lands</b>						
Not Farmable/Uplands	\$1,448,643	4.0%	\$2,346	1.2%	\$25,859	3.6%
Set-Aside/Fallow	\$1,484,964	4.1%	\$2,405	1.2%	\$26,507	3.7%
Leased for Other Crops	\$4,400,253	12.0%	\$7,125	3.6%	\$78,547	10.9%
Leased Rice Base Land	\$7,333,756	20.0%	\$11,876	6.0%	\$130,911	18.1%
<b>Subtotal Rice</b>	<b>\$14,667,616</b>	<b>40.1%</b>	<b>\$23,752</b>	<b>12.0%</b>	<b>\$261,824</b>	<b>36.2%</b>
Marsh	\$8,415,537	23.0%	\$49,797	25.2%	\$149,050	20.6%
Other	\$0	0.0%	\$0	0.0%	\$0	0.0%
Hunting	\$5,347,273	14.6%	\$23,716	12.0%	\$111,787	15.5%
Administration	\$8,150,000	22.3%	\$100,000	50.7%	\$200,000	27.7%
<b>Total O &amp; M Costs</b>	<b>\$36,580,426</b>	<b>100.0%</b>	<b>\$197,264</b>	<b>100.0%</b>	<b>\$722,661</b>	<b>100.0%</b>
<b>O &amp; M REVENUES</b>						
<b>Rice Lands</b>						
Other Crop Land Lease	\$5,317,509	11.6%	\$8,664	4.8%	\$95,511	10.1%
Rice Base Land Lease	\$17,835,422	39.1%	\$28,881	16.0%	\$318,371	33.8%
<b>Subtotal Rice</b>	<b>\$23,152,931</b>	<b>50.7%</b>	<b>\$37,546</b>	<b>20.8%</b>	<b>\$413,882</b>	<b>43.9%</b>
Habitat Admin. Mitigation Fees	\$2,625,004	5.7%	\$54,449	30.2%	\$113,191	12.0%
Hunting	\$19,880,396	43.5%	\$88,172	48.9%	\$415,608	44.1%
Up-front funding (1)	\$0	0.0%	\$0	0.0%	\$0	0.0%
<b>Total O &amp; M Revenues</b>	<b>\$45,658,331</b>	<b>100.0%</b>	<b>\$180,167</b>	<b>100.0%</b>	<b>\$942,681</b>	<b>100.0%</b>

\*O&M\_summary\*

(1) Shortfalls in the early years assumed to be funded with an up-front funding source in the initial years such as advanced funding of fees or grants.

In the early years, the fixed costs of administering the NBC is a much greater proportion of the total operating costs (50% in year 5 compared to 22% overall). Therefore, a substantial amount of acreage needs to be in income-generating activities at the start to fund the entire annual administration costs in addition to operations and maintenance. In the first five years, 70-80% of the habitat lands are necessary for hunting to fully fund the initial operating costs. During this period the development O&M/Admin fee contributes about 30% of the revenues.

### FIVE YEARS TO BUILDOUT

Figure 16 also shows total annual costs versus revenues during year 20. Over time, additional habitat acreage is acquired which reduces the average administration cost per acre (30% of total annual costs). At this time, the income-generating activities (rice and hunting) fund themselves plus operations and maintenance of the marshes and administration of the NBC. During the forty-years prior to urban buildout, the operating revenues fully fund the annual operating costs assuming averages of approximately 50-60% of the habitat lands hunted and 70-75% in rice cultivation.

A temporary revenue reduction of 5-10% in one activity could be supplemented by the contingency fund, off-setting expenditure reductions or increases in other revenue generating activities. If the revenue reduction becomes more significant or permanent, the previous actions plus application of the 50% base fee adjustment or an adjustment to the contingency fee could occur.

The operating surplus funds combined with the endowment fund are anticipated to provide approximately 30% of the operating costs at the end of the program. This will provide a measure of security in case one revenue generating activity is reduced or eliminated.

### AFTER BUILDOUT

After all development has occurred, the NBC lands consist of 25% marsh and 75% rice. The base scenario assumes that 40% of the lands are maintained for hunting which represents the lease of duck hunting blinds to approximately 470 duck hunters on an annual basis. In the long-term, only 20% of habitat lands need to be hunted to ensure adequate operations and maintenance funding.

### CONCLUSION

As the previous discussion indicates, the continuation of rice cultivation and waterfowl hunting provide the greatest assurance for the long term viability of the NBHCP. Other mechanisms that help maintain the program include setting aside surpluses into the endowment fund, additional revenue generating activities, the out-of-basin mitigation and cost-effective management practices.

## IV. ESTIMATION OF NATOMAS BASIN HABITAT CONSERVATION MITIGATION FEE

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### PURPOSE

The Habitat Conservation Plan for the Natomas Basin will be the basis for an incidental take permit to be issued by the federal government under Section 10(a) of the Endangered Species Act, administered by the U.S. Fish and Wildlife Service and by the state under Section 9000 of the California Endangered Species Act, administered by the California Department of Fish and Game. The entire Natomas Basin, as depicted on the maps contained in the NBHCP, has been designated as habitat for those species listed in the Plan. Participation in the NBHCP and payment of the mitigation fee by developing properties is voluntary. Payment of the mitigation fee obtains the benefit of the incidental take permit issued by the USFWS and CDFG.

Per the NBHCP, each jurisdiction will require all new development in the Natomas Basin to demonstrate suitable protected species mitigation and compliance with state and federal requirements. This will take the form of a notice from the NBC that a fee has been paid for a specific acreage and map, or that some alternative mitigation or exemption from mitigation has been approved by the USFWS and CDFG.

The purpose of this section is to show how the mitigation fee is calculated.

### ESTIMATION OF NBHCP MITIGATION FEE

Each gross acre of urban development throughout the Natomas Basin will be subject to a habitat mitigation fee which will provide for one-half acre of habitat land acquisition, restoration/enhancement and management as defined in the NBHCP. The total cost of habitat land acquisition, restoration/enhancement and management attributed to urban development is estimated to be \$4,480 per habitat acre, including the future O & M cost set aside in the endowment fund and the fee collection administrative cost.



### Calculation of NBHCP Habitat Cost per Acre

	<u>Average Cost per Habitat Acre</u>	<u>Cost Estimate Assumption</u>
Land Acquisition (including transaction costs)	\$3,660	Current estimated land cost plus 10% for transaction costs
Restoration/Enhancement Administration	\$280 \$300	Weighted avg. cost of each land type Approximately 30% of NBC admin.
O & M Endowment Fund	\$150	Approximately 10% of future O & M
<b>Subtotal Habitat Costs</b>	<b>\$4,390</b>	
Plus Fee Collection Administration (2%)	\$90	Based on 2% of habitat costs
<b>Total Habitat Mitigation Cost</b>	<b>\$4,480</b>	

Based on one-half acre of habitat mitigation per one acre of urban development, the resulting fee is \$2,240 including \$75 set-aside for the endowment fund and 2% for fee collection administration. Although the fee is based on the sum of several cost components, the portion of the fee funding the NBC annual costs may be used for any of the NBC annual activities given the priorities established by the NBHCP. The O & M endowment fund fee and 2% fee collection administrative fee are to be used entirely and exclusively for their respective purposes.

As shown above, the mitigation fee does not fully fund the NBC administrative costs or habitat operations and maintenance costs, because they are assumed to be partially or fully funded from the estimated operating revenues. The fee is initially set to fund approximately 30% of the NBC administrative costs although the NBC is not precluded from using the fees, if available, to fund additional NBC administration or habitat operations and maintenance activities.

### ADJUSTMENTS TO THE FEE

The cost estimates presented in this report are in 1995 dollars and are based on the best cost estimates available at this time. The NBHCP provides that every year, an appropriate inflation adjustment factor will be applied to the fee, not to exceed 10% in any one year.

After the initial base fee is established, the NBC may conduct an annual or other periodic review of acquisition, restoration/enhancement, operations/maintenance and administrative costs. Based on these reviews, necessary adjustments to the fee program will occur. If land acquisition or restoration/enhancement costs change significantly in either direction, or if other funding becomes available, the fee should be adjusted accordingly. The total adjustment is limited to a 50% cumulative increase over the base fee adjusted for inflation.

**APPENDIX A**

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Development Projections Ass

# DRAFT

Figure A-1  
 Natomas Basin HCP  
 SACOG Projected Development

	Total	1995	2000	2005	2010	2015
<b>Residential Units</b>						
Sacramento County	32,357	0	3,540	3,931	4,493	2,393
Sutter County	13,688	0	2,171	3,790	4,493	2,393
<b>Total Units</b>	<b>46,045</b>	<b>0</b>	<b>5,711</b>	<b>7,721</b>	<b>8,986</b>	<b>4,786</b>
<b>Residential Net Acres</b>						
Sacramento County 10.98 units/acre	2,948.0	0.0	322.5	358.1	409.3	1,100.0
Sutter County 6.42 units/acre	2,132.4	0.0	338.1	590.4	699.9	1,100.0
<b>Total Net Acres</b>	<b>5,080.4</b>	<b>0.0</b>	<b>660.7</b>	<b>948.5</b>	<b>1,109.3</b>	<b>2,200.0</b>
<b>Residential Gross Acres</b>						
Sacramento County 26% net to gross	3,728.3	0.0	407.9	453.0	517.7	2,350.4
Sutter County 18% net to gross	2,509.8	0.0	398.0	694.9	823.8	1,350.1
<b>Total Gross Acres</b>	<b>6,238.2</b>	<b>0.0</b>	<b>805.9</b>	<b>1,147.8</b>	<b>1,341.5</b>	<b>3,700.5</b>
<b>Non-Residential Employees</b>						
Sacramento County	56,565	0	14,681	13,894	15,685	12,505
Sutter County	22,564	0	1,796	6,403	7,575	6,790
<b>Total Employees</b>	<b>79,129</b>	<b>0</b>	<b>16,477</b>	<b>20,297</b>	<b>23,260</b>	<b>19,295</b>
<b>Non-Residential Net Acres</b>						
Sacramento County 33.88 emp/acre	1,669.5	0.0	433.3	410.1	462.9	300.0
Sutter County 21.55 emp/acre	1,046.8	0.0	83.3	297.1	351.4	300.0
<b>Total Net Acres</b>	<b>2,716.3</b>	<b>0.0</b>	<b>516.6</b>	<b>707.1</b>	<b>814.4</b>	<b>600.0</b>
<b>Non-Residential Gross Acres</b>						
Sacramento County 26% net to gross	2,111.5	0.0	548.0	518.6	585.5	400.0
Sutter County 18% net to gross	1,232.1	0.0	98.1	349.6	413.6	300.0
<b>Total Gross Acres</b>	<b>3,343.6</b>	<b>0.0</b>	<b>646.1</b>	<b>868.3</b>	<b>999.1</b>	<b>700.0</b>
<b>Total Developed Acreage</b>						
Sacramento County	5,839.8	0.0	955.9	971.6	1,103.2	2,750.4
Sutter County	3,741.9	0.0	496.1	1,044.5	1,237.4	1,350.1
<b>Total Developed Acreage</b>	<b>9,581.7</b>	<b>0.0</b>	<b>1,452.0</b>	<b>2,016.1</b>	<b>2,340.6</b>	<b>4,100.5</b>
<b>Percent Distribution</b>						
Residential	65%	0%	56%	57%	57%	57%
Non-Residential	35%	0%	44%	43%	43%	43%
<b>Total</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source: SACOG Housing and Employment Forecasts



# DRAFT

**FigureA-2  
Sacramento County  
Proposed Urban Development**

	Total	North Natomas	West Natomas	South Natomas	Metro
<b>Residential</b>					
Units	32,477	29,977	2,500	unknown	0
Acres	2,958.9	2,564.3	394.6	unknown	0.0
Density	11.0	11.7	6.3	unknown	0.0
<b>Non-Residential</b>					
Employees	97,130	57,830	0	unknown	39,300
Acres	2,866.8	1,556.8	0.0	unknown	1,310.0
Employees/Net Acre	33.9	37.1	0.0	unknown	30.0
<b>Acreage</b>					
Res & Non-Res. Acres	6,782.7	4,121.1	394.6	957.0	1,310.0
Gross Developed Acreage (2)	9,224.6	6,272.0	394.6	957.0	1,601.0
% Developed	74%	66%	100%	100%	82%

(1) Residential and non-residential development provided by North Natomas Community Plan, City of Sacramento, Natomas Basin HCP and Metro Air Park D.A.

(2) Gross developed acreage consistent with Natomas Basin HCP

# DRAFT

**Figure A-3  
Sutter County  
Proposed Urban Development**

	Total	Riego	College Park	Rincon
<b>Residential</b>				
Units	42,249	13,334	11,201	17,714
Acres	6,582.0	1,997.0	1,790.0	2,795.0
Density	6.4	6.7	6.3	6.3
<b>Non-Residential</b>				
Employees	70,420	33,510	19,010	17,900
Acres	3,267.0	1,843.0	914.0	510.0
Employees/Net Acre	21.6	18.2	20.8	35.1
<b>Acreage</b>				
Res & Non-Res. Acres	9,849.0	3,840.0	2,704.0	3,305.0
Gross Developed Acreage	11,967.0	4,521.0	3,349.0	4,097.0
% Developed	82%	85%	81%	81%

Note: Gross acreage excludes regional open space, detention open space and landscape corridors.

