

## MEMORANDUM

To: John Roberts, The Natomas Basin Conservancy  
From: Tim Youmans and Allison Shaffer  
Subject: Natomas Basin Habitat Conservation Plan Fee Update—  
2009; EPS #18591  
Date: December 4, 2008

*The Economics of Land Use*



### Introduction

Economic & Planning Systems, Inc., (EPS) has updated the cash flow model used to estimate the Natomas Basin Habitat Conservation Plan (NBHCP) mitigation fee (fee). This memorandum details the updated budget and related assumptions used to derive the 2009 proposed fee and discusses the proposed fee change.

The fee contains components for the following five funds:

- Land Acquisition.
- Restoration and Enhancement (R&E).
- Administration/Operations and Maintenance (Admin/O&M).
- O&M Endowment.
- Supplemental Endowment (for Land Acquisition).

**Figure 1** illustrates the purpose of and interaction among the five fee components. **Table 1** summarizes the historic fee for each of the five components. **Table 2** summarizes the cost per acre of habitat and the proposed fee for each fee component. The proposed fee level continues to assume the current NBHCP mitigation requirement of one-half acre of mitigation land for each gross acre of developed land. **Table 3** estimates the impact of each fee component and subcomponent on the 2009 proposed fee change.

The cash flows for each fund are summarized in **Table 4**. The assumption tables used in the cash flow analysis are presented in **Tables 5** through **16**. **Table 17** shows The Natomas Basin Conservancy (TNBC)'s Proposed 2009 Budget (2009 Budget).

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The 2009 amounts in the cash flow tables reflect the amounts shown in the 2009 Budget. In most cases, the 2009 Budget amounts are based on model assumptions, but for some costs, the budgeted amounts are based on actual experience by TNBC with particular activities, as well as expected land acquisitions. The 2009 Budget contains a discussion of the source of each revenue and cost estimate. The detailed cash flow tables are provided in **Appendix A**.

## Proposed 2009 Fee

The table below shows the fee history and the proposed 2009 fee.

Year	Total Mitigation Fee	Less Land Cost Portion	Mitigation Fee Excluding Land Cost Portion [1]	% Change in Total Mitigation Fee	% Change in Mitigation Fee Excluding Land Cost Portion
<i>per acre</i>					
1996/97	\$2,240		\$2,240		
1998	\$2,656		\$2,656	19%	
1999	\$3,292		\$3,292	24%	
2000	\$3,941		\$3,941	20%	
2001	\$10,021		\$10,021	154%	
2002	\$11,962		\$11,962	19%	
2003	\$12,270	(\$4,500)	\$7,770	3%	
2004	\$16,124	(\$7,500)	\$8,624	31%	11%
2005	\$24,897	(\$12,500)	\$12,397	54%	44%
2006	\$41,182	(\$22,500)	\$18,682	65%	51%
2007	\$38,445	(\$20,000)	\$18,445	(7%)	(1%)
2008	\$38,133	(\$17,500)	\$20,633	(1%)	12%
<b>2009 (proposed)</b>	<b>\$34,816</b>	<b>(\$15,000)</b>	<b>\$19,816</b>	<b>(9%)</b>	<b>(4%)</b>

[1] Land dedication requirement instituted in 2003, requiring most developers to dedicate land in lieu of paying the land cost portion of the fee. The total fee excluding the land cost portion includes land transaction costs and contingencies. Current land cost is estimated at \$30,000 per acre.

The fee currently charged by the City of Sacramento (City) is \$38,133 per acre of development. The proposed fee is \$34,816 per acre. Nearly all mitigation land, however, is acquired by TNBC through land dedication because all but a few small-acreage developers are required to dedicate land in lieu of paying the Land Acquisition Fund portion of the fee. It is anticipated that the City Council will re-authorize this land dedication requirement. The proposed balance of the fee to fee payers in this respect is \$19,816 per acre, as compared to the current 2008 fee amount of \$20,633 per acre.

**Table 3** estimates the change in the fee for each fee component and various subcomponents of the Admin/O&M component. The proposed 2009 fee represents a small decrease from the 2008 fee level. As shown in **Table 3**, the majority of the fee decrease can be attributed to an anticipated reduction in the cost of mitigation land that is caused by a decline in real estate development activity in the area. The lower land values more than compensate for increases in the non-land related fee components, resulting in an overall fee decrease.

Based on an assessment of market conditions in the Natomas Basin, the estimated value of mitigation land is expected to decline from approximately \$35,000 per acre to \$30,000 per acre. This decrease in land value not only causes a decrease in the Land Acquisition component of the fee, but also causes a decrease in the Supplemental Endowment component. The purpose of the Supplemental Endowment fee component is to provide sufficient funds to purchase a 200-acre reserve or the final 200 acres of habitat. As land values decline, fewer funds need to be set aside to ensure adequate funding for the 200 acres. In total, the \$5,000-per-acre decrease in habitat land value leads to a decrease of approximately \$3,240 per acre in the land-related fee components.

As shown in **Table 3**, there is a small increase in the R&E fee component. This increase is due to a slight increase in cost to convert rice acres to managed marsh from \$6,700 to \$7,500 per acre. The updated cost is based on actual Bennett North sealed public bids and includes a 15-percent contingency that covers construction management, design, and post-construction clean-up.

There is a small decrease in the non-land related fee components that is due mostly to a decrease in administration costs. Water costs continue to constitute a significant portion of the Admin/O&M costs. The assumptions concerning the Natomas Central Mutual Water Company (NCMWC) rates and the ability of the farmers to reimburse TNBC for the NCMWC assessments are summarized below:

- The basic rate for 2009 is estimated at \$121 per acre for rice. It is assumed that 15 percent of the acres will be excluded from NCMWC assessments.<sup>1</sup>
- It is assumed that TNBC will pay all NCMWC costs and subsequently be reimbursed by farmers for \$65 per acre of these costs. This assumption rests on the inability of TNBC's

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<sup>1</sup> TNBC's Finance Model factors in the NCMWC cost of \$121 per acre (and \$20 per acre for fall/winter flood-up). TNBC's Finance Model now contemplates that 15 percent of TNBC land holdings will not be assessed the NCMWC tariff rate of \$121 per acre. The 15-percent factor is used in this calculation because not all land owned by TNBC lies in the NCMWC service area, and therefore, the acreage outside the NCMWC service area would not incur NCMWC charges. This 15-percent factor for excluded land is used as an approximation in lieu of attempting to calculate and accurately predict many dynamic variables. To attempt to account for all variables could subject the Finance Model to risk levels believed, by TNBC management, to be unacceptable. These variables include the fact that decisions often are made late to fallow crop land or change from one crop to another, which would influence the amount of charges assessed by NCMWC. The Finance Model also does not reflect any late-year demand for water because of precipitation and other hydrological conditions, which are largely unpredictable. The Finance Model does not account for as-yet-made determinations regarding ground water well substitution (from TNBC wells) over NCMWC-supplied water, which is somewhat dependent on the ultimate NCMWC-approved tariffs and the breakdown between water usage charges and other components of the NCMWC fee structure. Moreover, a substantial portion of the total water costs assessed by NCMWC is assessed on shareholders of the NCMWC regardless of whether they purchase irrigation water or not, and this variable has not yet been published by the NCMWC Board of Directors but is expected to be different from those in recent years. It is assumed that the generalized approach noted above (85 percent of total landholdings are assessed the budgeted \$121 per acre per year) is adequate to estimate future water cost-recovery needs.

contract rice farmers to bear the full water cost and TNBC's requirement, as stated in the 2003 NBHCP, to ensure that rice is produced on mitigation lands. TNBC pays the full cost of water applied to managed-marsh complexes.

- TNBC has included a bad debt allowance of 5 percent of the NCMWC costs to cover the situation in which farmers fail to reimburse TNBC for their portion of the costs.

The endowment fund, the purpose of which is to ensure funds for ongoing operations and maintenance of habitat after conversion of all habitat acres to marsh, has seen significant decreases due to recent declines in the financial markets. A 3-percent interest rate has been assumed for all funds. While this rate may be more or less applicable in the short-term based on varying market conditions, the interest rate is appropriate for use over a long period of time, recognizing that while the market will experience growth and retraction periods, the market will balance over a long-term period.

## Updated Model Assumptions

The updated fee amount was estimated using a revised cash flow analysis prepared by EPS for each of the five funds. Many of the changes reflect new estimated costs based on recent experience and input from TNBC. The updated assumptions are described below.

### Cash Flow Adjustments

The cash flow tables for all funds except the Admin/O&M fund were updated such that the beginning balances in 2009 matched TNBC fund balances as of October 31, 2008. The October account statements were used because they were the most current statements available. For the Admin/O&M fund, the costs through October were adjusted to more accurately estimate costs that would be incurred through the end of the year. These adjustments were made since there are substantial ongoing Admin/O&M costs each month, as compared to the costs associated with the other funds. In addition, the 2009 cash flow amounts for all funds were obtained from the 2009 Budget (see **Table 17**), while the cash flow amounts for all remaining years were based on model assumptions presented in **Tables 1** through **16** and discussed in the remainder of this memorandum.

### Costs

#### **Land Acquisition Costs**

Land Acquisition costs decreased from \$35,000 per acre to a projected \$30,000 per acre (a 14.3-percent decrease, see **Table 5**). The decrease in costs reflects overall declining land values in the Sacramento area in the last year. The updated 2009 Land Acquisition cost of \$30,000 per acre was based on TNBC's knowledge of confirmed recent land transactions, supported by a professional land appraisal.

#### **R&E Costs**

R&E costs increased somewhat from \$2,280 per habitat acre to approximately \$2,540 per habitat acre (an 11.4-percent increase). This increase is due to a slight increase in cost to convert rice acres to managed marsh (see **Table 6**).

### Base R&E Costs

The cost to convert rice acres into managed marsh was estimated at \$7,500 per acre. This cost reflects a small increase from the 2008 estimate of \$6,700 per acre, based on recent actual R&E costs for the Bennett North tract. Because managed marsh will represent 25 percent of the total acquired acres, the conversion cost was weighted by 25 percent to arrive at a cost of \$1,875 per acquired acre (i.e., 25 percent of \$7,500 = \$1,875). The cost to convert rice acres to upland was estimated at \$500 per acre. The model projects that 1.6 percent of rice acres that will be converted to upland acres. The \$500 per acre conversion cost is weighted by this percent to arrive at a cost of \$8 per acquired acre. The combined cost to convert rice acres to managed marsh and upland is \$1,883 per acre.

### Biological Site Assessment and Preconstruction Survey Costs

The cost to conduct a formal biological site assessment and preconstruction survey for acquired mitigation land, as required by the 2003 NBHCP, was estimated at \$150 per acre, based on information provided by TNBC.

### Contingency Costs

This fee update continues to assume a contingency cost of 25 percent of all other R&E costs, which translates into \$508 per habitat acre. The contingency component is essential to ensure adequate funding for R&E, particularly given the lag time between when the fee is paid (and the habitat preserves are acquired) and when the R&E actually occurs. TNBC has 3 years to restore and enhance the designated preserves after approval of the SSMP, which comes 1 year after acquisition. In that time frame, biological studies also need to be completed. There is significant risk that the cost of restoring and enhancing a project will increase between the time the land has been acquired and the R&E construction begins (typically 2 to 3 years). An example is the cost of fencing, which increased dramatically before completion of the last R&E construction project, largely because of steel price increases.

### ***Admin/O&M Cost Estimates***

Admin/O&M cost estimates were revised. The Admin/O&M costs decreased from approximately \$21,470 per acre to \$20,448 per habitat acre (a 4.8-percent decrease). As discussed earlier, this decrease is largely attributable to a decrease in property taxes. Cost estimates for each of the Admin/O&M cost components are discussed below.

### O&M Costs

O&M costs are divided into the following three categories:

- O&M costs included in the land management contract for managing the marsh portion of the mitigation land.
- Annual O&M costs not included in the land management contract.
- Estimated TNBC costs for the replacement of fixed assets.

TNBC included a full accounting of its fixed assets in this report. The fixed assets-replacement costs are included in this report separately from the remaining TNBC annual O&M costs (see **Tables 8 and 9**). The original costs of the fixed assets were updated to 2009 levels by using a

3-percent annual inflation rate to estimate the current replacement costs for the fixed assets. The remaining O&M costs were updated based on the estimates from TNBC.

### Property Tax Costs and Special Assessments

Over the past year, land acquisition costs decreased from an estimated \$35,000 per acre to an estimated \$30,000 per acre. Although land values are believed to have decreased in the past year because of a general decline in real estate activity, it is anticipated that land values generally will increase over time. The method of estimating property taxes was changed in 2005 to adequately capture the increasing cost and assessed value of habitat land. This method is described below, and property tax calculations are shown in **Tables 10** and **11**.

- ***Existing Habitat Properties***

The assessed value for each existing habitat property was estimated as the land acquisition cost of the property, adjusted by 2 percent a year to 2009 levels. The average assessed value per acre then was calculated across all habitat acres. Annual property taxes for existing habitat acres were estimated as 1 percent of this average assessed value per acre multiplied by the number of habitat acres.

- ***Future Habitat Properties***

For future habitat acres, it was assumed that mitigation land acquisition costs would escalate by 10 percent a year on average after 2010 and that the assessed value per acre of these new land acquisitions would track this 10-percent escalation. These assessed values were discounted back to real dollars by assuming a 3-percent inflation rate. Annual property taxes on new properties were estimated at 1 percent of the average assessed value per acre multiplied by the number of habitat acres.

- ***Property Tax Adjustment***

Each year, the total estimated property tax has been adjusted downward by a declining percentage (beginning at 95 percent in 2009 and declining to 50 percent in 2032 and thereafter) to account for various factors anticipated to result in reduced property taxes. First, some properties receive Williamson Act tax reductions. It is uncertain to what degree these tax reductions will continue, but it is assumed that some level of tax reductions will continue. Second, TNBC staff believe that the habitat land values will not continue to increase indefinitely at the same levels they have been increasing recently. In addition, the value of the land on the property tax rolls likely will decrease after all habitat has been acquired and development in the Natomas Basin is finished. This probable decrease will occur for two reasons. First, the real value of land on the property rolls will decrease because the average annual inflation rate is likely to be around 3 percent, whereas the assessed value will increase by a maximum of 2 percent annually after all habitat is acquired. Second, once the 17,500 acres of development authorized by the federal- and State-issued Incidental Take Permit granted to the City, Metro Air Park, and Sutter County have been exhausted, there will be no more development potential on land in the Natomas Basin. It is difficult to envision a scenario in which the Sacramento and Sutter County tax assessors could continue to assess TNBC's habitat lands at commercial values. Therefore, TNBC believes that appeals to assessors for valuation reductions are likely to result in lower property taxes over time.

In addition to the property tax assumptions, Reclamation District 1000 and NCMWC assessment assumptions were updated based on current rates (see footnote 1 for a further discussion on this point). There was a small increase in the fee caused by these updates.

#### Mitigation Monitoring and Adaptive Management

Mitigation monitoring and adaptive management costs were updated to reflect revised cost estimates from the biological effectiveness—monitoring contractor<sup>2</sup> to perform the monitoring work. The original contract costs were increased to reflect the 2009 biological effectiveness—monitoring contract amount. Other than the costs associated with the NBHCP-required midpoint program reviews, the pre-acquisition biological reconnaissance (included as a Land Acquisition cost), and the SSMPs, all mitigation monitoring costs were inflated by 3 percent annually to reflect both likely cost increases as mitigation land acreage increases to 8,750 acres (the ultimate buildout level of the 2003 NBHCP) and anticipated increases in labor and related monitoring costs throughout the life of the NBHCP.

#### Site Specific Management Plan Costs

The cost of preparing the SSMPs for acquired mitigation land was estimated at \$225 per acre, based on information provided by TNBC staff and its land management contractor. An additional cost of \$200 per acre was estimated for updates of the SSMPs. This cost was based on the average cost per acre of updating the SSMP for the Bennett North tract as well as on trend data from previous updates (see **Table 7**).

#### Administration Costs

Administration costs were revised based on the current budget estimates of TNBC. These estimated costs decreased a small amount from approximately \$1,089,274 in 2008 to \$979,145 in 2009 (see **Table 13**).

#### ***Supplemental Endowment Cost Estimates***

The decrease in supplemental endowment costs, from \$1,605 per acre to \$1,481 per acre (a 7.8-percent decrease), was due to the decrease expected in the land acquisition cost from \$35,000 per acre to \$30,000 per acre (see **Table 14**).

### **Revenues**

#### ***Rice- and Other Crop-Revenue Estimates***

##### Rice Revenue

The model continues to be based on the assumption that revenue will be earned on 90 percent of the total rice acres in the habitat. Based on the actual rice revenue for the past year, rice revenue was increased from \$100 per acre to \$125 per acre. This estimate accounts for a blend of highly productive rice fields, which produce higher cash rents, and low-yielding rice land, which produces lower rent yields. This estimate also considers fallow fields and fields with no eligibility to participate in the federal farm program, which produces substantially lower cash

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<sup>2</sup> Currently, Jones & Stokes is conducting all the biological effectiveness monitoring on behalf of TNBC.

rents. The following steps detail the process for estimating the annual rice acres on which revenue will be earned:

1. Begin with the previous year's estimated rice acres.
2. Add the rice acres assumed to be acquired during the year (see **Table A-3**). The rice acres acquired annually are assumed to be 75 percent of the total mitigation acres acquired. Further, the model assumes that the annual number of mitigation acres acquired will equal the number of acres needed to achieve the annual habitat size required by the NBHCP (one-half of the number of acres for which fees have been paid plus a 200-acre surplus).
3. Deduct the rice acres assumed to be converted to marsh (see **Table A-3**). No acquired land that has historically produced rice was converted to marsh in 2008. TNBC estimates that no rice acres will be converted to marsh in 2009 or 2010, and that 80 rice acres will be converted in 2011. For all other years, the model is based on the assumption that enough rice acres will be converted to marsh so that the mitigation land use allocation required by the NBHCP (25 percent marsh, 50 percent rice, and 25 percent other land) will be achieved by the time fees have been paid for 9,000 acres of development and will be maintained thereafter.
4. Multiply the resulting number of acres by 90 percent to arrive at the estimated number of rice acres on which revenue will be earned.<sup>3</sup>

#### Other Crop Revenue

Revenue estimates for crops other than rice remain unchanged at \$15 per upland acre on 50 percent of all upland acres. The following steps detail the process for estimating the annual upland acres on which crop revenue will be earned:

1. Begin with the previous year's estimated upland acres (referred to as "other" acres in the model).
2. Add the upland acres assumed to be acquired during the year (see **Table A-3**). The upland acres acquired annually are assumed to be 25 percent of the total habitat acres acquired. Further, the model is based on the assumption that the annual number of acres acquired will equal the number of acres needed to achieve the annual mitigation land size required by the NBHCP (one-half of the number of acres for which fees have been paid plus a 200-acre surplus).
3. Deduct the upland acres assumed to be converted to marsh (see **Table A-3**). No upland acres were converted to marsh in 2008. TNBC estimates that no upland acres will be converted to marsh in 2009 or 2010 and that 110 upland acres will be converted in 2011. For all other years, the model is based on the assumption that enough acres will be converted to marsh so that the mitigation land use allocation required by the NBHCP (25 percent marsh, 50 percent rice, and 25 percent other land) will be achieved by the time fees have been paid for 9,000 acres of development and will be maintained thereafter.

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<sup>3</sup> The 2003 NBHCP requires that 10 percent of all mitigation land holdings used to produce rice will be fallowed each year.



4. Multiply the resulting number of acres by 50 percent to arrive at the estimated number of upland acres on which revenue will be earned, as only one-half of uplands are committed to commercial farming land uses.

### ***Hunting Revenues***

Below are the two main assumptions used to project hunting revenues:

- Annual hunting income was estimated at \$10 per acre.
- The percentage of mitigation land used for hunting was estimated at 25 percent per year. This percentage is approximately equal to the current percentage of habitat on which hunting occurs.

### ***Interest Revenue***

Investment income is calculated for all funds. Investment income in 2008 is based on the most recent TNBC fund balances as of October 31, 2008. Investment income for 2009 and beyond is projected based on interest earned on the existing net assets for each fund, assuming a 3-percent annual interest rate. As stated previously, while this rate may be more or less applicable in the short-term, the interest rate is appropriate for use over a long period of time.

### **Habitat Acquisition and Conversion**

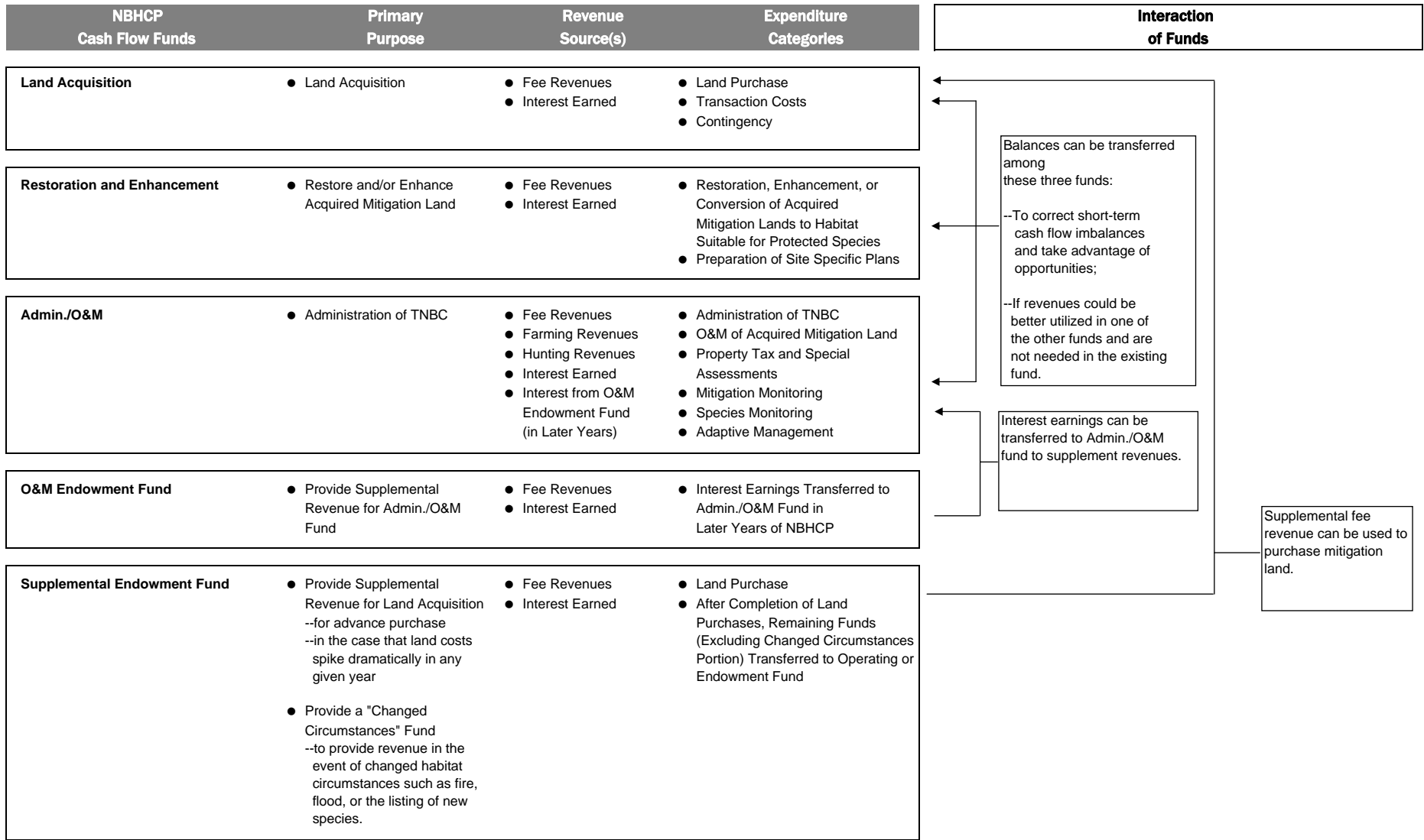
The habitat acquisition schedule was updated to reflect habitat acquisitions actually made or projected for 2007 through 2009. There were no habitat acquisitions made in 2007 or 2008. Further, no habitat acquisitions were projected for 2009. The projected habitat conversion schedule also was updated to reflect current estimates from TNBC of the number of acres to be converted to marsh in 2009 through 2011. TNBC assumes that no acres will be converted to marsh in 2009 or 2010 and that 80 rice acres and 110 upland acres will be converted to marsh in 2011.



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**Figure 1**  
**Natomas Basin HCP**  
**Cash Flow Model and Interaction of Funds**



**Table 1**  
**Natomas Basin HCP**  
**HCP Mitigation Fee Summary 1996-2009**

**2009 Update**  
17,500 acres of development  
1/2 acre of mitigation land per gross acre of developed land  
25% marsh, 50% rice, 25% other

Fee Component	Adopted												Proposed	
	1996/97	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	
Land Acquisition [1]	\$1,830	\$1,830	\$2,036	\$2,500	\$3,000	\$3,750	\$5,275	\$7,750	\$12,750	\$23,250	\$20,750	\$18,250	\$15,750	
Land Acquisition Settlement [2]					\$3,947	\$3,947								
Restoration/Enhancement	\$140	\$198	\$200	\$423	\$368	\$782	\$970	\$935	\$1,023	\$1,278	\$1,275	\$1,141	\$1,271	
Administration/O & M	\$150	\$475	\$800	\$750	\$1,555	\$1,555	\$3,450	\$4,154	\$6,243	\$9,255	\$9,213	\$10,737	\$10,224	
O & M Endowment	\$75	\$100	\$190	\$190	\$800	\$1,500	\$1,900	\$2,490	\$3,745	\$5,555	\$5,530	\$6,440	\$6,135	
Supplemental Endowment	\$0	\$0	\$0	\$0	\$150	\$188	\$430	\$473	\$638	\$1,020	\$908	\$803	\$740	
Fee Collection Admin.	\$45	\$53	\$66	\$78	\$201	\$240	\$245	\$322	\$498	\$824	\$769	\$763	\$696	
<b>Total Mitigation Fee</b>	<b>\$2,240</b>	<b>\$2,656</b>	<b>\$3,292</b>	<b>\$3,941</b>	<b>\$10,021</b>	<b>\$11,962</b>	<b>\$12,270</b>	<b>\$16,124</b>	<b>\$24,897</b>	<b>\$41,182</b>	<b>\$38,445</b>	<b>\$38,133</b>	<b>\$34,816</b>	
<i>Percent Change</i>		19%	24%	20%	154%	19%	3%	31%	54%	65%	(7%)	(1%)	(9%)	
Less Land Cost Portion of Land Acquisition Component								\$4,500	\$7,500	\$12,500	\$22,500	\$20,000	\$15,000	
<b>Total Mitigation Fee Excluding Land Cost Portion of Land Acquisition Component [3]</b>								<b>\$7,770</b>	<b>\$8,624</b>	<b>\$12,397</b>	<b>\$18,682</b>	<b>\$18,445</b>	<b>\$20,633</b>	<b>\$19,816</b>
<i>Percent Change</i>								11%	44%	51%	(1%)	12%	(4%)	

*"hist\_fee\_sum"*

- [1] Land acquisition cost includes land cost, transaction costs, and contingency costs.  
Current land costs estimated at \$30,000 per acre.  
[2] Fee through 2002 only.  
[3] Includes land transaction costs and contingencies.