Source: South Sutter County General Plan Amendment

Figure A-4  
 Natomas HCP  
 Summary of Dwelling Unit Growth Projections

**DRAFT**

	1992	1995	2000	2005	2010	2015
<b>SACRAMENTO COUNTY:</b>						
Single Family	0	1,290	1,988	2,271	2,591	7,836
Multiple Family	0	1,003	1,547	1,657	1,898	12,558
Mobile	0	4	5	3	4	-1
Subtotal	0	2,297	3,540	3,931	4,493	20,393
Cumulative	0	2,297	5,837	9,768	14,261	34,654
<b>SUTTER COUNTY:</b>						
Single Family	0	23	1,946	3,279	3,887	2,614
Multiple Family	0	0	204	492	582	602
Mobile	0	14	21	19	23	19
Subtotal	0	36	2,171	3,790	4,493	3,235
Cumulative	0	36	2,207	5,997	10,489	13,724
<b>TOTAL 5YR INCREMENTS</b>	<b>0</b>	<b>2,333</b>	<b>5,711</b>	<b>7,721</b>	<b>8,986</b>	<b>23,628</b>
<b>CUMMULATIVE TOTAL</b>	<b>0</b>	<b>2,333</b>	<b>8,044</b>	<b>15,765</b>	<b>24,750</b>	<b>71,382</b>

\*unit\_sum\*

Figure A-5  
 Natomas HCP  
 Summary of Employee Growth Projections

**DRAFT**

	1992	1995	2000	2005	2010	2015
<b>Sacramento County:</b>						
Retail EMP	0	672	1,038	1,013	965	1,600
Other EMP	0	8,866	13,643	12,881	14,720	10,690
<b>Subtotal</b>	<b>0</b>	<b>9,538</b>	<b>14,681</b>	<b>13,894</b>	<b>15,685</b>	<b>12,300</b>
<b>Cumulative</b>	<b>0</b>	<b>9,538</b>	<b>24,219</b>	<b>38,113</b>	<b>53,798</b>	<b>66,100</b>
<b>Sutter County</b>						
Retail EMP	0	4	233	1,474	1,743	1,360
Other EMP	0	7	1,563	4,929	5,832	5,430
<b>Subtotal</b>	<b>0</b>	<b>11</b>	<b>1,796</b>	<b>6,403</b>	<b>7,575</b>	<b>6,790</b>
<b>Cumulative</b>	<b>0</b>	<b>11</b>	<b>1,807</b>	<b>8,210</b>	<b>15,785</b>	<b>22,570</b>
<b>TOTAL 5YR INCREMENTS</b>	<b>0</b>	<b>9,549</b>	<b>16,477</b>	<b>20,297</b>	<b>23,260</b>	<b>19,090</b>
<b>CUMULATIVE TOTAL</b>	<b>0</b>	<b>9,549</b>	<b>26,026</b>	<b>46,323</b>	<b>69,583</b>	<b>88,670</b>

\*emp\_summar

## APPENDIX B

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### 50-Year Annual Projections

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# DRAFT

**Figure B-1**  
**Natomas Basin HCP**  
**Habitat Lands Acquired & Restored/Enhanced**

	Total 1994-2045	0 1994	0 1995	1 1996	2 1997	3 1998	4 1999	5 2000	6 2001	7 2002
<b>Annual Developed Acreage</b>	17,500.0	0.0	0.0	0.0	363.0	363.0	363.0	363.0	403.2	403.2
<b>Cumulative Developed Acreage</b>		0.0	0.0	0.0	363.0	726.0	1,089.0	1,452.0	1,855.2	2,258.4
<b>Annual Mitigation Requirement</b>	8,750.0	0.0	0.0	0.0	181.5	181.5	181.5	181.5	201.6	201.6
<b>Cumulative Mitigation</b>		0.0	0.0	0.0	181.5	363.0	544.5	726.0	927.6	1,129.2
<b>Habitat Acquired (1)</b>	8,750.0	0.0	0.0	400.0	0.0	0.0	0.0	326.0	201.6	201.6
<b>Cumulative Habitat Acreage</b>		0.0	0.0	400.0	400.0	400.0	400.0	726.0	927.6	1,129.2
<b>Surplus / Shortfall Acquisition</b>		0.0	0.0	400.0	218.5	37.0	-144.5	0.0	0.0	0.0
<b>Land Acquisition</b>										
<b>Out-of-Basin Lands</b>	1,750.0	0.0	0.0	80.0	0.0	0.0	0.0	65.2	40.3	40.3
<b>In-Basin Lands</b>	7,000.0	0.0	0.0	320.0	0.0	0.0	0.0	260.8	161.3	161.3
<b>Initial Use of Acquired Land</b>										
<b>Marsh</b>		0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Existing Rice</b>		0%	0%	70%	70%	70%	70%	70%	70%	70%
<b>Other Converted to Rice</b>		0%	0%	30%	30%	30%	30%	30%	30%	30%
<b>Other</b>		0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Use of Land</b>										
<b>Marsh</b>	1,787.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Existing Rice Base</b>	4,701.7	0.0	0.0	280.0	0.0	0.0	0.0	228.2	141.1	141.1
<b>Other Converted to Rice</b>	2,261.3	0.0	0.0	120.0	0.0	0.0	0.0	97.8	60.5	60.5
<b>Other</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Subtotal</b>	<b>8,750.0</b>	<b>0.0</b>	<b>0.0</b>	<b>400.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>326.0</b>	<b>201.6</b>	<b>201.6</b>
<b>Rice Converted to Marsh</b>	400.0	0.0	0.0	0.0	0.0	0.0	200.0	200.0	0.0	0.0
<b>Cumulative Acreage</b>										
<b>Marsh</b>		0.0	0.0	0.0	0.0	0.0	200.0	400.0	400.0	400.0
<b>Rice</b>		0.0	0.0	400.0	400.0	400.0	200.0	326.0	527.6	729.2
<b>Other</b>		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Subtotal</b>		<b>0.0</b>	<b>0.0</b>	<b>400.0</b>	<b>400.0</b>	<b>400.0</b>	<b>400.0</b>	<b>726.0</b>	<b>927.6</b>	<b>1,129.2</b>
<b>Hunting Acreage as Percent of Total (2)</b>		0%	0%	80%	80%	80%	80%	70%	70%	70%
<b>Hunting Acreage</b>		0.0	0.0	320.0	320.0	320.0	320.0	508.2	649.3	790.5
<b>Total Duck Hunters</b>		0	0	43	43	43	43	68	87	105
<b>Cumulative Acreage</b>										
<b>Marsh</b>		0%	0%	0%	0%	0%	50%	55%	43%	35%
<b>Rice</b>		0%	0%	100%	100%	100%	50%	45%	57%	65%
<b>Other</b>		0%	0%	0%	0%	0%	0%	0%	0%	0%

**Figure B-1**  
**Natomas Basin HCP**  
**Habitat Lands Acquired & Restored/Enhanced**

	Total 1994-2045	8 2003	9 2004	10 2005	11 2006	12 2007	13 2008	14 2009	15 2010
<b>Annual Developed Acreage</b>	17,500.0	403.2	403.2	403.2	468.1	468.1	468.1	468.1	468.1
<b>Cumulative Developed Acreage</b>		2,661.6	3,064.8	3,468.1	3,936.2	4,404.3	4,872.4	5,340.6	5,808.7
<b>Annual Mitigation Requirement</b>	8,750.0	201.6	201.6	201.6	234.1	234.1	234.1	234.1	234.1
<b>Cumulative Mitigation</b>		1,330.8	1,532.4	1,734.0	1,968.1	2,202.2	2,436.2	2,670.3	2,904.3
<b>Habitat Acquired (1)</b>	8,750.0	201.6	201.6	201.6	234.1	234.1	234.1	234.1	234.1
<b>Cumulative Habitat Acreage</b>		1,330.8	1,532.4	1,734.0	1,968.1	2,202.2	2,436.2	2,670.3	2,904.4
<b>Surplus / Shortfall Acquisition</b>		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Land Acquisition</b>									
Out-of-Basin Lands	1,750.0	40.3	40.3	40.3	46.8	46.8	46.8	46.8	46.8
In-Basin Lands	7,000.0	161.3	161.3	161.3	187.3	187.3	187.3	187.3	187.3
<b>Initial Use of Acquired Land</b>									
Marsh		0%	0%	16%	25%	25%	25%	25%	25%
Existing Rice		70%	70%	60%	50%	50%	50%	50%	50%
Other Converted to Rice		30%	30%	24%	25%	25%	25%	25%	25%
Other		0%	0%	0%	0%	0%	0%	0%	0%
<b>Use of Land</b>									
Marsh	1,787.1	0.0	0.0	33.1	58.5	58.5	58.5	58.5	58.5
Existing Rice Base	4,701.7	141.1	141.1	121.0	117.0	117.0	117.0	117.0	117.0
Other Converted to Rice	2,261.3	60.5	60.5	47.6	58.5	58.5	58.5	58.5	58.5
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Subtotal</b>	<b>8,750.0</b>	<b>201.6</b>	<b>201.6</b>	<b>201.6</b>	<b>234.1</b>	<b>234.1</b>	<b>234.1</b>	<b>234.1</b>	<b>234.1</b>
Rice Converted to Marsh	400.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Cumulative Acreage</b>									
Marsh		400.0	400.0	433.1	491.6	550.1	608.6	667.1	725.6
Rice		930.8	1,132.4	1,301.0	1,476.5	1,652.1	1,827.6	2,003.2	2,178.7
Other		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Subtotal</b>		<b>1,330.8</b>	<b>1,532.4</b>	<b>1,734.0</b>	<b>1,968.1</b>	<b>2,202.2</b>	<b>2,436.2</b>	<b>2,670.3</b>	<b>2,904.4</b>
<b>Hunting Acreage as Percent of Total (2)</b>		70%	70%	70%	60%	60%	60%	60%	50%
<b>Hunting Acreage</b>		931.6	1,072.7	1,213.8	1,180.9	1,321.3	1,461.7	1,602.2	1,452.2
<b>Total Duck Hunters</b>		124	143	162	157	176	195	214	194
<b>Cumulative Acreage</b>									
Marsh		30%	26%	25%	25%	25%	25%	25%	25%
Rice		70%	74%	75%	75%	75%	75%	75%	75%
Other		0%	0%	0%	0%	0%	0%	0%	0%

Source: SACOG Housing and Employment Forecasts

"land\_cost"

(1) After the first 400 acres is acquired, each additional habitat is acquired based on the amount of urban development from the current year.

(2) The HCP does not limited the number of [blank] able for hunting. The percentages represent how much may be hunted under this economic analysis, not what necessarily can or will be hunted.

**Figure B-1  
Natomas Basin HCP  
Habitat Lands Acquired & Restored/Enhanced**

	Total 1994-2045	16 2011	17 2012	18 2013	19 2014	20 2015	21 2016	22 2017	23 2018
<b>Annual Developed Acreage</b>	17,500.0	754.6	754.6	754.6	754.6	754.6	425.0	425.0	425.0
<b>Cumulative Developed Acreage</b>		6,563.3	7,317.9	8,072.5	8,827.1	9,581.7	10,006.7	10,431.7	10,856.7
<b>Annual Mitigation Requirement</b>	8,750.0	377.3	377.3	377.3	377.3	377.3	212.5	212.5	212.5
<b>Cumulative Mitigation</b>		3,281.6	3,659.0	4,036.3	4,413.6	4,790.9	5,003.4	5,215.9	5,428.4
<b>Habitat Acquired (1)</b>	8,750.0	377.3	377.3	377.3	377.3	377.3	212.5	212.5	212.5
<b>Cumulative Habitat Acreage</b>		3,281.7	3,659.0	4,036.3	4,413.6	4,790.9	5,003.4	5,215.9	5,428.4
<b>Surplus / Shortfall Acquisition</b>		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Land Acquisition</b>									
Out-of-Basin Lands	1,750.0	75.5	75.5	75.5	75.5	75.5	42.5	42.5	42.5
In-Basin Lands	7,000.0	301.8	301.8	301.8	301.8	301.8	170.0	170.0	170.0
<b>Initial Use of Acquired Land</b>									
Marsh		25%	25%	25%	25%	25%	25%	25%	25%
Existing Rice		50%	50%	50%	50%	50%	50%	50%	50%
Other Converted to Rice		25%	25%	25%	25%	25%	25%	25%	25%
Other		0%	0%	0%	0%	0%	0%	0%	0%
<b>Use of Land</b>									
Marsh	1,787.1	94.3	94.3	94.3	94.3	94.3	53.1	53.1	53.1
Existing Rice Base	4,701.7	188.7	188.7	188.7	188.7	188.7	106.3	106.3	106.3
Other Converted to Rice	2,261.3	94.3	94.3	94.3	94.3	94.3	53.1	53.1	53.1
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Subtotal</b>	<b>8,750.0</b>	<b>377.3</b>	<b>377.3</b>	<b>377.3</b>	<b>377.3</b>	<b>377.3</b>	<b>212.5</b>	<b>212.5</b>	<b>212.5</b>
Rice Converted to Marsh	400.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Cumulative Acreage</b>									
Marsh		820.0	914.3	1,008.6	1,102.9	1,197.3	1,250.4	1,303.5	1,356.6
Rice		2,461.7	2,744.7	3,027.6	3,310.6	3,593.6	3,753.0	3,912.4	4,071.7
Other		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Subtotal</b>		<b>3,281.7</b>	<b>3,659.0</b>	<b>4,036.3</b>	<b>4,413.6</b>	<b>4,790.9</b>	<b>5,003.4</b>	<b>5,215.9</b>	<b>5,428.4</b>
<b>Hunting Acreage as Percent of Total (2)</b>		50%	50%	50%	50%	50%	40%	40%	40%
<b>Hunting Acreage</b>		1,640.8	1,829.5	2,018.1	2,206.8	2,395.4	2,001.3	2,086.3	2,171.3
<b>Total Duck Hunters</b>		219	244	269	294	319	267	278	290
<b>Cumulative Acreage</b>									
Marsh		25%	25%	25%	25%	25%	25%	25%	25%
Rice		75%	75%	75%	75%	75%	75%	75%	75%
Other		0%	0%	0%	0%	0%	0%	0%	0%

Source: SACOG Housing and Employment Forecasts

"land\_cost"

(1) After the first 400 acres is acquired, each year additional habitat is acquired based on the urban development from the current year.

(2) The HCP does not limit the number of acres eligible for hunting. The percentages represent the proportion of total habitat that will be hunted.



**Figure B-1**  
**Natomas Basin HCP**  
**Habitat Lands Acquired & Restored/Enhanced**

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	Total 1994-2045	24 2019	25 2020	26 2021	27 2022	28 2023	29 2024	30 2025	31 2026
<b>Annual Developed Acreage</b>	17,500.0	425.0	425.0	425.0	425.0	425.0	425.0	425.0	425.0
<b>Cumulative Developed Acreage</b>		11,281.7	11,706.7	12,131.7	12,556.7	12,981.7	13,406.7	13,831.7	14,256.7
<b>Annual Mitigation Requirement</b>	8,750.0	212.5	212.5	212.5	212.5	212.5	212.5	212.5	212.5
<b>Cumulative Mitigation</b>		5,640.9	5,853.4	6,065.9	6,278.4	6,490.9	6,703.4	6,915.9	7,128.4
<b>Habitat Acquired (1)</b>	8,750.0	212.5	212.5	212.5	212.5	212.5	212.5	212.5	212.5
<b>Cumulative Habitat Acreage</b>		5,640.9	5,853.4	6,065.9	6,278.4	6,490.9	6,703.4	6,915.9	7,128.4
<b>Surplus / Shortfall Acquisition</b>		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Land Acquisition</b>									
<b>Out-of-Basin Lands</b>	1,750.0	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5
<b>In-Basin Lands</b>	7,000.0	170.0	170.0	170.0	170.0	170.0	170.0	170.0	170.0
<b>Initial Use of Acquired Land</b>									
<b>Marsh</b>		25%	25%	25%	25%	25%	25%	25%	25%
<b>Existing Rice</b>		50%	50%	50%	50%	50%	50%	50%	50%
<b>Other Converted to Rice</b>		25%	25%	25%	25%	25%	25%	25%	25%
<b>Other</b>		0%	0%	0%	0%	0%	0%	0%	0%
<b>Use of Land</b>									
<b>Marsh</b>	1,787.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1
<b>Existing Rice Base</b>	4,701.7	106.3	106.3	106.3	106.3	106.3	106.3	106.3	106.3
<b>Other Converted to Rice</b>	2,261.3	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1
<b>Other</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Subtotal</b>	<b>8,750.0</b>	<b>212.5</b>	<b>212.5</b>	<b>212.5</b>	<b>212.5</b>	<b>212.5</b>	<b>212.5</b>	<b>212.5</b>	<b>212.5</b>
<b>Rice Converted to Marsh</b>	400.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Cumulative Acreage</b>									
<b>Marsh</b>		1,409.8	1,462.9	1,516.0	1,569.1	1,622.3	1,675.4	1,728.5	1,781.6
<b>Rice</b>		4,231.1	4,390.5	4,549.9	4,709.2	4,868.6	5,028.0	5,187.4	5,346.7
<b>Other</b>		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Subtotal</b>		<b>5,640.9</b>	<b>5,853.4</b>	<b>6,065.9</b>	<b>6,278.4</b>	<b>6,490.9</b>	<b>6,703.4</b>	<b>6,915.9</b>	<b>7,128.4</b>
<b>Hunting Acreage as Percent of Total (2)</b>		40%	40%	40%	40%	40%	40%	40%	40%
<b>Hunting Acreage</b>		2,256.3	2,341.3	2,426.3	2,511.3	2,596.3	2,681.3	2,766.3	2,851.3
<b>Total Duck Hunters</b>		301	312	324	335	346	358	369	380
<b>Cumulative Acreage</b>									
<b>Marsh</b>		25%	25%	25%	25%	25%	25%	25%	25%
<b>Rice</b>		75%	75%	75%	75%	75%	75%	75%	75%
<b>Other</b>		0%	0%	0%	0%	0%	0%	0%	0%

Source: SACOG Housing and Employment Forecasts

(1) After the first 400 acres is acquired, each year additional habitat is acquired based on the amount of urban development from the current year.

(2) The HCP does not limited the number of acres available for hunting. The percentages represent how much may be hunted under this economic analysis, not what necessarily can or will be hunted.





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**Figure B-1  
Natomas Basin HCP  
Habitat Lands Acquired & Restored/Enhanced**

	Total 1994-2045	47 2042	48 2043	49 2044	50 2045
<b>Annual Developed Acreage</b>	17,500.0	0.0	0.0	0.0	0.0
<b>Cumulative Developed Acreage</b>		17,500.0	17,500.0	17,500.0	17,500.0
<b>Annual Mitigation Requirement</b>	8,750.0	0.0	0.0	0.0	0.0
<b>Cumulative Mitigation</b>		8,750.0	8,750.0	8,750.0	8,750.0
<b>Habitat Acquired (1)</b>	8,750.0	0.0	0.0	0.0	0.0
<b>Cumulative Habitat Acreage</b>		8,750.0	8,750.0	8,750.0	8,750.0
Surplus / Shortfall Acquisition		0.0	0.0	0.0	0.0
<b>Land Acquisition</b>					
Out-of-Basin Lands	1,750.0	0.0	0.0	0.0	0.0
In-Basin Lands	7,000.0	0.0	0.0	0.0	0.0
<b>Initial Use of Acquired Land</b>					
Marsh		25%	25%	25%	25%
Existing Rice		50%	50%	50%	50%
Other Converted to Rice		25%	25%	25%	25%
Other		0%	0%	0%	0%
<b>Use of Land</b>					
Marsh	1,787.1	0.0	0.0	0.0	0.0
Existing Rice Base	4,701.7	0.0	0.0	0.0	0.0
Other Converted to Rice	2,261.3	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0
<b>Subtotal</b>	<b>8,750.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
Rice Converted to Marsh	400.0	0.0	0.0	0.0	0.0
<b>Cumulative Acreage</b>					
Marsh		2,187.1	2,187.1	2,187.1	2,187.1
Rice		6,563.0	6,563.0	6,563.0	6,563.0
Other		0.0	0.0	0.0	0.0
<b>Subtotal</b>		<b>8,750.0</b>	<b>8,750.0</b>	<b>8,750.0</b>	<b>8,750.0</b>
Hunting Acreage as Percent of Total (2)		40%	40%	40%	40%
Hunting Acreage		3,500.0	3,500.0	3,500.0	3,500.0
Total Duck Hunters		467	467	467	467
<b>Cumulative Acreage</b>					
Marsh		25%	25%	25%	25%
Rice		75%	75%	75%	75%
Other		0%	0%	0%	0%

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**Figure B-2**  
**Natomas Basin HCP**  
**Acquisition and Restoration/Enhancement**

Constant 1995\$

	Total 1994-2045	0 1994	0 1995	1 1996	2 1997	3 1998	4 1999	5 2000	6 2001
<b>Land Acquisition Cost</b>									
Land Cost - 1995\$	\$29,093,830	\$0	\$0	\$1,330,000	\$0	\$0	\$0	\$1,083,938	\$670,351
Plus Transaction Costs	\$2,909,383	\$0	\$0	\$133,000	\$0	\$0	\$0	\$108,394	\$67,035
<b>Total Acquisition Cost - 1995\$</b>	<b>\$32,003,213</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,463,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,192,332</b>	<b>\$737,386</b>
<b>Inflated Acquisition Cost</b>	<b>\$32,003,213</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,463,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,192,332</b>	<b>\$737,386</b>
<b>LA Fee Revenue - 1995\$</b>	<b>\$32,025,049</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$664,277</b>	<b>\$664,277</b>	<b>\$664,277</b>	<b>\$664,277</b>	<b>\$737,890</b>
<b>Inflated LA Fee Revenue</b>	<b>\$32,025,049</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$664,277</b>	<b>\$664,277</b>	<b>\$664,277</b>	<b>\$664,277</b>	<b>\$737,890</b>
<b>Restoration/Enhancement Costs</b>									
Marsh	\$625,471	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Existing Rice	\$940,332	\$0	\$0	\$56,000	\$0	\$0	\$0	\$45,640	\$28,225
Other Converted to Rice	\$791,457	\$0	\$0	\$42,000	\$0	\$0	\$0	\$34,230	\$21,169
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Rice Converted to Marsh	\$80,000	\$0	\$0	\$0	\$0	\$0	\$40,000	\$40,000	\$0
<b>Total Cost - 1995\$</b>	<b>\$2,437,259</b>	<b>\$0</b>	<b>\$0</b>	<b>\$98,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$40,000</b>	<b>\$119,869</b>	<b>\$49,394</b>
<b>Inflated Development Cost</b>	<b>\$2,437,259</b>	<b>\$0</b>	<b>\$0</b>	<b>\$98,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$40,000</b>	<b>\$119,869</b>	<b>\$49,394</b>
<b>RE Fee Rev. - 1995\$</b>	<b>\$2,450,004</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$50,819</b>	<b>\$50,819</b>	<b>\$50,819</b>	<b>\$50,819</b>	<b>\$56,451</b>
<b>Inflated RE Fee Revenue</b>	<b>\$2,450,004</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$50,819</b>	<b>\$50,819</b>	<b>\$50,819</b>	<b>\$50,819</b>	<b>\$56,451</b>

\*dev\_cost\*

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**Figure B-2**  
**Natomas Basin HCP**  
**Acquisition and Restoration/Enhancement**

Constant 1995\$

	Total 1994-2045	7 2002	8 2003	9 2004	10 2005	11 2006	12 2007	13 2008
<b>Land Acquisition Cost</b>								
Land Cost - 1995\$	\$29,093,830	\$670,351	\$670,351	\$670,351	\$670,351	\$778,259	\$778,259	\$778,259
Plus Transaction Costs	\$2,909,383	\$67,035	\$67,035	\$67,035	\$67,035	\$77,826	\$77,826	\$77,826
<b>Total Acquisition Cost - 1995\$</b>	<b>\$32,003,213</b>	<b>\$737,386</b>	<b>\$737,386</b>	<b>\$737,386</b>	<b>\$737,386</b>	<b>\$856,085</b>	<b>\$856,085</b>	<b>\$856,085</b>
<b>Inflated Acquisition Cost</b>	<b>\$32,003,213</b>	<b>\$737,386</b>	<b>\$737,386</b>	<b>\$737,386</b>	<b>\$737,386</b>	<b>\$856,085</b>	<b>\$856,085</b>	<b>\$856,085</b>
<b>LA Fee Revenue - 1995\$</b>	<b>\$32,025,049</b>	<b>\$737,890</b>	<b>\$737,890</b>	<b>\$737,890</b>	<b>\$737,890</b>	<b>\$856,670</b>	<b>\$856,670</b>	<b>\$856,670</b>
<b>Inflated LA Fee Revenue</b>	<b>\$32,025,049</b>	<b>\$737,890</b>	<b>\$737,890</b>	<b>\$737,890</b>	<b>\$737,890</b>	<b>\$856,670</b>	<b>\$856,670</b>	<b>\$856,670</b>
<b>Restoration/Enhancement Costs</b>								
Marsh	\$625,471	\$0	\$0	\$0	\$11,572	\$20,480	\$20,480	\$20,480
Existing Rice	\$940,332	\$28,225	\$28,225	\$28,225	\$24,193	\$23,406	\$23,406	\$23,406
Other Converted to Rice	\$791,457	\$21,169	\$21,169	\$21,169	\$16,653	\$20,480	\$20,480	\$20,480
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Rice Converted to Marsh	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Cost - 1995\$</b>	<b>\$2,437,259</b>	<b>\$49,394</b>	<b>\$49,394</b>	<b>\$49,394</b>	<b>\$52,418</b>	<b>\$64,367</b>	<b>\$64,367</b>	<b>\$64,367</b>
<b>Inflated Development Cost</b>	<b>\$2,437,259</b>	<b>\$49,394</b>	<b>\$49,394</b>	<b>\$49,394</b>	<b>\$52,418</b>	<b>\$64,367</b>	<b>\$64,367</b>	<b>\$64,367</b>
<b>RE Fee Rev. - 1995\$</b>	<b>\$2,450,004</b>	<b>\$56,451</b>	<b>\$56,451</b>	<b>\$56,451</b>	<b>\$56,451</b>	<b>\$65,538</b>	<b>\$65,538</b>	<b>\$65,538</b>
<b>Inflated RE Fee Revenue</b>	<b>\$2,450,004</b>	<b>\$56,451</b>	<b>\$56,451</b>	<b>\$56,451</b>	<b>\$56,451</b>	<b>\$65,538</b>	<b>\$65,538</b>	<b>\$65,538</b>

\*dev. cost\*

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**Figure B-2**  
**Natomas Basin HCP**  
**Acquisition and Restoration/Enhancement**

Constant 1995\$

	Total 1994-2045	14 2009	15 2010	16 2011	17 2012	18 2013	19 2014	20 2015
<b>Land Acquisition Cost</b>								
Land Cost - 1995\$	\$29,093,830	\$778,259	\$778,259	\$1,254,534	\$1,254,534	\$1,254,534	\$1,254,534	\$1,254,534
Plus Transaction Costs	\$2,909,383	\$77,826	\$77,826	\$125,453	\$125,453	\$125,453	\$125,453	\$125,453
<b>Total Acquisition Cost - 1995\$</b>	<b>\$32,003,213</b>	<b>\$856,085</b>	<b>\$856,085</b>	<b>\$1,379,987</b>	<b>\$1,379,987</b>	<b>\$1,379,987</b>	<b>\$1,379,987</b>	<b>\$1,379,987</b>
<b>Inflated Acquisition Cost</b>	<b>\$32,003,213</b>	<b>\$856,085</b>	<b>\$856,085</b>	<b>\$1,379,987</b>	<b>\$1,379,987</b>	<b>\$1,379,987</b>	<b>\$1,379,987</b>	<b>\$1,379,987</b>
<b>LA Fee Revenue - 1995\$</b>	<b>\$32,025,049</b>	<b>\$856,670</b>	<b>\$856,670</b>	<b>\$1,380,931</b>	<b>\$1,380,931</b>	<b>\$1,380,931</b>	<b>\$1,380,931</b>	<b>\$1,380,931</b>
<b>Inflated LA Fee Revenue</b>	<b>\$32,025,049</b>	<b>\$856,670</b>	<b>\$856,670</b>	<b>\$1,380,931</b>	<b>\$1,380,931</b>	<b>\$1,380,931</b>	<b>\$1,380,931</b>	<b>\$1,380,931</b>
<b>Restoration/Enhancement Costs</b>								
Marsh	\$625,471	\$20,480	\$20,480	\$33,014	\$33,014	\$33,014	\$33,014	\$33,014
Existing Rice	\$940,332	\$23,406	\$23,406	\$37,730	\$37,730	\$37,730	\$37,730	\$37,730
Other Converted to Rice	\$791,457	\$20,480	\$20,480	\$33,014	\$33,014	\$33,014	\$33,014	\$33,014
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Rice Converted to Marsh	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Cost - 1995\$</b>	<b>\$2,437,259</b>	<b>\$64,367</b>	<b>\$64,367</b>	<b>\$103,758</b>	<b>\$103,758</b>	<b>\$103,758</b>	<b>\$103,758</b>	<b>\$103,758</b>
<b>Inflated Development Cost</b>	<b>\$2,437,259</b>	<b>\$64,367</b>	<b>\$64,367</b>	<b>\$103,758</b>	<b>\$103,758</b>	<b>\$103,758</b>	<b>\$103,758</b>	<b>\$103,758</b>
<b>RE Fee Rev. - 1995\$</b>	<b>\$2,450,004</b>	<b>\$65,538</b>	<b>\$65,538</b>	<b>\$105,645</b>	<b>\$105,645</b>	<b>\$105,645</b>	<b>\$105,645</b>	<b>\$105,645</b>
<b>Inflated RE Fee Revenue</b>	<b>\$2,450,004</b>	<b>\$65,538</b>	<b>\$65,538</b>	<b>\$105,645</b>	<b>\$105,645</b>	<b>\$105,645</b>	<b>\$105,645</b>	<b>\$105,645</b>

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**Figure B-2**  
**Natomas Basin HCP**  
**Acquisition and Restoration/Enhancement**

Constant 1995\$

	Total 1994-2045	28 2023	29 2024	30 2025	31 2026	32 2027	33 2028	34 2029
<b>Land Acquisition Cost</b>								
Land Cost - 1995\$	\$29,093,830	\$706,563	\$706,563	\$706,563	\$706,563	\$706,563	\$706,563	\$706,563
Plus Transaction Costs	\$2,909,383	\$70,656	\$70,656	\$70,656	\$70,656	\$70,656	\$70,656	\$70,656
<b>Total Acquisition Cost - 1995\$</b>	<b>\$32,003,213</b>	<b>\$777,219</b>	<b>\$777,219</b>	<b>\$777,219</b>	<b>\$777,219</b>	<b>\$777,219</b>	<b>\$777,219</b>	<b>\$777,219</b>
<b>Inflated Acquisition Cost</b>	<b>\$32,003,213</b>	<b>\$777,219</b>	<b>\$777,219</b>	<b>\$777,219</b>	<b>\$777,219</b>	<b>\$777,219</b>	<b>\$777,219</b>	<b>\$777,219</b>
<b>LA Fee Revenue - 1995\$</b>	<b>\$32,025,049</b>	<b>\$777,750</b>	<b>\$777,750</b>	<b>\$777,750</b>	<b>\$777,750</b>	<b>\$777,750</b>	<b>\$777,750</b>	<b>\$777,750</b>
<b>Inflated LA Fee Revenue</b>	<b>\$32,025,049</b>	<b>\$777,750</b>	<b>\$777,750</b>	<b>\$777,750</b>	<b>\$777,750</b>	<b>\$777,750</b>	<b>\$777,750</b>	<b>\$777,750</b>
<b>Restoration/Enhancement Costs</b>								
Marsh	\$625,471	\$18,594	\$18,594	\$18,594	\$18,594	\$18,594	\$18,594	\$18,594
Existing Rice	\$940,332	\$21,250	\$21,250	\$21,250	\$21,250	\$21,250	\$21,250	\$21,250
Other Converted to Rice	\$791,457	\$18,594	\$18,594	\$18,594	\$18,594	\$18,594	\$18,594	\$18,594
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Rice Converted to Marsh	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Cost - 1995\$</b>	<b>\$2,437,259</b>	<b>\$58,438</b>	<b>\$58,438</b>	<b>\$58,438</b>	<b>\$58,438</b>	<b>\$58,438</b>	<b>\$58,438</b>	<b>\$58,438</b>
<b>Inflated Development Cost</b>	<b>\$2,437,259</b>	<b>\$58,438</b>	<b>\$58,438</b>	<b>\$58,438</b>	<b>\$58,438</b>	<b>\$58,438</b>	<b>\$58,438</b>	<b>\$58,438</b>
<b>RE Fee Rev. - 1995\$</b>	<b>\$2,450,004</b>	<b>\$59,500</b>	<b>\$59,500</b>	<b>\$59,500</b>	<b>\$59,500</b>	<b>\$59,500</b>	<b>\$59,500</b>	<b>\$59,500</b>
<b>Inflated RE Fee Revenue</b>	<b>\$2,450,004</b>	<b>\$59,500</b>	<b>\$59,500</b>	<b>\$59,500</b>	<b>\$59,500</b>	<b>\$59,500</b>	<b>\$59,500</b>	<b>\$59,500</b>