**Table 2**  
**Natomas Basin HCP**  
**Estimation of Habitat Mitigation Fee**

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**2009 Update**  
*17,500 acres of development*  
*1/2 acre of mitigation land per gross acre of developed land*  
*25% marsh, 50% rice, 25% other*

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Item	Cost per Acre of Habitat <i>a</i>	Mitigation Fee per Acre of Development <i>b=a x .5</i>	Percentage of Base Fee	Notes:
<b>BASE FEE</b>				
<b>Land Acquisition Cost (LA)</b>				
Land Cost	\$30,000	\$15,000		
Transaction Costs and Contingency	\$1,500	\$750		
<b>Total Land Acquisition Cost (LA)</b>	<b>\$31,500</b>	<b>\$15,750</b>	45%	See Table 5
<b>Restoration/Enhancement (RE)</b>				
RE Cost	\$2,033	\$1,017		
RE Contingency	\$508	\$254		
<b>Total Restoration/Enhancement (RE)</b>	<b>\$2,541</b>	<b>\$1,271</b>	4%	See Table 6
Administration/O&M [1]	\$20,448	\$10,224	29%	
O&M Endowment Fund [1]	\$12,270	\$6,135	18%	
Supplemental Endowment Fund	\$1,481	\$740	2%	See Table 14
<b>Total Mitigation Fee</b>	<b>\$68,240</b>	<b>\$34,120</b>		
<b>Fee Collection Administration</b>		\$696	2%	2% of fee for collection
<b>Total Base Fee</b>		<b>\$34,816</b>	<b>100%</b>	
<b>FEE EXCLUDING LAND COST PORTION OF LAND ACQUISITION</b>		<b>\$19,816</b>		[2]

*"fee\_sum\_1"*

[1] Administration/O&M and Endowment Fund costs are set based on the cash flow analysis, ensuring that fund balances are positive in year 50 and that annual interest earnings in endowment fund exceed drawdown by Admin/O&M fund. See **Tables 7-13** for cost assumptions.

[2] In some cases developers may dedicate land to satisfy the land acquisition component of the NBHCP. Any land dedication will be subject to the terms of the NBHCP.

**Table 3**  
**Natomas Basin HCP**  
**Habitat Mitigation Fee Component Changes (2008-2009)**

**2009 Update**  
*17,500 acres of development*  
*1/2 acre of mitigation land per gross acre of developed land*  
*25% marsh, 50% rice, 25% other*

Fee Component	2008 Fee	2009 Proposed Fee	Fee Increase/ (Decrease)	Percentage Increase/ (Decrease)
<b>Land Acquisition</b>				
Land	\$17,500	\$15,000	(\$2,500)	(14.3%)
Transaction	\$375	\$375	\$0	0.0%
Contingency	\$375	\$375	\$0	0.0%
<b>Total Land Acquisition</b>	<b>\$18,250</b>	<b>\$15,750</b>	<b>(\$2,500)</b>	<b>(13.7%)</b>
<b>Restoration/Enhancement</b>				
Base Fee	\$913	\$1,017	\$104	11.4%
Contingency	\$228	\$254	\$26	11.4%
<b>Total Restoration/Enhancement</b>	<b>\$1,141</b>	<b>\$1,271</b>	<b>\$130</b>	<b>11.4%</b>
<b>Administration/O&amp;M and O&amp;M Endowment</b>				
Administration/O&M	\$10,737	\$10,224	(\$513)	(4.8%)
O&M Endowment Fund	\$6,440	\$6,135	(\$305)	(4.7%)
<b>Total Admin/O&amp;M and O&amp;M Endowment</b>	<b>\$17,177</b>	<b>\$16,359</b>	<b>(\$818)</b>	<b>(4.8%)</b>
<b>Fee Subcomponent Estimates</b>				
O&M	\$4,693	\$4,748	\$55	1.2%
Administration	\$3,777	\$3,588	(\$189)	(5.0%)
Species and Habitat Monitoring	\$2,346	\$2,527	\$181	7.7%
Special Districts	\$2,116	\$2,218	\$102	4.8%
Property Taxes	\$5,564	\$4,952	(\$612)	(11.0%)
Crop and Hunting Revenue Offset	(\$1,320)	(\$1,675)	(\$355)	26.9%
<b>Total Admin/O&amp;M and O&amp;M Endowment</b>	<b>\$17,177</b>	<b>\$16,359</b>	<b>(\$818)</b>	<b>(4.8%)</b>
<b>Supplemental Endowment Fund</b>	<b>\$803</b>	<b>\$740</b>	<b>(\$63)</b>	<b>(7.8%)</b>
<b>Fee Collection Administration</b>	<b>\$763</b>	<b>\$696</b>	<b>(\$66)</b>	<b>(8.7%)</b>
<b>Total Mitigation Fee</b>	<b>\$38,133</b>	<b>\$34,816</b>	<b>(\$3,317)</b>	<b>(8.7%)</b>
<b>Summary of Land-Related Fee Components</b>				
Land Acquisition	\$18,250	\$15,750	(\$2,500)	(13.7%)
Property Taxes	\$5,564	\$4,952	(\$612)	(11.0%)
Supplemental Endowment	\$803	\$740	(\$63)	(7.8%)
Fee Collection Administration for Land Components	\$502	\$438	(\$65)	(12.9%)
<b>Subtotal of Land-Related Components</b>	<b>\$25,119</b>	<b>\$21,880</b>	<b>(\$3,240)</b>	<b>(12.9%)</b>
<b>All Other Fee Components</b>				
Special Districts (Water)	\$2,116	\$2,218	\$102	4.8%
O&M, Administration, Species and Habitat Monitoring	\$10,816	\$10,863	\$47	0.4%
Crop and Hunting Revenue Offset	(\$1,320)	(\$1,675)	(\$355)	26.9%
Restoration and Enhancement	\$1,141	\$1,271	\$130	11.4%
Fee Collection Administration for All Other Components	\$260	\$259	(\$1)	(0.4%)
<b>Subtotal of All Other Fee Components</b>	<b>\$13,013</b>	<b>\$12,937</b>	<b>(\$76)</b>	<b>(0.6%)</b>
<b>Total Mitigation Fee</b>	<b>\$38,132</b>	<b>\$34,816</b>	<b>(\$3,316)</b>	<b>(8.7%)</b>

*"fee\_increase"*

**Table 4**  
**Natomas Basin HCP**  
**Cash Flow Summary**

**2009 Update**  
*17,500 acres of development*  
*1/2 acre of mitigation land per gross acre of developed land*  
*25% marsh, 50% rice, 25% other*

**Assumes:**  
0.0% Inflation  
3.0% Interest Rate

	Total 1996-2047	1 1996	2 1997	3 1998	4 1999	5 2000	6 2001	7 2002
		[1]	[1]	[1]	[2]			
<b>LAND ACQUISITION</b>								
<b>Beginning Balance</b>		\$0	\$55,641	\$247,608	\$2,773,665	\$750,754	\$563,113	\$2,225,278
Total Revenues	\$208,877,468	\$55,641	\$191,966	\$2,526,057	\$2,696,904	\$1,287,471	\$3,198,070	\$2,569,079
Total Expenditures	(\$174,556,740)	\$0	\$0	\$0	(\$4,924,998)	(\$1,475,112)	(\$1,535,905)	(\$8,854,102)
Transfers to/from Admin/O&M, R&E, Endow.	(\$34,525,911)	\$0	\$0	\$0	\$0	\$0	\$0	\$4,061,520
Balance Adjustments	\$205,183	\$0	\$0	\$0	\$205,183	\$0	\$0	\$0
Reserved Amounts	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Ending Balance</b>	<b>\$0</b>	<b>\$55,641</b>	<b>\$247,608</b>	<b>\$2,773,665</b>	<b>\$750,754</b>	<b>\$563,113</b>	<b>\$2,225,278</b>	<b>\$1,775</b>
<b>RESTORATION AND ENHANCEMENTS</b>								
<b>Beginning Balance</b>		\$0	\$4,257	\$19,070	\$292,954	\$592,052	\$582,058	\$268,280
Total Revenues	\$17,785,031	\$4,257	\$14,814	\$273,883	\$299,098	\$150,713	\$146,644	\$363,017
Total Expenditures	(\$15,696,309)	\$0	\$0	\$0	\$0	\$0	(\$1,060,422)	(\$490,041)
Transfers to/from O&M/Admin, LA, Endowment	(\$1,928,015)	\$0	\$0	\$0	\$0	\$0	\$600,000	(\$153,500)
Balance Adjustments	(\$160,706)	\$0	\$0	\$0	\$0	(\$160,706)	\$0	\$0
<b>Ending Balance</b>	<b>\$0</b>	<b>\$4,257</b>	<b>\$19,070</b>	<b>\$292,954</b>	<b>\$592,052</b>	<b>\$582,058</b>	<b>\$268,280</b>	<b>(\$12,244)</b>
<b>ADMINISTRATION/O&amp;M</b>								
<b>Beginning Balance</b>		\$0	\$4,561	\$70,261	\$621,109	\$1,265,315	\$1,549,539	\$1,154,659
Total Revenues	\$175,523,883	\$4,561	\$65,700	\$657,778	\$849,711	\$652,770	\$816,275	\$1,624,402
Drawdown on Endowment Fund	\$32,933,456	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Expenditures	(\$207,568,720)	\$0	\$0	(\$106,930)	(\$205,505)	(\$388,815)	(\$611,155)	(\$876,281)
Transfers to/from Land Acq. and R&E	(\$589,515)	\$0	\$0	\$0	\$0	\$0	(\$600,000)	(\$3,908,020)
City of Sac. Loan for 200-Acre Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,111,959
Balance Adjustments	\$20,268	\$0	\$0	\$0	\$0	\$20,268	\$0	\$0
Reserved Amounts	(\$319,373)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Ending Balance</b>	<b>\$0</b>	<b>\$4,561</b>	<b>\$70,261</b>	<b>\$621,109</b>	<b>\$1,265,315</b>	<b>\$1,549,539</b>	<b>\$1,154,659</b>	<b>\$106,719</b>
<b>O&amp;M ENDOWMENT</b>								
<b>Beginning Balance</b>		\$0	\$3,041	\$13,622	\$152,066	\$323,846	\$463,981	\$966,753
Total Revenues	\$192,818,897	\$3,041	\$10,581	\$138,445	\$157,704	\$140,135	\$502,772	\$764,050
Total Expenses	(\$301,797)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Transfer from Land Acq. and R&E	\$37,029,381	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Drawdown on Endowment Fund	(\$32,933,456)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Balance Adjustments	\$14,076	\$0	\$0	\$0	\$14,076	\$0	\$0	\$0
<b>Ending Balance</b>	<b>\$196,627,102</b>	<b>\$3,041</b>	<b>\$13,622</b>	<b>\$152,066</b>	<b>\$323,846</b>	<b>\$463,981</b>	<b>\$966,753</b>	<b>\$1,730,803</b>
<b>SUPPLEMENTAL ENDOWMENT</b>								
<b>Beginning Balance</b>		\$0	\$0	\$0	\$0	\$0	\$0	\$36,314
Total Revenues	\$17,635,855	\$0	\$0	\$0	\$0	\$0	\$36,314	\$147,318
Total Expenditures	(\$3,224,118)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Ending Balance</b>	<b>\$14,411,737</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$36,314</b>	<b>\$183,631</b>
<b>Changed Circumstances Fund Balance</b>	<b>\$7,725,995</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

"cash\_flow"

**Table 4**  
**Natomas Basin HCP**  
**Cash Flow Summary**

**2009 Update**  
*17,500 acres of development*  
*1/2 acre of mitigation land per gross acre of developed land*  
*25% marsh, 50% rice, 25% other*

	8	9	10	11	12	13	14	15	16
	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>LAND ACQUISITION</b>									
<b>Beginning Balance</b>	\$1,775	\$80,655	\$418,988	\$437,164	\$2,943,551	\$5,364,276	\$5,916,024	\$6,089,045	\$6,271,717
Total Revenues	\$9,072,846	\$469,564	\$1,002,010	\$3,418,052	\$2,438,647	\$551,749	\$173,021	\$182,671	\$3,338,152
Total Expenditures	(\$6,411,966)	(\$81,231)	(\$220,786)	(\$345,607)	(\$17,922)	\$0	\$0	\$0	(\$3,150,000)
Transfers to/from Admin/O&M, R&E, Endow.	(\$2,582,000)	(\$50,000)	\$100,414	(\$1,429,520)	\$0	\$0	\$0	\$0	(\$1,064,059)
Balance Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reserved Amounts	\$0	\$0	(\$863,462)	\$863,462	\$0	\$0	\$0	\$0	\$0
<b>Ending Balance</b>	<b>\$80,655</b>	<b>\$418,988</b>	<b>\$437,164</b>	<b>\$2,943,551</b>	<b>\$5,364,276</b>	<b>\$5,916,024</b>	<b>\$6,089,045</b>	<b>\$6,271,717</b>	<b>\$5,395,809</b>
<b>RESTORATION AND ENHANCEMENTS</b>									
<b>Beginning Balance</b>	(\$12,244)	\$384,545	(\$20,841)	\$481,611	\$683,244	\$351,236	\$335,110	\$344,940	\$300,289
Total Revenues	\$1,123,471	\$334,400	\$653,695	\$202,113	\$265,605	\$33,508	\$9,830	\$10,348	\$263,152
Total Expenditures	(\$880,182)	(\$739,786)	(\$40,344)	(\$480)	(\$597,613)	(\$49,634)	\$0	(\$55,000)	(\$1,627,500)
Transfers to/from O&M/Admin, LA, Endowment	\$153,500	\$0	(\$110,899)	\$0	\$0	\$0	\$0	\$0	\$1,064,059
Balance Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Ending Balance</b>	<b>\$384,545</b>	<b>(\$20,841)</b>	<b>\$481,611</b>	<b>\$683,244</b>	<b>\$351,236</b>	<b>\$335,110</b>	<b>\$344,940</b>	<b>\$300,289</b>	<b>\$0</b>
<b>ADMINISTRATION/O&amp;M</b>									
<b>Beginning Balance</b>	\$106,719	\$2,934,832	\$3,465,672	\$5,713,907	\$7,199,698	\$8,832,460	\$6,613,334	\$4,158,179	\$1,747,756
Total Revenues	\$3,960,363	\$2,219,362	\$4,128,595	\$2,177,635	\$5,004,197	\$668,030	\$689,429	\$390,316	\$2,359,047
Drawdown on Endowment Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Expenditures	(\$1,448,791)	(\$1,738,522)	(\$1,890,845)	(\$2,121,364)	(\$3,371,435)	(\$2,887,155)	(\$3,144,584)	(\$2,800,739)	(\$2,897,166)
Transfers to/from Land Acq. and R&E	\$2,428,500	\$50,000	\$10,485	\$1,429,520	\$0	\$0	\$0	\$0	\$0
City of Sac. Loan for 200-Acre Reserve	(\$2,111,959)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Balance Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reserved Amounts	\$0	\$0	(\$267,256)	(\$499,925)	(\$319,373)	(\$319,373)	(\$319,373)	(\$319,373)	(\$319,373)
<b>Ending Balance</b>	<b>\$2,934,832</b>	<b>\$3,465,672</b>	<b>\$5,446,651</b>	<b>\$6,699,773</b>	<b>\$8,513,087</b>	<b>\$6,293,961</b>	<b>\$3,838,806</b>	<b>\$1,428,383</b>	<b>\$890,264</b>
<b>O&amp;M ENDOWMENT</b>									
<b>Beginning Balance</b>	\$1,730,803	\$4,424,499	\$5,803,065	\$8,148,581	\$9,926,631	\$10,959,532	\$7,982,478	\$8,221,950	\$8,468,608
Total Revenues	\$2,718,367	\$1,378,566	\$2,438,050	\$1,868,942	\$1,086,696	(\$2,937,149)	\$239,472	\$246,658	\$1,481,058
Total Expenses	(\$24,671)	\$0	(\$92,534)	(\$90,892)	(\$53,795)	(\$39,905)	\$0	\$0	\$0
Transfer from Land Acq. and R&E	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Drawdown on Endowment Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Balance Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Ending Balance</b>	<b>\$4,424,499</b>	<b>\$5,803,065</b>	<b>\$8,148,581</b>	<b>\$9,926,631</b>	<b>\$10,959,532</b>	<b>\$7,982,478</b>	<b>\$8,221,950</b>	<b>\$8,468,608</b>	<b>\$9,949,667</b>
<b>SUPPLEMENTAL ENDOWMENT</b>									
<b>Beginning Balance</b>	\$183,631	\$456,255	\$558,090	\$784,553	\$980,468	\$1,103,885	\$813,442	\$854,070	\$879,693
Total Revenues	\$533,115	\$202,734	\$443,136	\$313,624	\$192,314	(\$475,561)	\$40,629	\$25,622	\$174,391
Total Expenditures	(\$260,491)	(\$100,899)	(\$216,673)	(\$117,709)	(\$68,897)	\$185,118	\$0	\$0	(\$50,000)
<b>Ending Balance</b>	<b>\$456,255</b>	<b>\$558,090</b>	<b>\$784,553</b>	<b>\$980,468</b>	<b>\$1,103,885</b>	<b>\$813,442</b>	<b>\$854,070</b>	<b>\$879,693</b>	<b>\$1,004,083</b>
<b>Changed Circumstances Fund Balance</b>	<b>\$260,491</b>	<b>\$361,390</b>	<b>\$563,082</b>	<b>\$668,010</b>	<b>\$732,617</b>	<b>\$540,856</b>	<b>\$557,082</b>	<b>\$573,794</b>	<b>\$641,008</b>