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**Figure B-2  
Natomas Basin HCP  
Acquisition and Restoration/Enhancement**

Constant 1995\$

	Total 1994-2045	35 2030	36 2031	37 2032	38 2033	39 2034	40 2035	41 2036
<b>Land Acquisition Cost</b>								
Land Cost - 1995\$	\$29,093,830	\$706,563	\$706,563	\$706,563	\$706,563	\$446,049	\$0	\$0
Plus Transaction Costs	\$2,909,383	\$70,656	\$70,656	\$70,656	\$70,656	\$44,605	\$0	\$0
<b>Total Acquisition Cost - 1995\$</b>	<b>\$32,003,213</b>	<b>\$777,219</b>	<b>\$777,219</b>	<b>\$777,219</b>	<b>\$777,219</b>	<b>\$490,654</b>	<b>\$0</b>	<b>\$0</b>
<b>Inflated Acquisition Cost</b>	<b>\$32,003,213</b>	<b>\$777,219</b>	<b>\$777,219</b>	<b>\$777,219</b>	<b>\$777,219</b>	<b>\$490,654</b>	<b>\$0</b>	<b>\$0</b>
<b>LA Fee Revenue - 1995\$</b>	<b>\$32,025,049</b>	<b>\$777,750</b>	<b>\$777,750</b>	<b>\$777,750</b>	<b>\$777,750</b>	<b>\$490,989</b>	<b>\$0</b>	<b>\$0</b>
<b>Inflated LA Fee Revenue</b>	<b>\$32,025,049</b>	<b>\$777,750</b>	<b>\$777,750</b>	<b>\$777,750</b>	<b>\$777,750</b>	<b>\$490,989</b>	<b>\$0</b>	<b>\$0</b>
<b>Restoration/Enhancement Costs</b>								
Marsh	\$625,471	\$18,594	\$18,594	\$18,594	\$18,594	\$11,738	\$0	\$0
Existing Rice	\$940,332	\$21,250	\$21,250	\$21,250	\$21,250	\$13,415	\$0	\$0
Other Converted to Rice	\$791,457	\$18,594	\$18,594	\$18,594	\$18,594	\$11,738	\$0	\$0
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Rice Converted to Marsh	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Cost - 1995\$</b>	<b>\$2,437,259</b>	<b>\$58,438</b>	<b>\$58,438</b>	<b>\$58,438</b>	<b>\$58,438</b>	<b>\$36,891</b>	<b>\$0</b>	<b>\$0</b>
<b>Inflated Development Cost</b>	<b>\$2,437,259</b>	<b>\$58,438</b>	<b>\$58,438</b>	<b>\$58,438</b>	<b>\$58,438</b>	<b>\$36,891</b>	<b>\$0</b>	<b>\$0</b>
<b>RE Fee Rev. - 1995\$</b>	<b>\$2,450,004</b>	<b>\$59,500</b>	<b>\$59,500</b>	<b>\$59,500</b>	<b>\$59,500</b>	<b>\$37,562</b>	<b>\$0</b>	<b>\$0</b>
<b>Inflated RE Fee Revenue</b>	<b>\$2,450,004</b>	<b>\$59,500</b>	<b>\$59,500</b>	<b>\$59,500</b>	<b>\$59,500</b>	<b>\$37,562</b>	<b>\$0</b>	<b>\$0</b>

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**Figure B-2**  
**Natomas Basin HCP**  
**Acquisition and Restoration/Enhancement**

Constant 1995\$

	Total 1994-2045	42 2037	43 2038	44 2039	45 2040	46 2041	47 2042
<b>Land Acquisition Cost</b>							
Land Cost - 1995\$	\$29,093,830	\$0	\$0	\$0	\$0	\$0	\$0
Plus Transaction Costs	\$2,909,383	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Acquisition Cost - 1995\$</b>	<b>\$32,003,213</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Inflated Acquisition Cost</b>	<b>\$32,003,213</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>LA Fee Revenue - 1995\$</b>	<b>\$32,025,049</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Inflated LA Fee Revenue</b>	<b>\$32,025,049</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Restoration/Enhancement Costs</b>							
Marsh	\$625,471	\$0	\$0	\$0	\$0	\$0	\$0
Existing Rice	\$940,332	\$0	\$0	\$0	\$0	\$0	\$0
Other Converted to Rice	\$791,457	\$0	\$0	\$0	\$0	\$0	\$0
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Rice Converted to Marsh	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Cost - 1995\$</b>	<b>\$2,437,259</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Inflated Development Cost</b>	<b>\$2,437,259</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>RE Fee Rev. - 1995\$</b>	<b>\$2,450,004</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Inflated RE Fee Revenue</b>	<b>\$2,450,004</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

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**Figure B-2**  
**Natomas Basin HCP**  
**Acquisition and Restoration/Enhancement**

Constant 1995\$

	Total 1994-2045	48 2043	49 2044	50 2045
<b>Land Acquisition Cost</b>				
Land Cost - 1995\$	\$29,093,830	\$0	\$0	\$0
Plus Transaction Costs	\$2,909,383	\$0	\$0	\$0
<b>Total Acquisition Cost - 1995\$</b>	<b>\$32,003,213</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Inflated Acquisition Cost</b>	<b>\$32,003,213</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>LA Fee Revenue - 1995\$</b>	<b>\$32,025,049</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Inflated LA Fee Revenue</b>	<b>\$32,025,049</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Restoration/Enhancement Costs</b>				
Marsh	\$625,471	\$0	\$0	\$0
Existing Rice	\$940,332	\$0	\$0	\$0
Other Converted to Rice	\$791,457	\$0	\$0	\$0
Other	\$0	\$0	\$0	\$0
Rice Converted to Marsh	\$80,000	\$0	\$0	\$0
<b>Total Cost - 1995\$</b>	<b>\$2,437,259</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Inflated Development Cost</b>	<b>\$2,437,259</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>RE Fee Rev. - 1995\$</b>	<b>\$2,450,004</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Inflated RE Fee Revenue</b>	<b>\$2,450,004</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

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**Figure B-3  
Natomas Basin HCP  
Operations & Maintenance Costs**

Constant 1995\$

	Total 1994-2045	0 1994	0 1995	1 1996	2 1997	3 1998	4 1999	5 2000	6 2001
<b>Rice Lands</b>									
Not Farmable/Uplands		0%	0%	10%	10%	10%	10%	10%	10%
Set-Aside/Fallow		0%	0%	9%	9%	9%	9%	9%	9%
Leased for Other Crops		0%	0%	30%	30%	30%	30%	30%	30%
Leased Rice Base Land		0%	0%	51%	51%	51%	51%	51%	51%
<b>Rice Lands</b>									
Not Farmable/Uplands		0.0	0.0	40.0	40.0	40.0	20.0	32.6	52.8
Set-Aside/Fallow		0.0	0.0	36.0	36.0	36.0	18.0	29.3	47.5
Leased for Other Crops		0.0	0.0	121.5	121.5	121.5	60.8	99.0	160.3
Leased Rice Base Land		0.0	0.0	202.5	202.5	202.5	101.3	165.0	267.1
<b>Total Rice Lands</b>		<b>0.0</b>	<b>0.0</b>	<b>400.0</b>	<b>400.0</b>	<b>400.0</b>	<b>200.0</b>	<b>326.0</b>	<b>527.6</b>
<b>Rice Lands</b>									
Not Farmable/Uplands	\$1,448,643	\$0	\$0	\$2,878	\$2,878	\$2,878	\$1,439	\$2,346	\$3,797
Set-Aside/Fallow	\$1,484,964	\$0	\$0	\$2,951	\$2,951	\$2,951	\$1,475	\$2,405	\$3,892
Leased for Other Crops	\$4,400,253	\$0	\$0	\$8,743	\$8,743	\$8,743	\$4,371	\$7,125	\$11,532
Leased Rice Base Land	\$7,333,756	\$0	\$0	\$14,572	\$14,572	\$14,572	\$7,286	\$11,876	\$19,220
<b>Subtotal Rice</b>	<b>\$14,667,616</b>	<b>\$0</b>	<b>\$0</b>	<b>\$29,143</b>	<b>\$29,143</b>	<b>\$29,143</b>	<b>\$14,572</b>	<b>\$23,752</b>	<b>\$38,440</b>
<b>Marsh</b>	<b>\$8,415,537</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$24,898</b>	<b>\$49,797</b>	<b>\$49,797</b>
<b>Other</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Hunting</b>	<b>\$5,347,273</b>	<b>\$0</b>	<b>\$0</b>	<b>\$14,933</b>	<b>\$14,933</b>	<b>\$14,933</b>	<b>\$14,933</b>	<b>\$23,716</b>	<b>\$30,302</b>
<b>Administration</b>	<b>\$8,150,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>\$100,000</b>	<b>\$150,000</b>
<b>Total O &amp; M Costs</b>	<b>\$36,580,426</b>	<b>\$0</b>	<b>\$0</b>	<b>\$94,077</b>	<b>\$94,077</b>	<b>\$94,077</b>	<b>\$104,403</b>	<b>\$197,264</b>	<b>\$268,539</b>
<b>Inflated O &amp; M Costs</b>	<b>\$36,580,426</b>	<b>\$0</b>	<b>\$0</b>	<b>\$94,077</b>	<b>\$94,077</b>	<b>\$94,077</b>	<b>\$104,403</b>	<b>\$197,264</b>	<b>\$268,539</b>

\*O&M\_cost\*

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**Figure B-3  
Natomas Basin HCP  
Operations & Maintenance Costs**

Constant 1995\$

	Total 1994-2045	7 2002	8 2003	9 2004	10 2005	11 2006	12 2007	13 2008
<b>Rice Lands</b>								
Not Farmable/Uplands		10%	10%	10%	10%	10%	10%	10%
Set-Aside/Fallow		9%	9%	9%	9%	9%	9%	9%
Leased for Other Crops		30%	30%	30%	30%	30%	30%	30%
Leased Rice Base Land		51%	51%	51%	51%	51%	51%	51%
<b>Rice Lands</b>								
Not Farmable/Uplands		72.9	93.1	113.2	130.1	147.7	165.2	182.8
Set-Aside/Fallow		65.6	83.8	101.9	117.1	132.9	148.7	164.5
Leased for Other Crops		221.5	282.7	344.0	395.2	448.5	501.8	555.1
Leased Rice Base Land		369.2	471.2	573.3	658.6	747.5	836.4	925.2
<b>Total Rice Lands</b>		<b>729.2</b>	<b>930.8</b>	<b>1,132.4</b>	<b>1,301.0</b>	<b>1,476.5</b>	<b>1,652.1</b>	<b>1,827.6</b>
<b>Rice Lands</b>								
Not Farmable/Uplands	\$1,448,643	\$5,247	\$6,698	\$8,149	\$9,362	\$10,625	\$11,888	\$13,151
Set-Aside/Fallow	\$1,484,964	\$5,379	\$6,866	\$8,353	\$9,596	\$10,891	\$12,186	\$13,481
Leased for Other Crops	\$4,400,253	\$15,939	\$20,345	\$24,752	\$28,436	\$32,273	\$36,110	\$39,947
Leased Rice Base Land	\$7,333,756	\$26,565	\$33,909	\$41,253	\$47,393	\$53,788	\$60,183	\$66,578
<b>Subtotal Rice</b>	<b>\$14,667,616</b>	<b>\$53,129</b>	<b>\$67,818</b>	<b>\$82,507</b>	<b>\$94,787</b>	<b>\$107,577</b>	<b>\$120,367</b>	<b>\$133,157</b>
Marsh	\$8,415,537	\$49,797	\$49,797	\$49,797	\$53,913	\$61,198	\$68,482	\$75,767
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Hunting	\$5,347,273	\$36,888	\$43,474	\$50,059	\$56,645	\$55,107	\$61,661	\$68,214
Administration	\$8,150,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
<b>Total O &amp; M Costs</b>	<b>\$36,580,426</b>	<b>\$339,814</b>	<b>\$361,089</b>	<b>\$382,363</b>	<b>\$405,345</b>	<b>\$423,882</b>	<b>\$450,510</b>	<b>\$477,139</b>
<b>Inflated O &amp; M Costs</b>	<b>\$36,580,426</b>	<b>\$339,814</b>	<b>\$361,089</b>	<b>\$382,363</b>	<b>\$405,345</b>	<b>\$423,882</b>	<b>\$450,510</b>	<b>\$477,139</b>

\*O&amp;M\_cost\*

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**Figure B-3  
Natomas Basin HCP  
Operations & Maintenance Costs**

Constant 1995\$

	Total 1994-2045	14 2009	15 2010	16 2011	17 2012	18 2013	19 2014	20 2015
<b>Rice Lands</b>								
Not Farmable/Uplands		10%	10%	10%	10%	10%	10%	10%
Set-Aside/Fallow		9%	9%	9%	9%	9%	9%	9%
Leased for Other Crops		30%	30%	30%	30%	30%	30%	30%
Leased Rice Base Land		51%	51%	51%	51%	51%	51%	51%
<b>Rice Lands</b>								
Not Farmable/Uplands		200.3	217.9	246.2	274.5	302.8	331.1	359.4
Set-Aside/Fallow		180.3	196.1	221.6	247.0	272.5	298.0	323.4
Leased for Other Crops		608.5	661.8	747.7	833.7	919.6	1,005.6	1,091.6
Leased Rice Base Land		1,014.1	1,103.0	1,246.2	1,389.5	1,532.7	1,676.0	1,819.3
<b>Total Rice Lands</b>		<b>2,003.2</b>	<b>2,178.7</b>	<b>2,461.7</b>	<b>2,744.7</b>	<b>3,027.6</b>	<b>3,310.6</b>	<b>3,593.6</b>
<b>Rice Lands</b>								
Not Farmable/Uplands	\$1,448,643	\$14,414	\$15,678	\$17,714	\$19,750	\$21,786	\$23,823	\$25,859
Set-Aside/Fallow	\$1,484,964	\$14,776	\$16,071	\$18,158	\$20,245	\$22,333	\$24,420	\$26,507
Leased for Other Crops	\$4,400,253	\$43,784	\$47,621	\$53,806	\$59,991	\$66,176	\$72,361	\$78,547
Leased Rice Base Land	\$7,333,756	\$72,973	\$79,368	\$89,677	\$99,985	\$110,294	\$120,602	\$130,911
<b>Subtotal Rice</b>	<b>\$14,667,616</b>	<b>\$145,947</b>	<b>\$158,737</b>	<b>\$179,355</b>	<b>\$199,972</b>	<b>\$220,589</b>	<b>\$241,207</b>	<b>\$261,824</b>
Marsh	\$8,415,537	\$83,052	\$90,336	\$102,079	\$113,822	\$125,565	\$137,308	\$149,050
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Hunting	\$5,347,273	\$74,768	\$67,768	\$76,572	\$85,376	\$94,180	\$102,983	\$111,787
Administration	\$8,150,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
<b>Total O &amp; M Costs</b>	<b>\$36,580,426</b>	<b>\$503,767</b>	<b>\$516,842</b>	<b>\$558,006</b>	<b>\$599,170</b>	<b>\$640,334</b>	<b>\$681,497</b>	<b>\$722,661</b>
<b>Inflated O &amp; M Costs</b>	<b>\$36,580,426</b>	<b>\$503,767</b>	<b>\$516,842</b>	<b>\$558,006</b>	<b>\$599,170</b>	<b>\$640,334</b>	<b>\$681,497</b>	<b>\$722,661</b>

\*O&amp;M\_cost\*

**Figure B-3**  
**Natomas Basin HCP**  
**Operations & Maintenance Costs**

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Constant 1995\$

	Total 1994-2045	21 2016	22 2017	23 2018	24 2019	25 2020	26 2021	27 2022
<b>Rice Lands</b>								
Not Farmable/Uplands		10%	10%	10%	10%	10%	10%	10%
Set-Aside/Fallow		9%	9%	9%	9%	9%	9%	9%
Leased for Other Crops		30%	30%	30%	30%	30%	30%	30%
Leased Rice Base Land		51%	51%	51%	51%	51%	51%	51%
<b>Rice Lands</b>								
Not Farmable/Uplands		\$375	\$391	\$407	\$423	\$439	\$455	\$471
Set-Aside/Fallow		337.8	352.1	366.5	380.8	395.1	409.5	423.8
Leased for Other Crops		1,140.0	1,188.4	1,236.8	1,285.2	1,333.6	1,382.0	1,430.4
Leased Rice Base Land		1,899.9	1,980.6	2,061.3	2,142.0	2,222.7	2,303.4	2,384.0
<b>Total Rice Lands</b>		<b>3,753.0</b>	<b>3,912.4</b>	<b>4,071.7</b>	<b>4,231.1</b>	<b>4,390.5</b>	<b>4,548.9</b>	<b>4,709.2</b>
<b>Rice Lands</b>								
Not Farmable/Uplands	\$1,448,643	\$27,006	\$28,153	\$29,299	\$30,446	\$31,593	\$32,740	\$33,887
Set-Aside/Fallow	\$1,484,964	\$27,683	\$28,858	\$30,034	\$31,210	\$32,385	\$33,561	\$34,736
Leased for Other Crops	\$4,400,253	\$82,030	\$85,514	\$88,997	\$92,481	\$95,964	\$99,448	\$102,931
Leased Rice Base Land	\$7,333,756	\$136,717	\$142,523	\$148,329	\$154,134	\$159,940	\$165,746	\$171,552
<b>Subtotal Rice</b>	<b>\$14,667,616</b>	<b>\$273,436</b>	<b>\$285,047</b>	<b>\$296,659</b>	<b>\$308,271</b>	<b>\$319,883</b>	<b>\$331,495</b>	<b>\$343,106</b>
Marsh	\$8,415,537	\$155,664	\$162,278	\$168,891	\$175,505	\$182,118	\$188,732	\$195,346
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Hunting	\$5,347,273	\$93,396	\$97,363	\$101,330	\$105,296	\$109,263	\$113,230	\$117,196
Administration	\$8,150,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
<b>Total O &amp; M Costs</b>	<b>\$36,580,426</b>	<b>\$722,496</b>	<b>\$744,688</b>	<b>\$766,880</b>	<b>\$789,072</b>	<b>\$811,264</b>	<b>\$833,456</b>	<b>\$855,648</b>
<b>Inflated O &amp; M Costs</b>	<b>\$36,580,426</b>	<b>\$722,496</b>	<b>\$744,688</b>	<b>\$766,880</b>	<b>\$789,072</b>	<b>\$811,264</b>	<b>\$833,456</b>	<b>\$855,648</b>



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**Figure B-3**  
**Natomas Basin HCP**  
**Operations & Maintenance Costs**

Constant 1995\$

	Total 1994-2045	28 2023	29 2024	30 2025	31 2026	32 2027	33 2028	34 2029
<b>Rice Lands</b>								
Not Farmable/Uplands		10%	10%	10%	10%	10%	10%	10%
Set-Aside/Fallow		9%	9%	9%	9%	9%	9%	9%
Leased for Other Crops		30%	30%	30%	30%	30%	30%	30%
Leased Rice Base Land		51%	51%	51%	51%	51%	51%	51%
<b>Rice Lands</b>								
Not Farmable/Uplands		\$487	\$503	\$519	\$535	\$551	\$567	\$582
Set-Aside/Fallow		438.2	452.5	466.9	481.2	495.5	509.9	524.2
Leased for Other Crops		1,478.8	1,527.2	1,575.7	1,624.1	1,672.5	1,720.9	1,769.3
Leased Rice Base Land		2,464.7	2,545.4	2,626.1	2,706.8	2,787.5	2,868.1	2,948.8
<b>Total Rice Lands</b>		<b>4,868.6</b>	<b>5,028.0</b>	<b>5,187.4</b>	<b>5,346.7</b>	<b>5,506.1</b>	<b>5,665.5</b>	<b>5,824.9</b>
<b>Rice Lands</b>								
Not Farmable/Uplands	\$1,448,643	\$35,034	\$36,180	\$37,327	\$38,474	\$39,621	\$40,768	\$41,915
Set-Aside/Fallow	\$1,484,964	\$35,912	\$37,088	\$38,263	\$39,439	\$40,614	\$41,790	\$42,966
Leased for Other Crops	\$4,400,253	\$106,415	\$109,898	\$113,382	\$116,865	\$120,349	\$123,832	\$127,316
Leased Rice Base Land	\$7,333,758	\$177,358	\$183,164	\$188,970	\$194,775	\$200,581	\$206,387	\$212,193
<b>Subtotal Rice</b>	<b>\$14,667,616</b>	<b>\$354,718</b>	<b>\$366,330</b>	<b>\$377,942</b>	<b>\$389,554</b>	<b>\$401,165</b>	<b>\$412,777</b>	<b>\$424,389</b>
Marsh	\$8,415,537	\$201,959	\$208,573	\$215,187	\$221,800	\$228,414	\$235,027	\$241,641
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Hunting	\$5,347,273	\$121,163	\$125,130	\$129,098	\$133,063	\$137,030	\$140,996	\$144,963
Administration	\$8,150,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
<b>Total O &amp; M Costs</b>	<b>\$36,580,426</b>	<b>\$877,841</b>	<b>\$900,033</b>	<b>\$922,225</b>	<b>\$944,417</b>	<b>\$966,609</b>	<b>\$988,801</b>	<b>\$1,010,993</b>
<b>Inflated O &amp; M Costs</b>	<b>\$36,580,426</b>	<b>\$877,841</b>	<b>\$900,033</b>	<b>\$922,225</b>	<b>\$944,417</b>	<b>\$966,609</b>	<b>\$988,801</b>	<b>\$1,010,993</b>

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**Figure B-3**  
**Natomas Basin HCP**  
**Operations & Maintenance Costs**

Constant 1995\$

	Total 1994-2045	35 2030	36 2031	37 2032	38 2033	39 2034	40 2035	41 2036
<b>Rice Lands</b>								
Not Farmable/Uplands		10%	10%	10%	10%	10%	10%	10%
Set-Aside/Fallow		9%	9%	9%	9%	9%	9%	9%
Leased for Other Crops		30%	30%	30%	30%	30%	30%	30%
Leased Rice Base Land		51%	51%	51%	51%	51%	51%	51%
<b>Rice Lands</b>								
Not Farmable/Uplands		\$598	\$614	\$630	\$646	\$656	\$656	\$656
Set-Aside/Fallow		538.6	552.9	567.3	581.6	590.7	590.7	590.7
Leased for Other Crops		1,817.7	1,866.1	1,914.5	1,962.9	1,993.5	1,993.5	1,993.5
Leased Rice Base Land		3,029.5	3,110.2	3,190.9	3,271.6	3,322.5	3,322.5	3,322.5
<b>Total Rice Lands</b>		<b>5,984.2</b>	<b>6,143.6</b>	<b>6,303.0</b>	<b>6,462.4</b>	<b>6,563.0</b>	<b>6,563.0</b>	<b>6,563.0</b>
<b>Rice Lands</b>								
Not Farmable/Uplands	\$1,448,643	\$43,062	\$44,208	\$45,355	\$46,502	\$47,226	\$47,226	\$47,226
Set-Aside/Fallow	\$1,484,964	\$44,141	\$45,317	\$46,492	\$47,668	\$48,410	\$48,410	\$48,410
Leased for Other Crops	\$4,400,253	\$130,799	\$134,283	\$137,766	\$141,250	\$143,449	\$143,449	\$143,449
Leased Rice Base Land	\$7,333,756	\$217,999	\$223,805	\$229,611	\$235,416	\$239,082	\$239,082	\$239,082
<b>Subtotal Rice</b>	<b>\$14,667,616</b>	<b>\$436,001</b>	<b>\$447,613</b>	<b>\$459,224</b>	<b>\$470,836</b>	<b>\$478,167</b>	<b>\$478,167</b>	<b>\$478,167</b>
Marsh	\$8,415,537	\$248,255	\$254,868	\$261,482	\$268,096	\$272,271	\$272,271	\$272,271
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Hunting	\$5,347,273	\$148,930	\$152,896	\$156,863	\$160,830	\$163,334	\$163,334	\$163,334
Administration	\$8,150,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$100,000	\$100,000
<b>Total O &amp; M Costs</b>	<b>\$36,580,426</b>	<b>\$1,033,185</b>	<b>\$1,055,377</b>	<b>\$1,077,569</b>	<b>\$1,099,761</b>	<b>\$1,113,771</b>	<b>\$1,013,771</b>	<b>\$1,013,771</b>
<b>Inflated O &amp; M Costs</b>	<b>\$36,580,426</b>	<b>\$1,033,185</b>	<b>\$1,055,377</b>	<b>\$1,077,569</b>	<b>\$1,099,761</b>	<b>\$1,113,771</b>	<b>\$1,013,771</b>	<b>\$1,013,771</b>



**Figure B-3  
Natomas Basin HCP  
Operations & Maintenance Costs**

Constant 1995\$

**DRAFT**

	Total 1994-2045	48 2043	49 2044	50 2045
<b>Rice Lands</b>				
Not Farmable/Uplands		10%	10%	10%
Set-Aside/Fallow		9%	9%	9%
Leased for Other Crops		30%	30%	30%
Leased Rice Base Land		51%	51%	51%
<b>Rice Lands</b>				
Not Farmable/Uplands		\$656	\$656	\$656
Set-Aside/Fallow		590.7	590.7	590.7
Leased for Other Crops		1,993.5	1,993.5	1,993.5
Leased Rice Base Land		3,322.5	3,322.5	3,322.5
<b>Total Rice Lands</b>		<b>6,563.0</b>	<b>6,563.0</b>	<b>6,563.0</b>
<b>Rice Lands</b>				
Not Farmable/Uplands	\$1,448,643	\$47,226	\$47,226	\$47,226
Set-Aside/Fallow	\$1,484,964	\$48,410	\$48,410	\$48,410
Leased for Other Crops	\$4,400,253	\$143,449	\$143,449	\$143,449
Leased Rice Base Land	\$7,333,756	\$239,082	\$239,082	\$239,082
<b>Subtotal Rice</b>	<b>\$14,667,616</b>	<b>\$478,167</b>	<b>\$478,167</b>	<b>\$478,167</b>
<b>Marsh</b>	<b>\$8,415,537</b>	<b>\$272,271</b>	<b>\$272,271</b>	<b>\$272,271</b>
<b>Other</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Hunting</b>	<b>\$5,347,273</b>	<b>\$163,334</b>	<b>\$163,334</b>	<b>\$163,334</b>
<b>Administration</b>	<b>\$8,150,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$100,000</b>
<b>Total O &amp; M Costs</b>	<b>\$36,580,426</b>	<b>\$1,013,771</b>	<b>\$1,013,771</b>	<b>\$1,013,771</b>
<b>Inflated O &amp; M Costs</b>	<b>\$36,580,426</b>	<b>\$1,013,771</b>	<b>\$1,013,771</b>	<b>\$1,013,771</b>

**Figure B-4**  
**Natomas Basin HCP**  
**Operating Revenues**

**DRAFT**

Constant 1995\$

	Total 1994-2045	0 1994	0 1995	1 1996	2 1997	3 1998	4 1999	5 2000	6 2001
<b>Rice Lands</b>									
Not Farmable/Uplands		0%	0%	10%	10%	10%	10%	10%	10%
Set-Aside/Fallow		0%	0%	9%	9%	9%	9%	9%	9%
Leased for Other Crops		0%	0%	30%	30%	30%	30%	30%	30%
Leased Rice Base Land		0%	0%	51%	51%	51%	51%	51%	51%
<b>Rice Land Acreage</b>									
Not Farmable/Uplands		0.0	0.0	40.0	40.0	40.0	20.0	32.6	52.8
Set-Aside/Fallow		0.0	0.0	36.0	36.0	36.0	18.0	29.3	47.5
Leased for Other Crops		0.0	0.0	121.5	121.5	121.5	60.8	99.0	160.3
Leased Rice Base Land		0.0	0.0	202.5	202.5	202.5	101.3	165.0	267.1
<b>Subtotal</b>		<b>0.0</b>	<b>0.0</b>	<b>400.0</b>	<b>400.0</b>	<b>400.0</b>	<b>200.0</b>	<b>326.0</b>	<b>527.6</b>
<b>Rice Lands</b>									
Other Crop Land Lease	\$5,317,509	\$0	\$0	\$10,631	\$10,631	\$10,631	\$5,316	\$8,664	\$14,023
Rice Base Land Lease	\$17,835,422	\$0	\$0	\$35,438	\$35,438	\$35,438	\$17,719	\$28,881	\$46,743
<b>Subtotal Rice</b>	<b>\$23,152,931</b>	<b>\$0</b>	<b>\$0</b>	<b>\$46,069</b>	<b>\$46,069</b>	<b>\$46,069</b>	<b>\$23,034</b>	<b>\$37,546</b>	<b>\$60,765</b>
<b>Admin/O &amp; M Mitigation Fees</b>									
Base Fee	\$2,625,004	\$0	\$0	\$0	\$54,449	\$54,449	\$54,449	\$54,449	\$60,483
Maximum Fee Adjustment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Admin/O &amp; M Fees</b>	<b>\$2,625,004</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$54,449</b>	<b>\$54,449</b>	<b>\$54,449</b>	<b>\$54,449</b>	<b>\$60,483</b>
<b>Hunting</b>	<b>\$19,880,396</b>	<b>\$0</b>	<b>\$0</b>	<b>\$55,520</b>	<b>\$55,520</b>	<b>\$55,520</b>	<b>\$55,520</b>	<b>\$88,172</b>	<b>\$112,658</b>
<b>Total Operating Revenues - 1995\$</b>	<b>\$45,658,331</b>	<b>\$0</b>	<b>\$0</b>	<b>\$101,589</b>	<b>\$156,038</b>	<b>\$156,038</b>	<b>\$133,003</b>	<b>\$180,167</b>	<b>\$233,906</b>
<b>Inflated Operating Revenues</b>	<b>\$45,658,331</b>	<b>\$0</b>	<b>\$0</b>	<b>\$101</b>	<b>\$156,038</b>	<b>\$156,038</b>	<b>\$133,003</b>	<b>\$180,167</b>	<b>\$233,906</b>