"cash\_flow"



**Table 4**  
**Natomas Basin HCP**  
**Cash Flow Summary**

**2009 Update**  
*17,500 acres of development*  
*1/2 acre of mitigation land per gross acre of developed land*  
*25% marsh, 50% rice, 25% other*

	17 2012	18 2013	19 2014	20 2015	21 2016	22 2017	23 2018	24 2019	25 2020
<b>LAND ACQUISITION</b>									
<b>Beginning Balance</b>	\$5,395,809	\$15,326,329	\$15,936,119	\$16,564,203	\$17,211,129	\$17,877,463	\$18,563,787	\$19,270,700	\$19,848,821
Total Revenues	\$12,131,487	\$12,429,402	\$12,447,696	\$12,466,539	\$11,698,446	\$10,852,443	\$9,376,526	\$9,397,734	\$9,415,077
Total Expenditures	(\$2,350,966)	(\$11,969,613)	(\$11,969,613)	(\$11,969,613)	(\$11,182,113)	(\$10,316,119)	(\$8,819,613)	(\$8,819,613)	(\$8,819,613)
Transfers to/from Admin/O&M, R&E, Endow.	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$0	\$0
Balance Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reserved Amounts	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Ending Balance</b>	<b>\$15,326,329</b>	<b>\$15,936,119</b>	<b>\$16,564,203</b>	<b>\$17,211,129</b>	<b>\$17,877,463</b>	<b>\$18,563,787</b>	<b>\$19,270,700</b>	<b>\$19,848,821</b>	<b>\$20,444,286</b>
<b>RESTORATION AND ENHANCEMENTS</b>									
<b>Beginning Balance</b>	\$0	\$441,030	\$276,949	\$107,946	\$157,423	\$195,473	\$220,467	\$221,676	\$358,862
Total Revenues	\$965,713	\$978,944	\$974,022	\$968,952	\$906,900	\$838,173	\$718,184	\$718,220	\$722,336
Total Expenditures	(\$374,684)	(\$993,025)	(\$993,025)	(\$769,475)	(\$718,850)	(\$663,179)	(\$566,975)	(\$566,975)	(\$566,975)
Transfers to/from O&M/Admin, LA, Endowment	(\$150,000)	(\$150,000)	(\$150,000)	(\$150,000)	(\$150,000)	(\$150,000)	(\$150,000)	(\$14,059)	\$0
Balance Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Ending Balance</b>	<b>\$441,030</b>	<b>\$276,949</b>	<b>\$107,946</b>	<b>\$157,423</b>	<b>\$195,473</b>	<b>\$220,467</b>	<b>\$221,676</b>	<b>\$358,862</b>	<b>\$514,223</b>
<b>ADMINISTRATION/O&amp;M</b>									
<b>Beginning Balance</b>	\$1,209,637	\$6,343,005	\$11,306,901	\$16,088,286	\$20,953,608	\$25,280,579	\$29,015,867	\$31,765,634	\$34,449,672
Total Revenues	\$8,068,223	\$8,240,849	\$8,408,391	\$8,574,869	\$8,231,148	\$7,818,657	\$6,976,240	\$7,075,707	\$7,173,203
Drawdown on Endowment Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Expenditures	(\$2,934,855)	(\$3,276,953)	(\$3,627,006)	(\$3,709,547)	(\$3,904,178)	(\$4,083,369)	(\$4,226,473)	(\$4,391,670)	(\$4,558,683)
Transfers to/from Land Acq. and R&E	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
City of Sac. Loan for 200-Acre Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Balance Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reserved Amounts	(\$319,373)	(\$319,373)	(\$319,373)	(\$319,373)	(\$319,373)	(\$319,373)	(\$319,373)	(\$319,373)	(\$319,373)
<b>Ending Balance</b>	<b>\$6,023,632</b>	<b>\$10,987,528</b>	<b>\$15,768,913</b>	<b>\$20,634,235</b>	<b>\$24,961,206</b>	<b>\$28,696,494</b>	<b>\$31,446,261</b>	<b>\$34,130,299</b>	<b>\$36,744,818</b>
<b>O&amp;M ENDOWMENT</b>									
<b>Beginning Balance</b>	\$9,949,667	\$14,910,606	\$20,020,373	\$25,283,433	\$30,704,385	\$35,981,216	\$41,079,026	\$45,746,846	\$50,554,701
Total Revenues	\$4,960,939	\$5,109,767	\$5,263,060	\$5,420,952	\$5,276,831	\$5,097,811	\$4,667,820	\$4,807,854	\$4,952,090
Total Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Transfer from Land Acq. and R&E	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Drawdown on Endowment Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Balance Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Ending Balance</b>	<b>\$14,910,606</b>	<b>\$20,020,373</b>	<b>\$25,283,433</b>	<b>\$30,704,385</b>	<b>\$35,981,216</b>	<b>\$41,079,026</b>	<b>\$45,746,846</b>	<b>\$50,554,701</b>	<b>\$55,506,791</b>
<b>SUPPLEMENTAL ENDOWMENT</b>									
<b>Beginning Balance</b>	\$1,004,083	\$1,406,594	\$1,821,179	\$2,248,203	\$2,688,037	\$3,116,566	\$3,531,009	\$3,911,327	\$4,303,055
Total Revenues	\$592,504	\$604,580	\$617,017	\$629,828	\$606,023	\$578,191	\$520,312	\$531,722	\$543,473
Total Expenditures	(\$189,994)	(\$189,994)	(\$189,994)	(\$189,994)	(\$177,494)	(\$163,748)	(\$139,994)	(\$139,994)	(\$139,994)
<b>Ending Balance</b>	<b>\$1,406,594</b>	<b>\$1,821,179</b>	<b>\$2,248,203</b>	<b>\$2,688,037</b>	<b>\$3,116,566</b>	<b>\$3,531,009</b>	<b>\$3,911,327</b>	<b>\$4,303,055</b>	<b>\$4,706,534</b>
<b>Changed Circumstances Fund Balance</b>	<b>\$850,232</b>	<b>\$1,065,733</b>	<b>\$1,287,699</b>	<b>\$1,516,323</b>	<b>\$1,739,307</b>	<b>\$1,955,234</b>	<b>\$2,153,885</b>	<b>\$2,358,495</b>	<b>\$2,569,244</b>

"cash\_flow"

**Table 4**  
**Natomas Basin HCP**  
**Cash Flow Summary**

**2009 Update**  
*17,500 acres of development*  
*1/2 acre of mitigation land per gross acre of developed land*  
*25% marsh, 50% rice, 25% other*

	26 2021	27 2022	28 2023	29 2024	30 2025	31 2026	32 2027	33 2028	34 2029
<b>LAND ACQUISITION</b>									
<b>Beginning Balance</b>	\$20,444,286	\$21,057,615	\$21,689,343	\$22,340,023	\$23,010,224	\$23,700,531	\$24,411,547	\$25,143,893	\$25,898,210
Total Revenues	\$9,432,941	\$6,511,991	\$6,530,943	\$6,550,463	\$6,570,569	\$6,591,278	\$6,612,609	\$6,634,579	\$6,657,209
Total Expenditures	(\$8,819,613)	(\$5,880,263)	(\$5,880,263)	(\$5,880,263)	(\$5,880,263)	(\$5,880,263)	(\$5,880,263)	(\$5,880,262)	(\$5,880,262)
Transfers to/from Admin/O&M, R&E, Endow.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Balance Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reserved Amounts	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Ending Balance</b>	<b>\$21,057,615</b>	<b>\$21,689,343</b>	<b>\$22,340,023</b>	<b>\$23,010,224</b>	<b>\$23,700,531</b>	<b>\$24,411,547</b>	<b>\$25,143,893</b>	<b>\$25,898,210</b>	<b>\$26,675,156</b>
<b>RESTORATION AND ENHANCEMENTS</b>									
<b>Beginning Balance</b>	\$514,223	\$674,245	\$790,877	\$911,009	\$1,034,744	\$1,162,192	\$1,293,463	\$1,428,672	\$1,567,938
Total Revenues	\$726,997	\$494,649	\$498,148	\$501,752	\$505,464	\$509,288	\$513,226	\$517,282	\$521,460
Total Expenditures	(\$566,975)	(\$378,017)	(\$378,017)	(\$378,017)	(\$378,017)	(\$378,017)	(\$378,017)	(\$378,017)	(\$378,017)
Transfers to/from O&M/Admin, LA, Endowment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Balance Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Ending Balance</b>	<b>\$674,245</b>	<b>\$790,877</b>	<b>\$911,009</b>	<b>\$1,034,744</b>	<b>\$1,162,192</b>	<b>\$1,293,463</b>	<b>\$1,428,672</b>	<b>\$1,567,938</b>	<b>\$1,711,381</b>
<b>ADMINISTRATION/O&amp;M</b>									
<b>Beginning Balance</b>	\$37,064,191	\$39,605,396	\$40,259,880	\$40,838,348	\$41,337,536	\$41,754,217	\$42,085,228	\$42,327,490	\$42,478,044
Total Revenues	\$7,268,612	\$5,448,102	\$5,479,053	\$5,507,724	\$5,534,017	\$5,557,835	\$5,579,082	\$5,597,667	\$5,613,501
Drawdown on Endowment Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Expenditures	(\$4,727,407)	(\$4,793,618)	(\$4,900,585)	(\$5,008,537)	(\$5,117,336)	(\$5,226,825)	(\$5,336,820)	(\$5,447,113)	(\$5,557,462)
Transfers to/from Land Acq. and R&E	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
City of Sac. Loan for 200-Acre Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Balance Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reserved Amounts	(\$319,373)	(\$319,373)	(\$319,373)	(\$319,373)	(\$319,373)	(\$319,373)	(\$319,373)	(\$319,373)	(\$319,373)
<b>Ending Balance</b>	<b>\$39,286,023</b>	<b>\$39,940,507</b>	<b>\$40,518,975</b>	<b>\$41,018,163</b>	<b>\$41,434,844</b>	<b>\$41,765,855</b>	<b>\$42,008,117</b>	<b>\$42,158,671</b>	<b>\$42,214,711</b>
<b>O&amp;M ENDOWMENT</b>									
<b>Beginning Balance</b>	\$55,506,791	\$60,607,444	\$64,716,169	\$68,948,157	\$73,307,103	\$77,796,819	\$82,421,226	\$87,184,365	\$92,090,398
Total Revenues	\$5,100,653	\$4,108,726	\$4,231,987	\$4,358,947	\$4,489,715	\$4,624,407	\$4,763,139	\$4,906,033	\$5,053,214
Total Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Transfer from Land Acq. and R&E	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Drawdown on Endowment Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Balance Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Ending Balance</b>	<b>\$60,607,444</b>	<b>\$64,716,169</b>	<b>\$68,948,157</b>	<b>\$73,307,103</b>	<b>\$77,796,819</b>	<b>\$82,421,226</b>	<b>\$87,184,365</b>	<b>\$92,090,398</b>	<b>\$97,143,612</b>
<b>SUPPLEMENTAL ENDOWMENT</b>									
<b>Beginning Balance</b>	\$4,706,534	\$5,122,118	\$5,458,723	\$5,805,427	\$6,162,531	\$6,530,348	\$6,909,200	\$7,299,418	\$7,701,342
Total Revenues	\$555,578	\$429,943	\$440,041	\$450,442	\$461,155	\$472,189	\$483,555	\$495,262	\$507,319
Total Expenditures	(\$139,994)	(\$93,338)	(\$93,338)	(\$93,338)	(\$93,338)	(\$93,338)	(\$93,338)	(\$93,338)	(\$93,338)
<b>Ending Balance</b>	<b>\$5,122,118</b>	<b>\$5,458,723</b>	<b>\$5,805,427</b>	<b>\$6,162,531</b>	<b>\$6,530,348</b>	<b>\$6,909,200</b>	<b>\$7,299,418</b>	<b>\$7,701,342</b>	<b>\$8,115,324</b>
<b>Changed Circumstances Fund Balance</b>	<b>\$2,786,315</b>	<b>\$2,963,242</b>	<b>\$3,145,477</b>	<b>\$3,333,179</b>	<b>\$3,526,512</b>	<b>\$3,725,644</b>	<b>\$3,930,751</b>	<b>\$4,142,011</b>	<b>\$4,359,609</b>