**Figure B-4**  
**Natomas Basin HCP**  
**Operating Revenues**

**DRAFT**

Constant 1995\$

	Total 1994-2045	7 2002	8 2003	9 2004	10 2005	11 2006	12 2007	13 2008
<b>Rice Lands</b>								
Not Farmable/Uplands		10%	10%	10%	10%	10%	10%	10%
Set-Aside/Fallow		9%	9%	9%	9%	9%	9%	9%
Leased for Other Crops		30%	30%	30%	30%	30%	30%	30%
Leased Rice Base Land		51%	51%	51%	51%	51%	51%	51%
<b>Rice Land Acreage</b>								
Not Farmable/Uplands		72.9	93.1	113.2	130.1	147.7	165.2	182.8
Set-Aside/Fallow		65.6	83.8	101.9	117.1	132.9	148.7	164.5
Leased for Other Crops		221.5	282.7	344.0	395.2	448.5	501.8	555.1
Leased Rice Base Land		369.2	471.2	573.3	658.6	747.5	836.4	925.2
<b>Subtotal</b>		<b>729.2</b>	<b>930.8</b>	<b>1,132.4</b>	<b>1,301.0</b>	<b>1,476.5</b>	<b>1,652.1</b>	<b>1,827.6</b>
<b>Rice Lands</b>								
Other Crop Land Lease	\$5,317,509	\$19,381	\$24,740	\$30,098	\$34,578	\$39,243	\$43,909	\$48,575
Rice Base Land Lease	\$17,835,422	\$64,604	\$82,465	\$100,327	\$115,259	\$130,811	\$146,363	\$161,916
<b>Subtotal Rice</b>	<b>\$23,152,931</b>	<b>\$83,985</b>	<b>\$107,205</b>	<b>\$130,424</b>	<b>\$149,836</b>	<b>\$170,054</b>	<b>\$190,272</b>	<b>\$210,490</b>
<b>Admin/O &amp; M Mitigation Fees</b>								
Base Fee	\$2,625,004	\$60,483	\$60,483	\$60,483	\$60,483	\$70,219	\$70,219	\$70,219
Maximum Fee Adjustment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Admin/O &amp; M Fees</b>	<b>\$2,625,004</b>	<b>\$60,483</b>	<b>\$60,483</b>	<b>\$60,483</b>	<b>\$60,483</b>	<b>\$70,219</b>	<b>\$70,219</b>	<b>\$70,219</b>
<b>Hunting</b>	<b>\$19,880,396</b>	<b>\$137,143</b>	<b>\$161,629</b>	<b>\$186,114</b>	<b>\$210,599</b>	<b>\$204,880</b>	<b>\$229,246</b>	<b>\$253,612</b>
<b>Total Operating Revenues - 1995\$</b>	<b>\$45,658,331</b>	<b>\$281,611</b>	<b>\$329,316</b>	<b>\$377,021</b>	<b>\$420,918</b>	<b>\$445,153</b>	<b>\$489,737</b>	<b>\$534,321</b>
<b>Inflated Operating Revenues</b>	<b>\$45,658,331</b>	<b>\$281,611</b>	<b>\$329,316</b>	<b>\$377,021</b>	<b>\$420,918</b>	<b>\$445,153</b>	<b>\$489,737</b>	<b>\$534,321</b>

\*revenues\*

**Figure B-4**  
**Natomas Basin HCP**  
**Operating Revenues**

**DRAFT**

Constant 1995\$

	Total 1994-2045	14 2009	15 2010	16 2011	17 2012	18 2013	19 2014	20 2015
<b>Rice Lands</b>								
Not Farmable/Uplands		10%	10%	10%	10%	10%	10%	10%
Set-Aside/Fallow		9%	9%	9%	9%	9%	9%	9%
Leased for Other Crops		30%	30%	15%	30%	30%	30%	30%
Leased Rice Base Land		51%	51%	51%	51%	51%	51%	51%
<b>Rice Land Acreage</b>								
Not Farmable/Uplands		200.3	217.9	246.2	274.5	302.8	331.1	359.4
Set-Aside/Fallow		180.3	196.1	221.6	247.0	272.5	298.0	323.4
Leased for Other Crops		608.5	661.8	369.3	833.7	919.6	1,005.6	1,091.6
Leased Rice Base Land		1,014.1	1,103.0	1,246.2	1,389.5	1,532.7	1,676.0	1,819.3
Subtotal		2,003.2	2,178.7	2,083.2	2,744.7	3,027.6	3,310.6	3,593.6
<b>Rice Lands</b>								
Other Crop Land Lease	\$5,317,509	\$53,240	\$57,906	\$32,310	\$72,948	\$80,469	\$87,990	\$95,511
Rice Base Land Lease	\$17,835,422	\$177,468	\$193,020	\$218,091	\$243,161	\$268,231	\$293,301	\$318,371
Subtotal Rice	\$23,152,931	\$230,709	\$250,927	\$250,400	\$316,109	\$348,700	\$381,291	\$413,882
<b>Admin/O &amp; M Mitigation Fees</b>								
Base Fee	\$2,625,004	\$70,219	\$70,219	\$113,191	\$113,191	\$113,191	\$113,191	\$113,191
Maximum Fee Adjustment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Admin/O & M Fees	\$2,625,004	\$70,219	\$70,219	\$113,191	\$113,191	\$113,191	\$113,191	\$113,191
<b>Hunting</b>	\$19,880,396	\$277,978	\$251,953	\$284,684	\$317,415	\$350,146	\$382,877	\$415,608
<b>Total Operating Revenues - 1995\$</b>	\$45,658,331	\$578,905	\$573,098	\$648,275	\$746,715	\$812,037	\$877,359	\$942,681
<b>Inflated Operating Revenues</b>	\$45,658,331	\$578,905	\$573,098	\$648,275	\$746,715	\$812,037	\$877,359	\$942,681

\*revenues\*

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**Figure B-4  
Natomas Basin HCP  
Operating Revenues**

Constant 1995\$

	Total 1994-2045	21 2016	22 2017	23 2018	24 2019	25 2020	26 2021	27 2022
<b>Rice Lands</b>								
Not Farmable/Uplands		10%	10%	10%	10%	10%	10%	10%
Set-Aside/Fallow		9%	9%	9%	9%	9%	9%	9%
Leased for Other Crops		30%	30%	30%	30%	30%	30%	30%
Leased Rice Base Land		51%	51%	51%	51%	51%	51%	51%
<b>Rice Land Acreage</b>								
Not Farmable/Uplands		\$375	\$391	\$407	\$423	\$439	\$455	\$471
Set-Aside/Fallow		337.8	352.1	366.5	380.8	395.1	409.5	423.8
Leased for Other Crops		1,140.0	1,188.4	1,236.8	1,285.2	1,333.6	1,382.0	1,430.4
Leased Rice Base Land		1,899.9	1,980.6	2,061.3	2,142.0	2,222.7	2,303.4	2,384.0
<b>Subtotal</b>		<b>3,753.0</b>	<b>3,912.4</b>	<b>4,071.7</b>	<b>4,231.1</b>	<b>4,390.5</b>	<b>4,549.9</b>	<b>4,709.2</b>
<b>Rice Lands</b>								
Other Crop Land Lease	\$5,317,509	\$99,747	\$103,983	\$108,219	\$112,455	\$116,691	\$120,927	\$125,162
Rice Base Land Lease	\$17,835,422	\$332,490	\$346,610	\$360,730	\$374,849	\$388,969	\$403,088	\$417,208
<b>Subtotal Rice</b>	<b>\$23,152,931</b>	<b>\$432,237</b>	<b>\$450,593</b>	<b>\$468,948</b>	<b>\$487,304</b>	<b>\$505,660</b>	<b>\$524,015</b>	<b>\$542,371</b>
<b>Admin/O &amp; M Mitigation Fees</b>								
Base Fee	\$2,625,004	\$63,750	\$63,750	\$63,750	\$63,750	\$63,750	\$63,750	\$63,750
Maximum Fee Adjustment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Admin/O &amp; M Fees</b>	<b>\$2,625,004</b>	<b>\$63,750</b>	<b>\$63,750</b>	<b>\$63,750</b>	<b>\$63,750</b>	<b>\$63,750</b>	<b>\$63,750</b>	<b>\$63,750</b>
<b>Hunting</b>	<b>\$19,880,396</b>	<b>\$347,234</b>	<b>\$361,982</b>	<b>\$376,729</b>	<b>\$391,477</b>	<b>\$406,224</b>	<b>\$420,972</b>	<b>\$435,719</b>
<b>Total Operating Revenues - 1995\$</b>	<b>\$45,658,331</b>	<b>\$843,222</b>	<b>\$876,325</b>	<b>\$909,428</b>	<b>\$942,531</b>	<b>\$975,634</b>	<b>\$1,008,737</b>	<b>\$1,041,840</b>
<b>Inflated Operating Revenues</b>	<b>\$45,658,331</b>	<b>\$843,222</b>	<b>\$876,325</b>	<b>\$909,428</b>	<b>\$942,531</b>	<b>\$975,634</b>	<b>\$1,008,737</b>	<b>\$1,041,840</b>



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**Figure B-4  
Natomas Basin HCP  
Operating Revenues**

Constant 1995\$

	Total 1994-2045	28 2023	29 2024	30 2025	31 2026	32 2027	33 2028	34 2029
<b>Rice Lands</b>								
Not Farmable/Uplands		10%	10%	10%	10%	10%	10%	10%
Set-Aside/Fallow		9%	9%	9%	9%	9%	9%	9%
Leased for Other Crops		30%	30%	30%	30%	30%	30%	30%
Leased Rice Base Land		51%	51%	51%	51%	51%	51%	51%
<b>Rice Land Acreage</b>								
Not Farmable/Uplands		\$487	\$503	\$519	\$535	\$551	\$567	\$582
Set-Aside/Fallow		438.2	452.5	466.9	481.2	495.5	509.9	524.2
Leased for Other Crops		1,478.8	1,527.2	1,575.7	1,624.1	1,672.5	1,720.9	1,769.3
Leased Rice Base Land		2,464.7	2,545.4	2,626.1	2,706.8	2,787.5	2,868.1	2,948.8
Subtotal		4,868.6	5,028.0	5,187.4	5,346.7	5,506.1	5,665.5	5,824.9
<b>Rice Lands</b>								
Other Crop Land Lease	\$5,317,509	\$129,398	\$133,634	\$137,870	\$142,106	\$146,342	\$150,578	\$154,814
Rice Base Land Lease	\$17,835,422	\$431,328	\$445,447	\$459,567	\$473,687	\$487,806	\$501,926	\$516,046
Subtotal Rice	\$23,152,931	\$560,726	\$579,082	\$597,437	\$615,793	\$634,148	\$652,504	\$670,859
<b>Admin/O &amp; M Mitigation Fees</b>								
Base Fee	\$2,625,004	\$63,750	\$63,750	\$63,750	\$63,750	\$63,750	\$63,750	\$63,750
Maximum Fee Adjustment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Admin/O & M Fees	\$2,625,004	\$63,750	\$63,750	\$63,750	\$63,750	\$63,750	\$63,750	\$63,750
<b>Hunting</b>	\$19,880,396	\$450,467	\$465,214	\$479,962	\$494,709	\$509,457	\$524,204	\$538,952
<b>Total Operating Revenues - 1995\$</b>	\$45,658,331	\$1,074,943	\$1,108,046	\$1,141,149	\$1,174,252	\$1,207,355	\$1,240,458	\$1,273,561
<b>Inflated Operating Revenues</b>	\$45,658,331	\$1,074,943	\$1,108,046	\$1,141,149	\$1,174,252	\$1,207,355	\$1,240,458	\$1,273,561

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**Figure B-4  
Natomas Basin HCP  
Operating Revenues**

Constant 1995\$

	Total 1994-2045	35 2030	36 2031	37 2032	38 2033	39 2034	40 2035	41 2036
<b>Rice Lands</b>		10%	10%	10%	10%	10%	10%	10%
Not Farmable/Uplands		9%	9%	9%	9%	9%	9%	9%
Set-Aside/Fallow		30%	30%	30%	30%	30%	30%	30%
Leased for Other Crops		51%	51%	51%	51%	51%	51%	51%
Leased Rice Base Land								
<b>Rice Land Acreage</b>								
Not Farmable/Uplands		\$598	\$614	\$630	\$646	\$656	\$656	\$656
Set-Aside/Fallow		538.6	552.9	567.3	581.6	590.7	590.7	590.7
Leased for Other Crops		1,817.7	1,866.1	1,914.5	1,962.9	1,993.5	1,993.5	1,993.5
Leased Rice Base Land		3,029.5	3,110.2	3,190.9	3,271.6	3,322.5	3,322.5	3,322.5
Subtotal		5,984.2	6,143.6	6,303.0	6,462.4	6,563.0	6,563.0	6,563.0
<b>Rice Lands</b>								
Other Crop Land Lease	\$5,317,509	\$159,050	\$163,285	\$167,521	\$171,757	\$174,431	\$174,431	\$174,431
Rice Base Land Lease	\$17,835,422	\$530,165	\$544,285	\$558,404	\$572,524	\$581,438	\$581,438	\$581,438
Subtotal Rice	\$23,152,931	\$689,215	\$707,570	\$725,926	\$744,281	\$755,869	\$755,869	\$755,869
<b>Admin/O &amp; M Mitigation Fees</b>								
Base Fee	\$2,625,004	\$63,750	\$63,750	\$63,750	\$63,750	\$40,245	\$0	\$0
Maximum Fee Adjustment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Admin/O & M Fees	\$2,625,004	\$63,750	\$63,750	\$63,750	\$63,750	\$40,245	\$0	\$0
<b>Hunting</b>	\$19,880,396	\$553,699	\$568,447	\$583,194	\$597,942	\$607,252	\$607,252	\$607,252
<b>Total Operating Revenues - 1995\$</b>	\$45,658,331	\$1,306,664	\$1,339,767	\$1,372,870	\$1,405,973	\$1,403,366	\$1,363,121	\$1,363,121
<b>Inflated Operating Revenues</b>	\$45,658,331	\$1,306,664	\$1,339,767	\$1,372,870	\$1,405,973	\$1,403,366	\$1,363,121	\$1,363,121