"cash\_flow"

**Table 4**  
**Natomas Basin HCP**  
**Cash Flow Summary**

**2009 Update**  
*17,500 acres of development*  
*1/2 acre of mitigation land per gross acre of developed land*  
*25% marsh, 50% rice, 25% other*

	35 2030	36 2031	37 2032	38 2033	39 2034	40 2035	41 2036	42 2037	43 2038
<b>LAND ACQUISITION</b>									
<b>Beginning Balance</b>	\$26,675,156	\$27,895,148	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Revenues	\$6,680,517	\$6,717,117	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Expenditures	(\$5,460,525)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Transfers to/from Admin/O&M, R&E, Endow.	\$0	(\$34,612,265)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Balance Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reserved Amounts	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Ending Balance</b>	<b>\$27,895,148</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>RESTORATION AND ENHANCEMENTS</b>									
<b>Beginning Balance</b>	\$1,711,381	\$1,886,111	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Revenues	\$525,764	\$531,005	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Expenditures	(\$351,034)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Transfers to/from O&M/Admin, LA, Endowment	\$0	(\$2,417,116)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Balance Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Ending Balance</b>	<b>\$1,886,111</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>ADMINISTRATION/O&amp;M</b>									
<b>Beginning Balance</b>	\$42,534,084	\$42,508,815	\$42,603,207	\$38,896,588	\$35,058,610	\$31,084,725	\$26,970,235	\$22,710,279	\$18,299,832
Total Revenues	\$5,625,692	\$5,624,934	\$1,810,623	\$1,699,424	\$1,584,285	\$1,465,068	\$1,341,634	\$1,213,835	\$1,081,522
Drawdown on Endowment Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Expenditures	(\$5,650,961)	(\$5,530,542)	(\$5,517,241)	(\$5,537,403)	(\$5,558,169)	(\$5,579,559)	(\$5,601,590)	(\$5,624,282)	(\$5,647,654)
Transfers to/from Land Acq. and R&E	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
City of Sac. Loan for 200-Acre Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Balance Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reserved Amounts	(\$319,373)	(\$319,373)	(\$319,373)	(\$319,373)	(\$319,373)	(\$319,373)	(\$319,373)	(\$319,373)	(\$319,373)
<b>Ending Balance</b>	<b>\$42,189,442</b>	<b>\$42,283,834</b>	<b>\$38,577,215</b>	<b>\$34,739,237</b>	<b>\$30,765,352</b>	<b>\$26,650,862</b>	<b>\$22,390,906</b>	<b>\$17,980,459</b>	<b>\$13,414,327</b>
<b>O&amp;M ENDOWMENT</b>									
<b>Beginning Balance</b>	\$97,143,612	\$102,348,423	\$144,738,759	\$149,080,922	\$153,553,349	\$158,159,950	\$162,904,748	\$167,791,891	\$172,825,647
Total Revenues	\$5,204,811	\$5,360,955	\$4,342,163	\$4,472,428	\$4,606,600	\$4,744,798	\$4,887,142	\$5,033,757	\$5,184,769
Total Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Transfer from Land Acq. and R&E	\$0	\$37,029,381	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Drawdown on Endowment Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Balance Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Ending Balance</b>	<b>\$102,348,423</b>	<b>\$144,738,759</b>	<b>\$149,080,922</b>	<b>\$153,553,349</b>	<b>\$158,159,950</b>	<b>\$162,904,748</b>	<b>\$167,791,891</b>	<b>\$172,825,647</b>	<b>\$178,010,417</b>
<b>SUPPLEMENTAL ENDOWMENT</b>									
<b>Beginning Balance</b>	\$8,115,324	\$8,541,725	\$8,980,918	\$9,250,346	\$9,527,856	\$9,813,692	\$10,108,102	\$10,411,345	\$10,723,686
Total Revenues	\$519,739	\$532,531	\$269,428	\$277,510	\$285,836	\$294,411	\$303,243	\$312,340	\$321,711
Total Expenditures	(\$93,338)	(\$93,338)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Ending Balance</b>	<b>\$8,541,725</b>	<b>\$8,980,918</b>	<b>\$9,250,346</b>	<b>\$9,527,856</b>	<b>\$9,813,692</b>	<b>\$10,108,102</b>	<b>\$10,411,345</b>	<b>\$10,723,686</b>	<b>\$11,045,396</b>
<b>Changed Circumstances Fund Balance</b>	<b>\$4,583,735</b>	<b>\$4,814,584</b>	<b>\$4,959,022</b>	<b>\$5,107,793</b>	<b>\$5,261,026</b>	<b>\$5,418,857</b>	<b>\$5,581,423</b>	<b>\$5,748,866</b>	<b>\$5,921,332</b>

"cash\_flow"

**Table 4**  
**Natomas Basin HCP**  
**Cash Flow Summary**

**2009 Update**  
*17,500 acres of development*  
*1/2 acre of mitigation land per gross acre of developed land*  
*25% marsh, 50% rice, 25% other*

	44 2039	45 2040	46 2041	47 2042	48 2043	49 2044	50 2045	51 2046	52 2047
<b>LAND ACQUISITION</b>									
<b>Beginning Balance</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Expenditures	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Transfers to/from Admin/O&M, R&E, Endow.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Balance Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reserved Amounts	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Ending Balance</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>RESTORATION AND ENHANCEMENTS</b>									
<b>Beginning Balance</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Expenditures	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Transfers to/from O&M/Admin, LA, Endowment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Balance Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Ending Balance</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>ADMINISTRATION/O&amp;M</b>									
<b>Beginning Balance</b>	\$13,733,700	\$9,006,509	\$4,112,707	\$319,373	\$319,373	\$319,373	\$319,373	\$319,373	\$319,373
Total Revenues	\$944,538	\$802,722	\$655,908	\$542,108	\$542,108	\$542,108	\$542,108	\$542,108	\$542,108
Drawdown on Endowment Fund	\$0	\$0	\$1,272,822	\$5,206,263	\$5,233,358	\$5,261,266	\$5,290,012	\$5,319,619	\$5,350,116
Total Expenditures	(\$5,671,728)	(\$5,696,524)	(\$5,722,064)	(\$5,748,370)	(\$5,775,466)	(\$5,803,374)	(\$5,832,119)	(\$5,861,727)	(\$5,892,223)
Transfers to/from Land Acq. and R&E	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
City of Sac. Loan for 200-Acre Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Balance Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reserved Amounts	(\$319,373)	(\$319,373)	(\$319,373)	(\$319,373)	(\$319,373)	(\$319,373)	(\$319,373)	(\$319,373)	(\$319,373)
<b>Ending Balance</b>	<b>\$8,687,136</b>	<b>\$3,793,334</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>O&amp;M ENDOWMENT</b>									
<b>Beginning Balance</b>	\$178,010,417	\$183,350,729	\$188,851,251	\$193,243,966	\$193,835,023	\$194,416,715	\$194,987,951	\$195,547,578	\$196,094,385
Total Revenues	\$5,340,313	\$5,500,522	\$5,665,538	\$5,797,319	\$5,815,051	\$5,832,501	\$5,849,639	\$5,866,427	\$5,882,832
Total Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Transfer from Land Acq. and R&E	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Drawdown on Endowment Fund	\$0	\$0	(\$1,272,822)	(\$5,206,263)	(\$5,233,358)	(\$5,261,266)	(\$5,290,012)	(\$5,319,619)	(\$5,350,116)
Balance Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Ending Balance</b>	<b>\$183,350,729</b>	<b>\$188,851,251</b>	<b>\$193,243,966</b>	<b>\$193,835,023</b>	<b>\$194,416,715</b>	<b>\$194,987,951</b>	<b>\$195,547,578</b>	<b>\$196,094,385</b>	<b>\$196,627,102</b>
<b>SUPPLEMENTAL ENDOWMENT</b>									
<b>Beginning Balance</b>	\$11,045,396	\$11,376,758	\$11,718,061	\$12,069,603	\$12,431,691	\$12,804,642	\$13,188,781	\$13,584,444	\$13,991,978
Total Revenues	\$331,362	\$341,303	\$351,542	\$362,088	\$372,951	\$384,139	\$395,663	\$407,533	\$419,759
Total Expenditures	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Ending Balance</b>	<b>\$11,376,758</b>	<b>\$11,718,061</b>	<b>\$12,069,603</b>	<b>\$12,431,691</b>	<b>\$12,804,642</b>	<b>\$13,188,781</b>	<b>\$13,584,444</b>	<b>\$13,991,978</b>	<b>\$14,411,737</b>
<b>Changed Circumstances Fund Balance</b>	<b>\$6,098,972</b>	<b>\$6,281,941</b>	<b>\$6,470,399</b>	<b>\$6,664,511</b>	<b>\$6,864,446</b>	<b>\$7,070,380</b>	<b>\$7,282,491</b>	<b>\$7,500,966</b>	<b>\$7,725,995</b>

"cash\_flow"

**Table 5**  
**Natomas Basin HCP**  
**Land Acquisition Cost**

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**2009 Update**  
*17,500 acres of development*  
*1/2 acre of mitigation land per gross acre of developed land*  
*25% marsh, 50% rice, 25% other*

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Item	Cost per Acre	Permitted by Plan	Assumed in Financial Analysis	Notes
In-Basin Lands	\$30,000	100%	100%	Price based on information from recent sales transactions and consultations with landowners and real estate brokers.
Out-of-Basin Lands	NA			
<b>Average Land Value</b>	<b>\$30,000</b>			Assumes all acquisition occurs at the average in-basin land value.
Plus Transaction Costs and Contingency	\$1,500			Includes pre-acquisition field reconnaissance, surveys, Phase 1 environmental report, legal fees, and closing costs. Transaction costs assumed at 1/2 of total, contingency at 1/2 of total. This cost was restored to its 2003 level because of the increased complexity of real estate transactions.
<b>Average Land Acquisition Cost per Acquired Acre</b>	<b>\$31,500</b>			Beginning 2009

*"land\_acq\_assumps"*

Source: The Natomas Basin Conservancy

**Table 6**  
**Natomas Basin HCP**  
**Restoration and Enhancement Assumptions**

**2009 Update**  
*17,500 acres of development*  
*1/2 acre of mitigation land per gross acre of developed land*  
*25% marsh, 50% rice, 25% other*

**Site Specific Management Plan (SSMP) and Related Costs** (to be completed within 1 year of habitat acquisition)

Item	Estimated Cost per Acquisition	Estimated Cost per Habitat Acre	Note
NBHCP Biological Site Assessment	\$15,000 per Acquisition	\$83 Per-Acquired-Acre	Baseline Biological site assessments for: -Tri-Colored Blackbird -Valley Elderberry Longhorn Beetle -Delta Tule Pea -Sanford Arrowhead Assessment for Species Introduction: -Delta Tule Pea -CTS -ST -Pond Turtle -Sanford Arrowhead -Vernal Pool Plant Species, -Other Covered Plant Species
NBHCP Pre-Construction Survey	\$12,000 per Acquisition	\$67 Per-Acquired-Acre	Formal pre-construction site survey for restoration and enhancement, including: -Assessment of Swainsons Hawk nest disturbance -Assessment of Other Avian Species nest disturbance -Assessment of Valley Elderberry Longhorn Beetle
<b>Subtotal Biological Site Assess. &amp; Pre-Construction Survey</b>		<b>\$150 per acre</b>	Note [1]
<b>Restoration and Enhancement Conversion Costs</b>			
	Use of Land	Initial Costs	Weighted Cost [5]
<b>Expended at Time Land Is Acquired</b>			
Marsh	0%	\$0	\$0
Existing Rice	75%	\$0	\$0
Dry Converted to Rice	0%	\$0	\$0
Other Upland	25%	\$0	\$0
<b>Subtotal</b>	<b>100%</b>	<b>\$0</b>	<b>\$0</b>
<b>Expended at Time Land Is Converted</b>			
Rice/Other Converted to Marsh	25.00%	\$7,500	\$1,875
Rice Converted to Upland/Other	1.63%	\$500	\$8
<b>Subtotal Restoration and Enhancement Conversion Costs</b>		<b>\$1,883</b>	
<b>Subtotal of All Restoration and Enhancement Costs per Acre</b>		<b>\$2,033</b>	
<b>Restoration and Enhancement Contingency per Acre (25%)</b>		<b>\$508</b>	
<b>Total Restoration and Enhancement Costs per Acre</b>		<b>\$2,541</b>	

*"RE\_Assumps"*

Source: The Natomas Basin Conservancy

- [1] The addition of a formal biological site assessment and pre-construction survey are required by the Draft HCP -- July 2002.  
 [2] Initial marsh land estimated at 0% because TNBC estimates that little to no marshland is available for acquisition. Rice land will be converted to marsh, however.  
 [3] Initial costs of all types of habitat land have been set to zero as no initial restoration or enhancement costs are anticipated.  
 [4] Based on actual Bennett North sealed public bids. Approximately \$6,560 represents hard construction costs while the remaining represents a 15 percent contingency that covers construction management, design, and post-construction clean-up.  
 [5] The cost of restoration and enhancement is weighted by the percentage of acres assumed to be converted or used for that particular land use.  
 [6] The percentage of rice converted to upland is based on the acres purchased through 2006 that are planned to be converted to upland.

**Table 7**  
**Natomas Basin HCP**  
**Operations and Maintenance Assumptions**

**2009 Update**  
*17,500 acres of development*  
*1/2 acre of mitigation land per gross acre of developed land*  
*25% marsh, 50% rice, 25% other*

Item	Amount	Notes:
<b>Operations and Maintenance Costs</b>		
Land Management Contract	\$68.31 per acre	Land Management annual contract of \$285,000 divided by the current habitat size of 4,172 acres (including supplemental mitigation)
TNBC Costs	\$76.55 per acre	See <b>Table 8</b>
Fixed Assets	\$23.98 per acre	Based on TNBC's inventory of fixed asses (see <b>Table 9</b> )
<b>Subtotal</b>	<b>\$168.84</b> per acre	
<b>Special Assessments</b>		
Reclamation District #1000	\$13.99 per acre	2007-08 amount of \$58,354 / 4,172 habitat acres.
NCMWC	\$63.48 per acre	Based on published tariffs and rates. <b>Assumptions:</b> 1) 15% of acres are not in the NCMWC area 2) On all acres except marsh (75% of acres), TNBC pays all of the \$121 per acre average costs, then gets reimbursed by farmers for \$65 per acre, so TNBC pays a net amount of \$56 per acre. On marsh acres (25% of acres), TNBC pays the full \$121 per acre average costs. 3) Bad debt allowance of 5% 4) <i>Estimate = 85% * (\$56 per acre*75% + \$121 per acre*25% + \$65 per acre*75%* 5%)</i>
<b>Subtotal</b>	<b>\$77.47</b> per acre	
<b>Federal Marsh Water</b>	<b>\$7.51</b> per marsh acre	Additional assessment on all marsh acres. Marsh acres up to 960 acres are assessed \$19 per acre. Once marsh acres exceed 960, marsh acres are assessed \$26.51 per acre (\$26.51 - \$19.00 = \$7.51)
<b>Property Taxes for Existing Habitat (1%)</b>	<b>\$114.24</b> per acre	Based on the estimated average cost per acre, adjusting the cost per acre for each acquisition by 2% per year (see <b>Table 11</b> for detail)
<b>Preparation of Site Specific Management Plan</b>	<b>\$225</b> per acquired acre	Based on information from contracts regarding cost of SSMPs prepared to date.
<b>Update of Site Specific Management Plan</b>	<b>\$200</b> per acquired acre	Based on expected costs.
<b>Mitigation Monitoring and Adaptive Management</b>		
<u>2009 +</u> One-Time/Fixed Costs	\$135,000 in 2014	See <b>Table 12</b> for detail, increases by 3% per year until habitat buildout
On-Going Monitoring	\$340,522 per year	
<b>Subtotal</b>	<b>\$340,522</b> per year	
<b>Administrative Costs</b>		
During Development	\$979,145 per year	See <b>Table 13</b> for detail
After All Land Acquired	\$979,145 per year	
<b>Operations and Maintenance Revenues</b>		
<b>Crop Land Leases</b>		
Planted Rice Base Acreage	\$125 per acre	Estimate of average revenue per rice acre; revenue on 90% of rice acres
Other Crops	\$15 per acre	Estimate of average revenue per upland/other acre; revenue on 50% of other/upland acres
<b>Hunting Revenue</b>	<b>\$10</b> per acre	Revenue on a maximum of 1/4 of the acres

"om\_assumps"

Source: The Natomas Basin Conservancy

**Table 8**  
**Natomas Basin HCP**  
**Estimated TNBC Operations and Maintenance Annual Costs**  
*(excludes costs covered by Land Management contract and TNBC costs included in other tables)*

**2009 Update**  
 17,500 acres of development  
 1/2 acre of mitigation land per gross acre of developed land  
 25% marsh, 50% rice, 25% other

Task	Comments	Expenditure Type	Cost/Item	Items	Total Cost	Recurrence Interval	Total Annual Cost
<b>Water Management</b>							
berm maintenance	Land Management Contract	annual					
water-control structure maintenance/repair	Land Management Contract	annual					
water-control structure replacement							
pump maintenance							
lift pump	Land Management Contract	annual					
well pump	Land Management Contract	annual					
electricity	Land Management Contract	annual					
water management operation							
water cost							
summer water	TNBC (see <b>Table 7</b> -- NCMWC)	annual					
winter water [1]	TNBC (additional water cost, 40% of habitat)	annual	\$13	834	\$10,915	1	\$10,915
electricity/fuel for wells	TNBC (added by TNBC in 2005)	annual	\$5,000	5	\$25,000	1	\$25,000
channel and outlet siltation control	TNBC	accrued			\$1,100,000	8	\$137,500
reclamation district fee	TNBC (See <b>Table 7</b> )	annual					\$0
well reserve	TNBC (added by TNBC in 2004)	accrued			\$9,600	1	\$9,600
<b>Subtotal Water Management</b>							<b>\$183,015</b>
<b>Vegetation Management</b>							
marsh-plant management							
labor	Land Management Contract	annual					
marsh water level management labor	Land Management Contract	annual					
upland-plant management							
mowing perimeter	Land Management Contract	annual					
herbicide	TNBC (amt not incl. in Land Management Contract)	annual	\$125	32	\$4,000	1	\$4,000
labor for vegetation management	TNBC (amt not incl. in Land Management Contract)	annual			\$8,800	1	\$8,800
<b>Subtotal Vegetation Management</b>							<b>\$12,800</b>

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**Table 8**  
**Natomas Basin HCP**  
**Estimated TNBC Operations and Maintenance Annual Costs**  
*(excludes costs covered by Land Management contract and TNBC costs included in other tables)*

**2009 Update**  
 17,500 acres of development  
 1/2 acre of mitigation land per gross acre of developed land  
 25% marsh, 50% rice, 25% other

Task	Comments	Expenditure			Recurrence Interval	Total Annual Cost
		Type	Cost/Item	Items		
<b>Pest Management</b>						
pest management (beaver/muskrat/mosquito)						
muskrat traps	Land Management Contract					
beaver traps	Land Management Contract					
labor for beaver and muskrat control	Land Management Contract					
cottonwood/willow protection	Land Management Contract					
<b>Subtotal Pest Management</b>						<b>\$0</b>
<b>Agriculture Management (rice and alfalfa farming)</b>						
coordination with farmers and grazing tenants	TNBC (See <b>Table 13</b> )	annual			\$0	\$0
field leveling and cleanup	TNBC	annual	\$200	200 acres	\$40,000	\$40,000
<b>Subtotal Agricultural Management</b>						<b>\$40,000</b>
<b>Hunting Management</b>						
manage hunting program	TNBC (See <b>Table 13</b> )	annual			\$0	\$0
coordinate with Sacramento Int. Airport	TNBC (See <b>Table 13</b> )	annual			\$0	\$0
winter water	TNBC	annual			\$0	\$0
<b>Subtotal Hunting Management</b>						<b>\$0</b>
<b>Public Access and Interpretation</b>						
provide guided tours	TNBC (See <b>Table 13</b> )	annual				\$0
prepare handbooks and misc. interpretive material	TNBC (See <b>Table 13</b> )					\$0
<b>Subtotal Public Access and Interpret.</b>						<b>\$0</b>
<b>Monitoring</b>						
general field-monitoring of veg. and wildlife	TNBC (See <b>Table 12</b> )	annual				\$0
site-specific multispecies wildlife survey	TNBC (See <b>Table 12</b> )	accrued				\$0
waterfowl activities	TNBC (See <b>Table 12</b> )	annual				\$0
prepare reports	TNBC (See <b>Table 12</b> )	annual				\$0
general agency coordination	TNBC (See <b>Table 12</b> )	annual				\$0
<b>Subtotal Monitoring</b>						<b>\$0</b>
<b>Adaptive Management</b>						
labor to implement changes to various management practices	TNBC (See <b>Table 12</b> )	annual				\$0
<b>Subtotal Adaptive Management</b>						<b>\$0</b>

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**Table 8**  
**Natomas Basin HCP**  
**Estimated TNBC Operations and Maintenance Annual Costs**  
*(excludes costs covered by Land Management contract and TNBC costs included in other tables)*

**2009 Update**  
 17,500 acres of development  
 1/2 acre of mitigation land per gross acre of developed land  
 25% marsh, 50% rice, 25% other

Task	Comments	Expenditure			Total Cost	Recurrence Interval	Total Annual Cost
		Type	Cost/Item	Items			
<b>Miscellaneous</b>							
mosquito and vector control [2]	TNBC	annual	\$10	1,321 acres	\$13,200	1	\$13,200
trespass management	TNBC	annual			\$5,000	1	\$5,000
site security	TNBC	annual			\$18,000	1	\$18,000
trash clean-up	TNBC	annual			\$5,100	1	\$5,100
truck	Land Management Contract						
atv	Land Management Contract						
trailer for atv	Land Management Contract						
hand tools	Land Management Contract						
backpack sprayer	Land Management Contract						
weed eater	Land Management Contract						
fuels and oils	Land Management Contract						
tractor with implements	Land Management Contract						
trailer for tractor	Land Management Contract						
misc. equipment maintenance	Land Management Contract						
road maintenance	Land Management Contract						
access gate (heavy duty)	Land Management Contract						
access gate (light duty)	Land Management Contract						
perimeter fence (6 strand barbed wire)	Land Management Contract						
perimeter fence (mesh + 2 strand barbed wire)	Land Management Contract						
fence maintenance	TNBC	accrued	\$10,000	1	\$10,000	2	\$5,000
signage	TNBC	annual			\$500	1	\$500
burrowing owl boxes	TNBC	accrued	\$180	4	\$720	15	\$48
insurance	TNBC (see Table 13)	annual					\$0
winter bird management	TNBC	annual			\$7,700	1	\$7,700
project management/administration/misc.							
project coordination (10% of work year)	Land Management Contract	annual					
<b>Subtotal Miscellaneous</b>							<b>\$54,548</b>
<b>Subtotal All Costs</b>							<b>\$290,363</b>
Contingency						10%	\$29,036
<b>Total Costs</b>							<b>\$319,399</b>
Acre Allocation							4,172
<b>Estimated Cost per Acre</b>							<b>\$76.55</b>

"o&m tnbc"

Source: Wildlands, Inc. and TNBC

[1] It is assumed that winter water fees will be paid on 40% of the acres and that TNBC will be reimbursed by farmers for 1/2 of the charges.

[2] Estimated as \$10 per acre on 75% of Sacramento County acres.

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**Table 9**  
**Natomas Basin HCP**  
**Estimated TNBC Fixed Asset Annual Costs (2009 \$)**

**2009 Update**  
 17,500 acres of development  
 1/2 acre of mitigation land per gross acre of developed land  
 25% marsh, 50% rice, 25% other

Property	Description	Year Acquired	Recurrence Interval	Years Remaining	Cost Per Item	Items	Total Cost	Total Cost (2009 \$)		Annual Cost
								3% annual inflation		
SLV	House - 9055 E. Levee Road *	1999	n/a	n/a			\$170,000			
SLV	Pole Barn *	1999	n/a	n/a			\$15,000			
SLV	Large Dairy Barn *	1999	n/a	n/a			\$172,700			
SLV	Quonset Hut *	1999	n/a	n/a			\$50,000			
BTS	House - 8701 E. Levee Road *	1999	n/a	n/a			\$90,000			
BTS	Betts Barn *	1999	n/a	n/a			\$30,000			
BTS	Well & Pump (residential)	1995	20	7.00	\$12,500	1	\$12,500	\$18,907		\$945
BTS	Pump (irrigation pump)	1995	20	2.00	\$80,000	1	\$80,000	\$121,007		\$6,050
BTS	Well (not in use)	1995	n/a	n/a			\$80,000			
SLV	Northern Barn	1995	n/a	n/a			\$30,000			
SLV	Maint. Shed (milking parlor?)	1995	n/a	n/a			\$45,000			
SLV	Well & Pump (Quonset hut - domestic)	1995	20	7.00	\$12,500	1	\$12,500	\$18,907		\$945
SLV	Well & Pump (Northern barn - well collapsed & pump destroyed)	2005	n/a	17.00			\$80,000			
SLV	Well & Pump (Northern barn - new well & pump)	2006	20	18.00	\$78,563	1	\$78,563	\$85,848		\$4,292
SLV	Pump (abandoned, north property line)	1995	n/a	n/a			\$80,000			
SLV	Pump (abandoned, south property line)	1995	n/a	n/a			\$80,000			
KSM	Lift pump (pond)	2003	20	15.00	\$42,000	1	\$42,000	\$50,150		\$2,508
* These assets had no value assigned at date of acquisition. Two houses were appraised on 02/05/04. Those appraised values are used here. The other barns and out buildings were quantified by John Roberts based on replacement costs for insurance purposes. Those values are used here.										
BKS Fencing**										
BKS	BW Fencing 5-strand	2000	20	12		9,632.59 ft	\$18,302	\$23,880		\$1,194
BKS	16' Stock Gates	2000	20	12	\$115	4	\$460	\$600		\$30
BKS	BW Fencing 5-strand	2001	20	13		3,959 ft	\$7,522	\$9,529		\$476
BKS	16' Stock Gates	2001	20	13	\$123	3	\$370	\$469		\$23
BKS	16' Stock Gate and setup	2001	20	13	\$275	1	\$275	\$348		\$17
BKS	BW Fencing 5-strand	2001	20	13		2,293.3 ft	\$4,365	\$5,529		\$276
BKS	BW Fencing 2-strand	2001	15	8		621 ft	\$2,329	\$2,950		\$197
BKS	BW Fencing 5-strand	2001	20	13		1,749 ft	\$1,185	\$1,501		\$75
BKS	Stock Gates	2001	20	13	\$100	2	\$200	\$253		\$13
SLV	BW Fencing	2001	20	13		730 ft	\$1,643	\$2,081		\$104
BTS	BW Fencing 5-strand	2002	20	14		1,340 ft	\$3,015	\$3,708		\$185
SLV	BW Fencing 3-strand	2003	15	10		350 ft	\$1,365	\$1,630		\$109
SLV	BW Fencing 1-strand	2003	15	10		526 ft	\$2,051	\$2,449		\$163