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**Figure B-4**  
**Natomas Basin HCP**  
**Operating Revenues**

Constant 1995\$

	Total 1994-2045	48 2043	49 2044	50 2045
<b>Rice Lands</b>				
Not Farmable/Uplands		10%	10%	10%
Set-Aside/Fallow		9%	9%	9%
Leased for Other Crops		30%	30%	30%
Leased Rice Base Land		51%	51%	51%
<b>Rice Land Acreage</b>				
Not Farmable/Uplands		\$656	\$656	\$656
Set-Aside/Fallow		590.7	590.7	590.7
Leased for Other Crops		1,993.5	1,993.5	1,993.5
Leased Rice Base Land		3,322.5	3,322.5	3,322.5
<b>Subtotal</b>		<b>6,563.0</b>	<b>6,563.0</b>	<b>6,563.0</b>
<b>Rice Lands</b>				
Other Crop Land Lease	\$5,317,509	\$174,431	\$174,431	\$174,431
Rice Base Land Lease	\$17,835,422	\$581,438	\$581,438	\$581,438
<b>Subtotal Rice</b>	<b>\$23,152,931</b>	<b>\$755,869</b>	<b>\$755,869</b>	<b>\$755,869</b>
<b>Admin/O &amp; M Mitigation Fees</b>				
Base Fee	\$2,625,004	\$0	\$0	\$0
Maximum Fee Adjustment	\$0	\$0	\$0	\$0
<b>Total Admin/O &amp; M Fees</b>	<b>\$2,625,004</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Hunting</b>	<b>\$19,880,396</b>	<b>\$607,252</b>	<b>\$607,252</b>	<b>\$607,252</b>

**Figure B-5  
Natomas Basin HCP  
Cash Flow - 1995\$**

**DRAFT**

1995\$

	Total 1994-2045	0 1994	0 1995	1 1996	2 1997	3 1998	4 1999	5 2000	6 2001
<b>LAND ACQUISITION</b>									
<b>Beginning Balance</b>		\$0	\$0	\$0	\$0	\$664,277	\$1,337,854	\$2,020,861	\$58,098
Less Land Acquisition Costs	(\$32,003,213)	\$0	\$0	(\$1,463,000)	\$0	\$0	\$0	(\$1,192,332)	(\$737,386)
Plus LA Fee Revenue	\$32,025,049	\$0	\$0	\$0	\$664,277	\$664,277	\$664,277	\$664,277	\$737,890
Plus Other Revenues/(Reimb.) (1)	\$0	\$0	\$0	\$1,463,000	\$0	\$0	\$0	(\$1,463,000)	\$0
Plus Interest Earnings (2)	\$116,688	\$0	\$0	\$0	\$0	\$9,300	\$18,730	\$28,292	\$813
<b>Ending Balance</b>	<b>\$138,525</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$664,277</b>	<b>\$1,337,854</b>	<b>\$2,020,861</b>	<b>\$58,098</b>	<b>\$59,416</b>
<b>RESTORATION &amp; ENHANCEMENTS</b>									
<b>Beginning Balance</b>		\$0	\$0	\$0	\$0	\$50,819	\$102,349	\$114,601	\$14,489
Less Restoration/Enh. Costs	(\$2,437,259)	\$0	\$0	(\$98,000)	\$0	\$0	(\$40,000)	(\$119,869)	(\$49,394)
Plus RE Fee Revenue	\$2,450,004	\$0	\$0	\$0	\$50,819	\$50,819	\$50,819	\$50,819	\$56,451
Plus Other Revenues/(Reimb.) (1)	\$0	\$0	\$0	\$98,000	\$0	\$0	\$0	(\$32,667)	\$0
Plus Interest Earnings (2)	\$13,640	\$0	\$0	\$0	\$0	\$711	\$1,433	\$1,604	\$203
<b>Ending Balance</b>	<b>\$26,385</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$50,819</b>	<b>\$102,349</b>	<b>\$114,601</b>	<b>\$14,489</b>	<b>\$21,748</b>
<b>OPERATIONS &amp; MAINTENANCE</b>									
<b>Beginning Balance</b>		\$0	\$0		\$7,512	\$69,578	\$132,513	\$162,969	\$17,533
O & M Costs	(\$36,580,426)	\$0	\$0	(\$77)	(\$94,077)	(\$94,077)	(\$104,403)	(\$197,264)	(\$269,000)

**Figure B-5  
Natomas Basin HCP  
Cash Flow - 1995\$**

**DRAFT**

1995\$

	Total 1994-2045	7 2002	8 2003	9 2004	10 2005	11 2006	12 2007	13 2008
<b>LAND ACQUISITION</b>								
<b>Beginning Balance</b>		\$59,416	\$60,752	\$62,106	\$63,480	\$64,872	\$66,366	\$67,880
Less Land Acquisition Costs	(\$32,003,213)	(\$737,386)	(\$737,386)	(\$737,386)	(\$737,386)	(\$856,085)	(\$856,085)	(\$856,085)
Plus LA Fee Revenue	\$32,025,049	\$737,890	\$737,890	\$737,890	\$737,890	\$856,670	\$856,670	\$856,670
Plus Other Revenues/(Reimb.) (1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Plus Interest Earnings (2)	\$116,688	\$832	\$851	\$869	\$889	\$908	\$929	\$950
<b>Ending Balance</b>	<b>\$138,525</b>	<b>\$60,752</b>	<b>\$62,106</b>	<b>\$63,480</b>	<b>\$64,872</b>	<b>\$66,366</b>	<b>\$67,880</b>	<b>\$69,415</b>
<b>RESTORATION &amp; ENHANCEMENTS</b>								
<b>Beginning Balance</b>		\$21,748	\$29,109	\$36,573	\$44,141	\$16,125	\$17,521	\$18,936
Less Restoration/Enh. Costs	(\$2,437,259)	(\$49,394)	(\$49,394)	(\$49,394)	(\$52,418)	(\$64,367)	(\$64,367)	(\$64,367)
Plus RE Fee Revenue	\$2,450,004	\$56,451	\$56,451	\$56,451	\$56,451	\$65,538	\$65,538	\$65,538
Plus Other Revenues/(Reimb.) (1)	\$0	\$0	\$0	\$0	(\$32,667)	\$0	\$0	\$0
Plus Interest Earnings (2)	\$13,640	\$304	\$408	\$512	\$618	\$226	\$245	\$265
<b>Ending Balance</b>	<b>\$26,385</b>	<b>\$29,109</b>	<b>\$36,573</b>	<b>\$44,141</b>	<b>\$16,125</b>	<b>\$17,521</b>	<b>\$18,936</b>	<b>\$20,372</b>
<b>OPERATIONS &amp; MAINTENANCE</b>								
<b>Beginning Balance</b>		\$115,594	\$59,009	\$28,063	\$23,114	\$39,011	\$60,828	\$100,906
Less O & M Costs	(\$36,580,426)	(\$339,814)	(\$361,089)	(\$382,363)	(\$405,345)	(\$423,882)	(\$450,510)	(\$477,139)
Plus Admin/O&M Fee Revenue	\$2,625,004	\$80,483	\$60,483	\$60,483	\$60,483	\$70,219	\$70,219	\$70,219
Plus Rice Revenues	\$23,152,931	\$83,985	\$107,205	\$130,424	\$149,836	\$170,054	\$190,272	\$210,490
Plus Hunting Revenues	\$19,880,396	\$137,143	\$161,629	\$186,114	\$210,599	\$204,880	\$229,246	\$253,612
Plus Other Revenues (1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Plus Interest Earnings (2)	\$2,171,696	\$1,618	\$826	\$393	\$324	\$546	\$852	\$1,413
<b>Subtotal Revenues</b>	<b>\$47,830,027</b>	<b>\$283,229</b>	<b>\$330,142</b>	<b>\$377,414</b>	<b>\$421,242</b>	<b>\$445,699</b>	<b>\$490,588</b>	<b>\$535,734</b>
<b>Ending Balance (3)</b>	<b>\$11,249,601</b>	<b>\$59,009</b>	<b>\$28,063</b>	<b>\$23,114</b>	<b>\$39,011</b>	<b>\$60,828</b>	<b>\$100,906</b>	<b>\$159,501</b>

# DRAFT

1995\$

**Figure B-5  
Natomas Basin HCP  
Cash Flow - 1995\$**

	Total 1994-2045	14 2009	15 2010	16 2011	17 2012	18 2013	19 2014	20 2015
<b>LAND ACQUISITION</b>								
<b>Beginning Balance</b>		\$69,415	\$70,972	\$72,551	\$74,510	\$76,497	\$78,511	\$80,553
Less Land Acquisition Costs	(\$32,003,213)	(\$856,085)	(\$856,085)	(\$1,379,987)	(\$1,379,987)	(\$1,379,987)	(\$1,379,987)	(\$1,379,987)
Plus LA Fee Revenue	\$32,025,049	\$856,670	\$856,670	\$1,380,931	\$1,380,931	\$1,380,931	\$1,380,931	\$1,380,931
Plus Other Revenues/(Reimb.) (1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Plus Interest Earnings (2)	\$116,688	\$972	\$994	\$1,016	\$1,043	\$1,071	\$1,099	\$1,128
<b>Ending Balance</b>	<b>\$138,525</b>	<b>\$70,972</b>	<b>\$72,551</b>	<b>\$74,510</b>	<b>\$76,497</b>	<b>\$78,511</b>	<b>\$80,553</b>	<b>\$82,624</b>
<b>RESTORATION &amp; ENHANCEMENTS</b>								
<b>Beginning Balance</b>		\$20,372	\$21,827	(\$9,363)	(\$7,477)	(\$5,590)	(\$3,704)	(\$1,817)
Less Restoration/Enh. Costs	(\$2,437,259)	(\$64,367)	(\$64,367)	(\$103,758)	(\$103,758)	(\$103,758)	(\$103,758)	(\$103,758)
Plus RE Fee Revenue	\$2,450,004	\$65,538	\$65,538	\$105,645	\$105,645	\$105,645	\$105,645	\$105,645
Plus Other Revenues/(Reimb.) (1)	\$0	\$0	(\$32,667)	\$0	\$0	\$0	\$0	\$0
Plus Interest Earnings (2)	\$13,640	\$285	\$306	\$0	\$0	\$0	\$0	\$0
<b>Ending Balance</b>	<b>\$26,385</b>	<b>\$21,827</b>	<b>(\$9,363)</b>	<b>(\$7,477)</b>	<b>(\$5,590)</b>	<b>(\$3,704)</b>	<b>(\$1,817)</b>	<b>\$69</b>
<b>OPERATIONS &amp; MAINTENANCE</b>								
<b>Beginning Balance</b>		\$159,501	\$236,871	\$296,444	\$390,863	\$543,880	\$723,198	\$929,184
Less O & M Costs	(\$36,580,426)	(\$503,767)	(\$516,842)	(\$558,006)	(\$599,170)	(\$640,334)	(\$681,497)	(\$722,661)
Plus Admin/O&M Fee Revenue	\$2,625,004	\$70,219	\$70,219	\$113,191	\$113,191	\$113,191	\$113,191	\$113,191
Plus Rice Revenues	\$23,152,931	\$230,709	\$250,927	\$250,400	\$316,109	\$348,700	\$381,291	\$413,882
Plus Hunting Revenues	\$19,880,396	\$277,978	\$251,953	\$284,684	\$317,415	\$350,146	\$382,877	\$415,608
Plus Other Revenues (1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Plus Interest Earnings (2)	\$2,171,696	\$2,233	\$3,316	\$4,150	\$5,472	\$7,614	\$10,125	\$13,009
Subtotal Revenues	\$47,830,027	\$581,138	\$576,415	\$652,425	\$752,187	\$819,651	\$887,484	\$955,690
<b>Ending Balance (3)</b>	<b>\$11,249,601</b>	<b>\$236,871</b>	<b>\$296,444</b>	<b>\$390,863</b>	<b>\$543,880</b>	<b>\$723,198</b>	<b>\$929,184</b>	<b>\$1,162,211</b>

from Federal, State, or development fees to fund the initial acquisition or

"cash flow"

**Figure B-5  
Natomas Basin HCP  
Cash Flow - 1995\$**

**DRAFT**

1995\$

	Total 1994-2045	21 2016	22 2017	23 2018	24 2019	25 2020	26 2021	27 2022
<b>LAND ACQUISITION</b>								
<b>Beginning Balance</b>		\$82,624	\$84,312	\$86,024	\$87,759	\$89,519	\$91,304	\$93,113
Less Land Acquisition Costs	(\$32,003,213)	(\$777,219)	(\$777,219)	(\$777,219)	(\$777,219)	(\$777,219)	(\$777,219)	(\$777,219)
Plus LA Fee Revenue	\$32,025,049	\$777,750	\$777,750	\$777,750	\$777,750	\$777,750	\$777,750	\$777,750
Plus Other Revenues/(Reimb.) (1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Plus Interest Earnings (2)	\$116,688	\$1,157	\$1,180	\$1,204	\$1,229	\$1,253	\$1,278	\$1,304
<b>Ending Balance</b>	<b>\$138,525</b>	<b>\$84,312</b>	<b>\$86,024</b>	<b>\$87,759</b>	<b>\$89,519</b>	<b>\$91,304</b>	<b>\$93,113</b>	<b>\$94,948</b>
<b>RESTORATION &amp; ENHANCEMENTS</b>								
<b>Beginning Balance</b>		\$69	\$1,133	\$2,211	\$3,304	\$4,413	\$5,537	\$6,677
Less Restoration/Enh. Costs	(\$2,437,259)	(\$58,438)	(\$58,438)	(\$58,438)	(\$58,438)	(\$58,438)	(\$58,438)	(\$58,438)
Plus RE Fee Revenue	\$2,450,004	\$59,500	\$59,500	\$59,500	\$59,500	\$59,500	\$59,500	\$59,500
Plus Other Revenues/(Reimb.) (1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Plus Interest Earnings (2)	\$13,640	\$1	\$16	\$31	\$46	\$62	\$78	\$93
<b>Ending Balance</b>	<b>\$26,385</b>	<b>\$1,133</b>	<b>\$2,211</b>	<b>\$3,304</b>	<b>\$4,413</b>	<b>\$5,537</b>	<b>\$6,677</b>	<b>\$7,833</b>
<b>OPERATIONS &amp; MAINTENANCE</b>								
<b>Beginning Balance</b>		\$1,162,213	\$1,299,210	\$1,449,035	\$1,611,869	\$1,787,894	\$1,977,294	\$2,180,256
Less O & M Costs	(\$36,580,426)	(\$722,496)	(\$744,688)	(\$766,880)	(\$789,072)	(\$811,264)	(\$833,456)	(\$855,648)
Plus Admin/O&M Fee Revenue	\$2,625,004	\$63,750	\$63,750	\$63,750	\$63,750	\$63,750	\$63,750	\$63,750
Plus Rice Revenues	\$23,152,931	\$432,237	\$450,593	\$468,948	\$487,304	\$505,660	\$524,015	\$542,371
Plus Hunting Revenues	\$19,880,396	\$347,234	\$361,982	\$376,729	\$391,477	\$406,224	\$420,972	\$435,719
Plus Other Revenues (1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Plus Interest Earnings (2)	\$2,171,696	\$16,271	\$18,189	\$20,286	\$22,566	\$25,031	\$27,682	\$30,524
<b>Subtotal Revenues</b>	<b>\$47,830,027</b>	<b>\$859,493</b>	<b>\$894,514</b>	<b>\$929,714</b>	<b>\$965,097</b>	<b>\$1,000,664</b>	<b>\$1,036,419</b>	<b>\$1,072,363</b>
<b>Ending Balance (3)</b>	<b>\$11,249,601</b>	<b>\$1,299,210</b>	<b>\$1,449,035</b>	<b>\$1,611,869</b>	<b>\$1,787,894</b>	<b>\$1,977,294</b>	<b>\$2,180,256</b>	<b>\$2,396,971</b>

(1) "Other" revenues represents upfront funding from Federal, State or development fees to fund the initial acquisition and restoration/enhancement costs. The projects that funded this upfront cost would receive a fee credit for this portion. If Federal or State money were available, more land could be funded in advance of development.

(2) Interest is earned at 2% annually on 70% of the prior year's ending balance.



**Figure B-5  
Natomas Basin HCP  
Cash Flow - 1995\$**

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1995\$

	Total 1994-2045	28 2023	29 2024	30 2025	31 2026	32 2027	33 2028	34 2029
<b>LAND ACQUISITION</b>								
<b>Beginning Balance</b>		\$94,948	\$96,809	\$98,695	\$100,608	\$102,548	\$104,515	\$106,509
Less Land Acquisition Costs	(\$32,003,213)	(\$777,219)	(\$777,219)	(\$777,219)	(\$777,219)	(\$777,219)	(\$777,219)	(\$777,219)
Plus LA Fee Revenue	\$32,025,049	\$777,750	\$777,750	\$777,750	\$777,750	\$777,750	\$777,750	\$777,750
Plus Other Revenues/(Reimb.) (1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Plus Interest Earnings (2)	\$116,688	\$1,329	\$1,355	\$1,382	\$1,409	\$1,436	\$1,463	\$1,491
<b>Ending Balance</b>	<b>\$138,525</b>	<b>\$96,809</b>	<b>\$98,695</b>	<b>\$100,608</b>	<b>\$102,548</b>	<b>\$104,515</b>	<b>\$106,509</b>	<b>\$108,532</b>
<b>RESTORATION &amp; ENHANCEMENTS</b>								
<b>Beginning Balance</b>		\$7,833	\$9,006	\$10,194	\$11,399	\$12,622	\$13,861	\$15,117
Less Restoration/Enh. Costs	(\$2,437,259)	(\$58,438)	(\$58,438)	(\$58,438)	(\$58,438)	(\$58,438)	(\$58,438)	(\$58,438)
Plus RE Fee Revenue	\$2,450,004	\$59,500	\$59,500	\$59,500	\$59,500	\$59,500	\$59,500	\$59,500
Plus Other Revenues/(Reimb.) (1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Plus Interest Earnings (2)	\$13,640	\$110	\$126	\$143	\$160	\$177	\$194	\$212
<b>Ending Balance</b>	<b>\$26,385</b>	<b>\$9,006</b>	<b>\$10,194</b>	<b>\$11,399</b>	<b>\$12,622</b>	<b>\$13,861</b>	<b>\$15,117</b>	<b>\$16,391</b>
<b>OPERATIONS &amp; MAINTENANCE</b>								
<b>Beginning Balance</b>		\$2,396,971	\$2,627,631	\$2,872,430	\$3,131,569	\$3,405,245	\$3,693,665	\$3,997,033
Less O & M Costs	(\$36,580,426)	(\$877,841)	(\$900,033)	(\$922,225)	(\$944,417)	(\$966,609)	(\$988,801)	(\$1,010,993)
Plus Admin/O&M Fee Revenue	\$2,625,004	\$63,750	\$63,750	\$63,750	\$63,750	\$63,750	\$63,750	\$63,750
Plus Rice Revenues	\$23,152,931	\$560,726	\$579,082	\$597,437	\$615,793	\$634,148	\$652,504	\$670,859
Plus Hunting Revenues	\$19,880,396	\$450,467	\$465,214	\$479,962	\$494,709	\$509,457	\$524,204	\$538,952
Plus Other Revenues (1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Plus Interest Earnings (2)	\$2,171,696	\$33,558	\$36,787	\$40,214	\$43,842	\$47,673	\$51,711	\$55,958
<b>Subtotal Revenues</b>	<b>\$47,830,027</b>	<b>\$1,108,500</b>	<b>\$1,144,833</b>	<b>\$1,181,363</b>	<b>\$1,218,094</b>	<b>\$1,255,028</b>	<b>\$1,292,169</b>	<b>\$1,329,519</b>
<b>Ending Balance (3)</b>	<b>\$11,249,601</b>	<b>\$2,627,631</b>	<b>\$2,872,430</b>	<b>\$3,131,569</b>	<b>\$3,405,245</b>	<b>\$3,693,665</b>	<b>\$3,997,033</b>	<b>\$4,315,559</b>

(1) "Other" revenues represents upfront funding from Federal, State or development fees to fund the initial acquisition and restoration/enhancement costs. The portion that funded this upfront cost would receive a fee credit for this portion. If

**Figure B-5  
Natomas Basin HCP  
Cash Flow - 1995\$**

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1995\$

	Total 1994-2045	35 2030	36 2031	37 2032	38 2033	39 2034	40 2035	41 2036
<b>LAND ACQUISITION</b>								
<b>Beginning Balance</b>		\$108,532	\$110,582	\$112,662	\$114,770	\$116,908	\$118,880	\$120,545
Less Land Acquisition Costs	(\$32,003,213)	(\$777,219)	(\$777,219)	(\$777,219)	(\$777,219)	(\$490,654)	\$0	\$0
Plus LA Fee Revenue	\$32,025,049	\$777,750	\$777,750	\$777,750	\$777,750	\$490,989	\$0	\$0
Plus Other Revenues/(Reimb.) (1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Plus Interest Earnings (2)	\$116,688	\$1,519	\$1,548	\$1,577	\$1,607	\$1,637	\$1,664	\$1,688
<b>Ending Balance</b>	<b>\$138,525</b>	<b>\$110,582</b>	<b>\$112,662</b>	<b>\$114,770</b>	<b>\$116,908</b>	<b>\$118,880</b>	<b>\$120,545</b>	<b>\$122,232</b>
<b>RESTORATION &amp; ENHANCEMENTS</b>								
<b>Beginning Balance</b>		\$16,391	\$17,683	\$18,993	\$20,322	\$21,669	\$22,643	\$22,960
Less Restoration/Enh. Costs	(\$2,437,259)	(\$58,438)	(\$58,438)	(\$58,438)	(\$58,438)	(\$36,891)	\$0	\$0
Plus RE Fee Revenue	\$2,450,004	\$59,500	\$59,500	\$59,500	\$59,500	\$37,562	\$0	\$0
Plus Other Revenues/(Reimb.) (1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Plus Interest Earnings (2)	\$13,640	\$229	\$248	\$266	\$285	\$303	\$317	\$321
<b>Ending Balance</b>	<b>\$26,385</b>	<b>\$17,683</b>	<b>\$18,993</b>	<b>\$20,322</b>	<b>\$21,669</b>	<b>\$22,643</b>	<b>\$22,960</b>	<b>\$23,281</b>
<b>OPERATIONS &amp; MAINTENANCE</b>								
<b>Beginning Balance</b>		\$4,315,559	\$4,649,456	\$4,998,938	\$5,364,223	\$5,745,534	\$6,115,566	\$6,550,533
Less O & M Costs	(\$36,580,426)	(\$1,033,185)	(\$1,055,377)	(\$1,077,569)	(\$1,099,761)	(\$1,113,771)	(\$1,013,771)	(\$1,013,771)
Plus Admin/O&M Fee Revenue	\$2,625,004	\$63,750	\$63,750	\$63,750	\$63,750	\$40,245	\$0	\$0
Plus Rice Revenues	\$23,152,931	\$689,215	\$707,570	\$725,926	\$744,281	\$755,869	\$755,869	\$755,869
Plus Hunting Revenues	\$19,880,396	\$553,699	\$568,447	\$583,194	\$597,942	\$607,252	\$607,252	\$607,252
Plus Other Revenues (1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Plus Interest Earnings (2)	\$2,171,696	\$60,418	\$65,092	\$69,985	\$75,099	\$80,437	\$85,618	\$91,707
<b>Subtotal Revenues</b>	<b>\$47,830,027</b>	<b>\$1,367,082</b>	<b>\$1,404,859</b>	<b>\$1,442,855</b>	<b>\$1,481,072</b>	<b>\$1,483,803</b>	<b>\$1,448,739</b>	<b>\$1,454,828</b>
<b>Ending Balance (3)</b>	<b>\$11,249,601</b>	<b>\$4,649,456</b>	<b>\$4,998,938</b>	<b>\$5,364,223</b>	<b>\$5,745,534</b>	<b>\$6,115,566</b>	<b>\$6,550,533</b>	<b>\$6,991,590</b>

**Figure B-5  
Natomas Basin HCP  
Cash Flow - 1995\$**

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1995\$

	Total 1994-2045	42 2037	43 2038	44 2039	45 2040	46 2041	47 2042
<b>LAND ACQUISITION</b>							
<b>Beginning Balance</b>		\$122,232	\$123,944	\$125,679	\$127,438	\$129,223	\$131,032
Less Land Acquisition Costs	(\$32,003,213)	\$0	\$0	\$0	\$0	\$0	\$0
Plus LA Fee Revenue	\$32,025,049	\$0	\$0	\$0	\$0	\$0	\$0
Plus Other Revenues/(Reimb.) (1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Plus Interest Earnings (2)	\$116,688	\$1,711	\$1,735	\$1,760	\$1,784	\$1,809	\$1,834
<b>Ending Balance</b>	<b>\$138,525</b>	<b>\$123,944</b>	<b>\$125,679</b>	<b>\$127,438</b>	<b>\$129,223</b>	<b>\$131,032</b>	<b>\$132,866</b>
<b>RESTORATION &amp; ENHANCEMENTS</b>							
<b>Beginning Balance</b>		\$23,281	\$23,607	\$23,938	\$24,273	\$24,613	\$24,957
Less Restoration/Enh. Costs	(\$2,437,259)	\$0	\$0	\$0	\$0	\$0	\$0
Plus RE Fee Revenue	\$2,450,004	\$0	\$0	\$0	\$0	\$0	\$0
Plus Other Revenues/(Reimb.) (1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Plus Interest Earnings (2)	\$13,640	\$326	\$331	\$335	\$340	\$345	\$349
<b>Ending Balance</b>	<b>\$26,385</b>	<b>\$23,607</b>	<b>\$23,938</b>	<b>\$24,273</b>	<b>\$24,613</b>	<b>\$24,957</b>	<b>\$25,307</b>
<b>OPERATIONS &amp; MAINTENANCE</b>							
<b>Beginning Balance</b>		\$6,991,590	\$7,438,822	\$7,892,315	\$8,352,157	\$8,818,437	\$9,291,245
Less O & M Costs	(\$36,580,426)	(\$1,013,771)	(\$1,013,771)	(\$1,013,771)	(\$1,013,771)	(\$1,013,771)	(\$1,013,771)
Plus Admin/O&M Fee Revenue	\$2,625,004	\$0	\$0	\$0	\$0	\$0	\$0
Plus Rice Revenues	\$23,152,931	\$755,869	\$755,869	\$755,869	\$755,869	\$755,869	\$755,869
Plus Hunting Revenues	\$19,880,396	\$607,252	\$607,252	\$607,252	\$607,252	\$607,252	\$607,252
Plus Other Revenues (1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Plus Interest Earnings (2)	\$2,171,696	\$97,882	\$104,144	\$110,492	\$116,930	\$123,458	\$130,077
<b>Subtotal Revenues</b>	<b>\$47,830,027</b>	<b>\$1,461,003</b>	<b>\$1,467,264</b>	<b>\$1,473,613</b>	<b>\$1,480,051</b>	<b>\$1,486,579</b>	<b>\$1,493,198</b>
<b>Ending Balance (3)</b>	<b>\$11,249,601</b>	<b>\$7,438,822</b>	<b>\$7,892,</b>	<b>\$8,352,157</b>	<b>\$8,818,437</b>	<b>\$9,291,245</b>	<b>\$9,770.6.</b>

(1) "Other" revenues represents upflow from Federal, State or development fees to fund the habitat...

**Figure B-5  
Natomas Basin HCP  
Cash Flow - 1995\$**

1995\$

**DRAFT**

	Total 1994-2045	48 2043	49 2044	50 2045
<b>LAND ACQUISITION</b>				
<b>Beginning Balance</b>		\$132,866	\$134,726	\$136,612
Less Land Acquisition Costs	(\$32,003,213)	\$0	\$0	\$0
Plus LA Fee Revenue	\$32,025,049	\$0	\$0	\$0
Plus Other Revenues/(Reimb.) (1)	\$0	\$0	\$0	\$0
Plus Interest Earnings (2)	\$116,688	\$1,860	\$1,886	\$1,913
<b>Ending Balance</b>	<b>\$138,525</b>	<b>\$134,726</b>	<b>\$136,612</b>	<b>\$138,525</b>
<b>RESTORATION &amp; ENHANCEMENTS</b>				
<b>Beginning Balance</b>		\$25,307	\$25,661	\$26,020
Less Restoration/Enh. Costs	(\$2,437,259)	\$0	\$0	\$0
Plus RE Fee Revenue	\$2,450,004	\$0	\$0	\$0
Plus Other Revenues/(Reimb.) (1)	\$0	\$0	\$0	\$0
Plus Interest Earnings (2)	\$13,640	\$354	\$359	\$364
<b>Ending Balance</b>	<b>\$26,385</b>	<b>\$25,661</b>	<b>\$26,020</b>	<b>\$26,385</b>
<b>OPERATIONS &amp; MAINTENANCE</b>				
<b>Beginning Balance</b>		\$9,770,672	\$10,256,810	\$10,749,755
Less O & M Costs	(\$36,580,426)	(\$1,013,771)	(\$1,013,771)	(\$1,013,771)
Plus Admin/O&M Fee Revenue	\$2,625,004	\$0	\$0	\$0
Plus Rice Revenues	\$23,152,931	\$755,869	\$755,869	\$755,869
Plus Hunting Revenues	\$19,880,396	\$607,252	\$607,252	\$607,252
Plus Other Revenues (1)	\$0	\$0	\$0	\$0
Plus Interest Earnings (2)	\$2,171,696	\$136,789	\$143,595	\$150,497
<b>Subtotal Revenues</b>	<b>\$47,830,027</b>	<b>\$1,499,910</b>	<b>\$1,506,716</b>	<b>\$1,513,617</b>
<b>Ending Balance (3)</b>	<b>\$11,249,601</b>	<b>\$10,256,810</b>	<b>\$10,749,755</b>	<b>\$11,249,601</b>

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