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**Table 9**  
**Natomas Basin HCP**  
**Estimated TNBC Fixed Asset Annual Costs (2009 \$)**

**2009 Update**  
 17,500 acres of development  
 1/2 acre of mitigation land per gross acre of developed land  
 25% marsh, 50% rice, 25% other

Property	Description	Year Acquired	Recurrence Interval	Years Remaining	Cost Per Item	Items	Total Cost	Total Cost (2009 \$)	Annual Cost
SLV	Security Gates	2003	25	19	\$450	6	\$2,700	\$3,224	\$129
BKS	Goat fencing	2007	20	19			\$11,155	\$11,834	\$592
SLV	Ayala Bridge labor	2008	20	20			\$13,032	\$13,423	\$671
SLV	Ayala Bridge - Pipes & risers	2008	20	20			\$7,748	\$7,980	\$399
** Minor repairs and maintenance may extend reoccurrence interval period									
BKS Water Control Structures									
BKS	3'x4' Water Control Structure Assembly w/24" Dia Pipe	2001	50	43	\$2,500	9	\$22,500	\$28,502	\$570
BKS	New gates over WCS 3x4	2001	10	3	\$105	11	\$1,155	\$1,463	\$146
BKS	4'x4' Water Control Structure Assembly w/30" Dia Pipe	2001	50	43	\$2,750	9	\$24,750	\$31,353	\$627
BKS	New gates over WCS 4x4	2001	10	3	\$130	10	\$1,300	\$1,647	\$165
BKS	4'x5' Water Control Structure Assembly w/36" Dia Pipe	2001	50	43	\$4,200	2	\$8,400	\$10,641	\$213
BKS	75'x15'x1' rock pad with Geotech Fabric	2001	15	8	\$3,000	1	\$3,000	\$3,800	\$253
BKS	Spillway Assembly	2001	20	13	\$4,850	18	\$87,300	\$110,589	\$5,529
BKS	Soil cover over 15 spillways (sealing)	2001	10	3	\$150	15	\$2,250	\$2,850	\$285
KSM	Water lift pump, standpipe, pipeline assembly (barn area)	2001	25	18	\$57,753	1	\$57,753	\$73,160	\$2,926
BKS	30" Dia Corrugated Polyethylene pipe, Installed	2001	20	13	\$65	90	\$5,850	\$7,411	\$371
BKS	Canal Gate & Pipe Assembly	2001	20	13	\$6,000	1	\$6,000	\$7,601	\$380
BKS	12" water slides in diversion structure	2001	15	8	\$1,100	2	\$2,200	\$2,787	\$186
LUCN/FRZ	Gates (incl Dbl Wide)	2003	20	15		5	\$2,473	\$2,953	\$148
FRZ	Well & pump (50 hp)	2004	20	16		1	\$80,000	\$92,742	\$4,637
LUCN	Well & pump (75 hp)	1999	20	9		1	\$95,000	\$127,672	\$6,384
LUCN/FRZ	3'x5' Water Control Structure Assemblies w/18" dia pimp, 40'	2004	50	46	\$2,350	9	\$21,150	\$24,519	\$490
LUCN/FRZ	3'x5' Water Control Structure Assemblies w/24" dia pimp, 40'	2004	50	46	\$2,550	7	\$17,850	\$20,693	\$414
LUCN/FRZ	5'x5' Water Control Structure Assemblies w/24" dia pimp, 40'	2004	50	46	\$2,900	3	\$8,700	\$10,086	\$202
LUCN/FRZ	Grates over WCS 3'x5' - existing (5) and proposed structures	2004	10	6	\$110	21	\$2,310	\$2,678	\$268
LUCN/FRZ	Grates over WCS 3'x5' - proposed structures	2004	10	6	\$150	3	\$450	\$522	\$52
FRZ	Fencing & signs	2006	15	13			\$1,746	\$1,908	\$127
LUCN	Electrical upgrades	2008	20	20			\$3,448	\$3,551	\$178
LUCN	RV electrical hook-up	2008	20	20			\$1,240	\$1,277	\$64

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**Table 9**  
**Natomas Basin HCP**  
**Estimated TNBC Fixed Asset Annual Costs (2009 \$)**

**2009 Update**  
 17,500 acres of development  
 1/2 acre of mitigation land per gross acre of developed land  
 25% marsh, 50% rice, 25% other

Property	Description	Year Acquired	Recurrence Interval	Years Remaining	Cost Per Item	Items	Total Cost	Total Cost (2009 \$)		Annual Cost
								3% annual inflation		
BENN	16" dia. well	2006	20	18	\$47,160	1	\$47,160	\$51,533	\$2,577	
BENN	Weir & gasket pipe	2006	20	18	\$2,354	1	\$2,354	\$2,572	\$129	
BENN	60 hp pump @ 100'	2007	20	19	\$37,211	1	\$37,211	\$39,477	\$1,974	
BENN	3' x 6' Water Control Structure Assembly with canal gate and 24" c	2007	50	49	\$4,030	1	\$4,030	\$4,275	\$86	
BENN	24" x 50' culvert (C)	2007	50	49	\$2,985	1	\$2,985	\$3,167	\$63	
BENN	3' x 3' Water Control Structure Assembly with 24" diameter pipe, 2	2007	50	49	\$2,595	1	\$2,595	\$2,753	\$55	
BENN	3' x 2' Water Control Structure Assembly with 12" diameter pipe, 2	2007	50	49	\$2,118	1	\$2,118	\$2,247	\$45	
BENN	12" x 20' culvert (F)	2007	50	49	\$1,750	1	\$1,750	\$1,857	\$37	
BENN	3' x 6' Water Control Structure Assembly with 24" diameter pipe, 6	2007	50	49	\$3,390	10	\$33,900	\$35,965	\$719	
BENN	3' x 6' Water Control Structure Assembly with 24" diameter pipe, 1	2007	50	49	\$6,475	2	\$12,950	\$13,739	\$275	
BENN	3' x 6' Water Control Structure Assembly with canal gate and 24" c	2007	50	49	\$5,720	1	\$5,720	\$6,068	\$121	
BENN	1 - 3' x 6' Water Control Structure Assembly with 24" diameter pipe	2007	50	49	\$3,090	1	\$3,090	\$3,278	\$66	
BENN	Fencing	2008	15	15			\$4,880	\$5,027	\$335	
BENN	Duck blinds & installation	2008	20	20			\$12,010	\$12,370	\$619	
BENN	Irrigation supplies - drain line & riser box	2008	20	20			\$1,849	\$1,905	\$95	
BENS	16' Gate (Dbl Wide)	2004	15	11	\$375	1	\$375	\$435	\$29	
BENS	14' Gate	2005	15	12	\$275	3	\$825	\$929	\$62	
BENS	BW Fencing 3-strand	2004	15	11		1,600 ft	\$6,240	\$7,234	\$482	
BENS	Fencing & signs	2006	15	13			\$7,346	\$8,028	\$535	
LB2	3'x3' Water Control Structure Assembly w/24" Dia Pipe, 40'	2002	50	44	\$2,350	1	\$2,350	\$2,890	\$58	
LB2	3'x4' Water Control Structure Assembly w/18" Dia Pipe, 40'	2002	50	44	\$2,350	1	\$2,350	\$2,890	\$58	
LB2	3'x4' Water Control Structure Assembly w/24" Dia Pipe, 40'	2002	50	44	\$2,400	2	\$4,800	\$5,903	\$118	
LB2	3'x4' Water Control Structure Assembly w/24" Dia Pipe, 20'	2002	50	44	\$2,000	2	\$4,000	\$4,919	\$98	
LB2	3'x6' Water Control Structure Assembly w/18" Dia Pipe, 40'	2002	50	44	\$2,600	2	\$5,200	\$6,395	\$128	
LB2	3'x5' Water Control Structure Assembly w/18" Dia Pipe, 40'	2002	50	44	\$2,550	4	\$10,200	\$12,545	\$251	
LB2	3'x6' Water Control Structure Assembly w/24" Dia Pipe, 40'	2002	50	44	\$2,650	4	\$10,600	\$13,037	\$261	
LB2	3'x5' Water Control Structure Assembly w/24" Dia Pipe, 40'	2002	50	44	\$2,600	1	\$2,600	\$3,198	\$64	
LB2	3'x5' Canal Gate Structure Assembly w/18" Dia Pipe, 40'	2002	50	44	\$3,650	1	\$3,650	\$4,489	\$90	
LB2	3'x5' Canal Gate Structure Assembly w/24" Dia Pipe, 40'	2002	50	44	\$3,850	2	\$7,700	\$9,470	\$189	
LB2	3'x8' Canal Gate Structure Assembly w/24" Dia Pipe, 40'	2002	50	44	\$4,300	1	\$4,300	\$5,288	\$106	
LB2	Grates over WCS 3'x4'	2002	10	4	\$105	21	\$2,205	\$2,712	\$271	
LB2	Security Gates and Gateways	2002	15	9		?	\$2,922	\$3,594	\$240	
LB2	21' Custom made Security Gates with Lock Boxes and Hangars	2002	20	14	\$450	5	\$2,250	\$2,767	\$138	

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**Table 9**  
**Natomas Basin HCP**  
**Estimated TNBC Fixed Asset Annual Costs (2009 \$)**

**2009 Update**  
 17,500 acres of development  
 1/2 acre of mitigation land per gross acre of developed land  
 25% marsh, 50% rice, 25% other

Property	Description	Year Acquired	Recurrence Interval	Years Remaining	Cost Per Item	Items	Total Cost	Total Cost (2009 \$)	Annual Cost
HUFW	Well & pump (50 hp)	2003	20	2		1	\$80,000	\$95,524	\$4,776
HUFW	Diversion Pump (20 hp)(1/2 Interest)	2003	20	7		1	\$30,000	\$35,822	\$1,791
ATKE	Gate	2003	20	15	\$450	1	\$450	\$537	\$27
ATKE	Lift pump (25 hp)	2003	20	7	\$45,000	1	\$45,000	\$53,732	\$2,687
ATKW	Well & pump (30 hp)	2003	20	2		1	\$50,000	\$59,703	\$2,985
RUR	Gate (Dbl Wide)	2003	20	15	\$450	2	\$900	\$1,075	\$54
SILS	15' Security Gate wih Lock Boxes and Hangars	2002	20	14	\$450	2	\$900	\$1,107	\$55
SILS	Culverts cleared and pipes replaced	2006	10	8		2	\$6,517	\$7,121	\$712
SOU/NAF	BW Fencing 1-strand	2003	15	10		11,210 ft	\$43,719	\$52,203	\$3,480
SOU/NAF	Gates (incl Rainey)	2003	15	10		6	\$4,635	\$5,534	\$369
NAF	Ballards around well	2005	50	47		8	\$2,237	\$2,518	\$50
NAF	BW Fencing 10-strand	2005	20	17		4,500 ft	\$35,821	\$40,317	\$2,016
SOU	Fencing	2006	15	13			\$1,675	\$1,830	\$122
NAF	Well & pump (60 hp)	2005	20	17		1	\$95,000	\$106,923	\$5,346
SOU/NAF	3'x5' Water Control Structure Assembly w/18" Dia Pipe, 40'	2003	50	44	\$2,500	1	\$2,500	\$2,985	\$60
SOU/NAF	3'x5' Water Control Structure Assembly w/18" Dia Pipe, 60'	2003	50	44	\$2,800	1	\$2,800	\$3,343	\$67
SOU/NAF	3'x5' Canal Gate Structure Assembly w/18" Dia Pipe, 20'	2003	50	44	\$3,075	1	\$3,075	\$3,672	\$73
SOU/NAF	3'x5' Canal Gate Structure Assembly w/18" Dia Pipe, 40'	2003	50	44	\$3,500	3	\$10,500	\$12,538	\$251
SOU/NAF	Grates over WCS	2003	10	4	\$105	6	\$630	\$752	\$75
CMS	13' Security Gate with Lock Boxes and Hangars	2002	20	14	\$450	2	\$900	\$1,107	\$55
CMS	Gates (incl Dbl Wide)	2004	15	11		4	\$3,105	\$3,600	\$240
CMS	Fencing	2004	15	11		7,400 ft	\$33,300	\$38,604	\$2,574
CMS	3'x3' Water Control Structure Assembly w/24" Dia Pipe, 20'	2004	50	46	\$2,546	1	\$2,546	\$2,952	\$59
CMS	3'x5' Water Control Structure Assembly w/18" Dia Pipe, 40'	2004	50	46	\$2,988	4	\$11,952	\$13,856	\$277
CMS	3'x5' Canal Gate Structure Assembly w/24" Dia Pipe, 40'	2004	50	46	\$3,289	1	\$3,289	\$3,813	\$76
CMS	Grates over WCS 3'x3'	2004	10	6	\$602	1	\$602	\$698	\$70
CMS	Grates over WCS 3'x5'	2004	10	6	\$602	5	\$3,012	\$3,492	\$349
CMS	Well & pump (20 hp)	2004	20	12		1	\$80,000	\$92,742	\$4,637

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**Table 9**  
**Natomas Basin HCP**  
**Estimated TNBC Fixed Asset Annual Costs (2009 \$)**

**2009 Update**  
 17,500 acres of development  
 1/2 acre of mitigation land per gross acre of developed land  
 25% marsh, 50% rice, 25% other

Property	Description	Year Acquired	Recurrence Interval	Years Remaining	Cost Per Item	Items	Total Cost	Total Cost (2009 \$)	Annual Cost
<i>3% annual inflation</i>									
CMS	Fencing	2006	15	13			\$1,092	\$1,194	\$80
ALG	Security Gate	2002	20	14		1	\$1,131	\$1,391	\$70
All properties	Signage	2002	5	0	\$120	70	\$8,416	\$10,351	\$2,070
All properties	Signage, fencing materials	2006	5	3			\$8,654	\$9,456	\$1,891
All properties	Signage	2007	10	9	12	100	\$1,446	\$1,534	\$153
All properties	Risers	2007	20	19	\$275	5	\$1,375	\$1,459	\$73
All properties	Pipes	2007	10	9	\$13	260	\$3,388	\$3,594	\$359
All properties	Fencing (goat fencing and panels)	2008	15	15			\$2,539	\$2,615	\$174
BOLS	Well & pump (60 hp)	2004	20	17		1	\$95,000	\$110,131	\$5,507
BOLN	Gate (Dbl Wide)	2005	20	7		1	\$2,500	\$2,814	\$141
BOLN	Gate	2005	20	7		1	\$1,500	\$1,688	\$84
Rosa	BW Fencing 10-strand	2006	20	18		2350 ft.	\$16,450	\$17,975	\$899
Rosa	Gates / signs / painting	2006	20	18		5	\$8,155	\$8,911	\$446
VES	Fencing & signs	2006	15	13			\$1,889	\$2,064	\$138
Elsie	Irrigation supplies - riser boxes	2008	20	20			\$1,485	\$1,529	\$76
Nestor	Irrigation supplies - drain line, riser box	2008	20	20			\$1,786	\$1,840	\$92
<b>TOTAL</b>							<b>\$2,651,843</b>	<b>\$100,037</b>	
<b>Habitat Acres</b>									<b>4,172</b>
<b>Cost per Habitat Acre</b>									<b>\$23.98</b>

"fixed assets"

Source: TNBC

**2009 Update**

17,500 acres of development

1/2 acre of mitigation land per gross acre of developed land

25% marsh, 50% rice, 25% other

**Table 10**  
**Natomas Basin HCP**  
**Estimated Property Taxes (2009-2047)**

Year Acquired	Acres	Value per Acre <i>10% annual increase after 2010</i>	Total Value	Property Taxes				
				Taxes on New Acres (inflated \$) <i>1% of total value</i>	Taxes on New Acres (2009 \$) <i>assumes 3% inflation rate</i>	Total Annual Property Taxes (2009 \$)	Percentage Adjustment <i>[1]</i>	Adjusted Total Annual Taxes (2009 \$) <i>[2]</i>
1999-2008 [3]	4,172.12	\$ 11,424	\$ 47,661,892	\$ 476,619	\$ 476,619			
2009	-	\$ 30,000	\$ 0	\$ 0	\$ 0	\$ 476,619	95%	\$ 452,788
2010	-	\$ 30,000	\$ 0	\$ 0	\$ 0	\$ 476,619	93%	\$ 443,256
2011	100.00	\$ 33,000	\$ 3,300,000	\$ 33,000	\$ 31,106	\$ 507,725	91%	\$ 462,029
2012	74.63	\$ 36,300	\$ 2,709,209	\$ 27,092	\$ 24,793	\$ 532,518	89%	\$ 473,941
2013	379.99	\$ 39,930	\$ 15,172,909	\$ 151,729	\$ 134,809	\$ 667,327	87%	\$ 580,575
2014	379.99	\$ 43,923	\$ 16,690,200	\$ 166,902	\$ 143,971	\$ 811,298	85%	\$ 689,603
2015	379.99	\$ 48,315	\$ 18,359,220	\$ 183,592	\$ 153,756	\$ 965,054	83%	\$ 800,995
2016	354.99	\$ 53,147	\$ 18,866,471	\$ 188,665	\$ 153,402	\$ 1,118,455	81%	\$ 905,949
2017	327.50	\$ 58,462	\$ 19,145,903	\$ 191,459	\$ 151,140	\$ 1,269,595	79%	\$ 1,002,980
2018	279.99	\$ 64,308	\$ 18,005,355	\$ 180,054	\$ 137,996	\$ 1,407,591	77%	\$ 1,083,845
2019	279.99	\$ 70,738	\$ 19,805,891	\$ 198,059	\$ 147,374	\$ 1,554,965	75%	\$ 1,166,224
2020	279.99	\$ 77,812	\$ 21,786,480	\$ 217,865	\$ 157,390	\$ 1,712,356	73%	\$ 1,250,020
2021	279.99	\$ 85,594	\$ 23,965,128	\$ 239,651	\$ 168,087	\$ 1,880,442	71%	\$ 1,335,114
2022	186.68	\$ 94,153	\$ 17,575,984	\$ 175,760	\$ 119,684	\$ 2,000,126	69%	\$ 1,380,087
2023	186.68	\$ 103,568	\$ 19,333,582	\$ 193,336	\$ 127,818	\$ 2,127,944	67%	\$ 1,425,722
2024	186.68	\$ 113,925	\$ 21,266,940	\$ 212,669	\$ 136,504	\$ 2,264,448	65%	\$ 1,471,891
2025	186.68	\$ 125,317	\$ 23,393,634	\$ 233,936	\$ 145,781	\$ 2,410,230	63%	\$ 1,518,445
2026	186.68	\$ 137,849	\$ 25,732,997	\$ 257,330	\$ 155,689	\$ 2,565,918	61%	\$ 1,565,210
2027	186.68	\$ 151,634	\$ 28,306,297	\$ 283,063	\$ 166,270	\$ 2,732,188	59%	\$ 1,611,991
2028	186.67	\$ 166,798	\$ 31,136,927	\$ 311,369	\$ 177,570	\$ 2,909,758	57%	\$ 1,658,562
2029	186.67	\$ 183,477	\$ 34,250,620	\$ 342,506	\$ 189,637	\$ 3,099,395	55%	\$ 1,704,667
2030	173.35	\$ 201,825	\$ 34,986,363	\$ 349,864	\$ 188,069	\$ 3,287,464	53%	\$ 1,742,356
2031	-	\$ 222,007	\$ 0	\$ 0	\$ 0	\$ 3,287,464	51%	\$ 1,676,607
2032	-	\$ 244,208	\$ 0	\$ 0	\$ 0	\$ 3,287,464	50%	\$ 1,643,732
2033	-	\$ 268,629	\$ 0	\$ 0	\$ 0	\$ 3,287,464	50%	\$ 1,643,732
2034	-	\$ 295,492	\$ 0	\$ 0	\$ 0	\$ 3,287,464	50%	\$ 1,643,732
2035	-	\$ 325,041	\$ 0	\$ 0	\$ 0	\$ 3,287,464	50%	\$ 1,643,732
2036	-	\$ 357,545	\$ 0	\$ 0	\$ 0	\$ 3,287,464	50%	\$ 1,643,732
2037	-	\$ 393,300	\$ 0	\$ 0	\$ 0	\$ 3,287,464	50%	\$ 1,643,732
2038	-	\$ 432,630	\$ 0	\$ 0	\$ 0	\$ 3,287,464	50%	\$ 1,643,732
2039	-	\$ 475,893	\$ 0	\$ 0	\$ 0	\$ 3,287,464	50%	\$ 1,643,732
2040	-	\$ 523,482	\$ 0	\$ 0	\$ 0	\$ 3,287,464	50%	\$ 1,643,732
2041	-	\$ 575,830	\$ 0	\$ 0	\$ 0	\$ 3,287,464	50%	\$ 1,643,732
2042	-	\$ 633,413	\$ 0	\$ 0	\$ 0	\$ 3,287,464	50%	\$ 1,643,732
2043	-	\$ 696,755	\$ 0	\$ 0	\$ 0	\$ 3,287,464	50%	\$ 1,643,732
2044	-	\$ 766,430	\$ 0	\$ 0	\$ 0	\$ 3,287,464	50%	\$ 1,643,732
2045	-	\$ 843,073	\$ 0	\$ 0	\$ 0	\$ 3,287,464	50%	\$ 1,643,732
2046	-	\$ 927,380	\$ 0	\$ 0	\$ 0	\$ 3,287,464	50%	\$ 1,643,732
2047	-	\$ 1,020,118	\$ 0	\$ 0	\$ 0	\$ 3,287,464	50%	\$ 1,643,732
<b>Total [4]</b>	<b>8,955.90</b>		<b>\$ 461,452,000</b>	<b>\$ 4,614,520</b>	<b>\$ 3,287,464</b>	<b>\$ 92,664,922</b>		<b>\$ 52,702,568</b>

*prop taxes*

[1] Property taxes adjusted to account for Williamson Act, welfare exemptions, and decreasing habitat valuation over time.

[2] Includes contingency. Actual property tax amount equals approximately \$140,363 (excluding RD 1000 of \$60,451).

[3] See **Table 11** for the estimated assessed value (in 2008 \$) of existing habitat.

[4] Includes supplemental mitigation acres and taxes.



**Table 11**  
**Natomas Basin HCP**  
**2009 Property Tax Assumptions**

**2009 Update**  
*17,500 acres of development*  
*1/2 acre of mitigation land per gross acre of developed land*  
*25% marsh, 50% rice, 25% other*

Property	Year Acquired	Acres			Cost	Assessed Value Adjustment Factor	2009 Value	Estimated 2009 Value per Acre
		Sacramento County	Sutter County	Total				
						<i>2.00% per year</i>		
Silva	1999	155.31	3.89	159.200	\$ 478,500	1.219	\$ 583,289	\$ 3,664
Betts	1999	121.78	17.21	138.992	\$ 451,265	1.219	\$ 550,090	\$ 3,958
Kismat	1999	40.29		40.293	\$ 140,000	1.219	\$ 170,659	\$ 4,235
Bennett North	1999		226.68	226.675	\$ 816,030	1.219	\$ 994,736	\$ 4,388
Bennett South	1999		132.49	132.486	\$ 476,950	1.219	\$ 581,399	\$ 4,388
Lucich North	1999		267.99	267.986	\$ 1,071,944	1.219	\$ 1,306,694	\$ 4,876
Lucich South	1999		351.89	351.889	\$ 1,324,836	1.219	\$ 1,614,968	\$ 4,589
Brennan [1]	2000		-	-	\$ 0	1.195	\$ 0	\$ 0
Frazer	2000		92.60	92.600	\$ 388,920	1.195	\$ 464,795	\$ 5,019
Souza	2001	40.00		40.000	\$ 444,882	1.172	\$ 521,250	\$ 13,031
Natomas Farms	2001	96.46		96.460	\$ 1,060,000	1.172	\$ 1,241,959	\$ 12,875
Ayala [1]	2002	-		-	\$ 0	1.149	\$ 0	\$ 0
Sills [2]	2002	436.06		436.056	\$ 3,272,753	1.149	\$ 3,759,365	\$ 8,621
Alleghany	2002	50.26		50.260	\$ 415,933	1.149	\$ 477,777	\$ 9,506
Cummings	2002	66.83		66.831	\$ 553,092	1.149	\$ 635,329	\$ 9,507
Atkinson	2003		205.40	205.397	\$ 1,853,694	1.126	\$ 2,087,561	\$ 10,164
Ruby Ranch	2003		91.08	91.078	\$ 1,092,960	1.126	\$ 1,230,850	\$ 13,514
Huffman West	2003		181.03	181.030	\$ 2,190,420	1.126	\$ 2,466,769	\$ 13,626
Huffman East	2003		135.75	135.746	\$ 1,085,968	1.126	\$ 1,222,976	\$ 9,009
Tufts	2004	147.95		147.950	\$ 2,963,000	1.104	\$ 3,271,391	\$ 22,111
Bolen North	2005		113.6	113.619	\$ 1,704,285	1.082	\$ 1,844,773	\$ 16,236
Bolen South	2005		102.38	102.381	\$ 1,535,715	1.082	\$ 1,662,307	\$ 16,236
Rosa [3]	2005	206.30		206.298	\$ 2,069,880	1.082	\$ 2,240,505	\$ 10,861
Vestal	2005		94.95	94.951	\$ 3,798,040	1.082	\$ 4,111,121	\$ 43,297
Nestor [3]	2006		233.16	233.160	\$ 4,796,334	1.061	\$ 5,089,908	\$ 21,830
Bolen West [3]	2006		155.14	155.141	\$ 3,191,406	1.061	\$ 3,386,746	\$ 21,830
Frazier South [4]	2006	110.37		110.372	\$ 172,308	1.040	\$ 179,269	\$ 1,624
Bianchi West [4]	2006	110.16		110.160	\$ 444,308	1.040	\$ 462,258	\$ 4,196
Elsie [4]	2006	158.03		158.031	\$ 5,289,456	1.040	\$ 5,503,150	\$ 34,823
<b>Easements</b>								
RD1000 @ LUCS	2003		4.64	4.635		1.126		
RD1000 @ BENN	2003		1.12	1.123		1.126		
Sills South-West border	2005	12.58		12.580		1.082		
Sills South-East border	2005	5.20		5.197		1.082		
Bianchi North	2006	3.54		3.540		1.061		
<b>TOTAL</b>		<b>1,761.12</b>	<b>2,411.00</b>	<b>4,172.12</b>	<b>\$ 43,082,879</b>		<b>\$ 47,661,892</b>	<b>\$ 11,424</b>
Percent of Total Acres		42%	58%					

**Estimated 2008 Property Taxes per Acre**

**\$ 114.24**

[1] Costs reduced to \$0 because Brennan tract was surrendered in a land trade for Nestor and Bolen West, and Ayala was surrendered in a land trade for Frazier South, Bianchi West, and Elsie.

*"prop tax assumps"*

[2] Cost reduced from original cost to account for the acres surrendered in the Sills-Rosa land trade, as shown below.

	Acres	Cost per Acre	Total Cost
<b>Sills Property</b>	575.56	\$ 7,499	\$ 4,316,286
<b>Less Acres Surrendered</b>	(139.15)	\$ 7,499	(\$ 1,043,532)
<b>Acres Remaining</b>	<b>436.41</b>	<b>\$ 7,499</b>	<b>\$ 3,272,753</b>

[3] Costs reflect the 2006 assessed value. The actual costs were \$0 because the Rosa, Nestor, and Bolen West tracts were acquired in a land trade.

[4] Costs reflect the 2007 assessed value. The actual costs were \$0 because these properties were acquired in a land trade. Although the properties were acquired in 2006, the assessed value is as of 2007, so the cost is escalated from 2007 2% to estimate the 2009 value.

**Table 12**  
**Natomas Basin HCP**  
**Species and Habitat Monitoring Cost Assumptions (2009 \$)**

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**2009 Update**  
17,500 acres of development  
1/2 acre of mitigation land per gross acre of developed land  
25% marsh, 50% rice, 25% other

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Task	Amount
<b>BIOLOGICAL EFFECTIVENESS MONITORING (Jones &amp; Stokes 2009 contract costs)</b>	
Project Management	\$24,500
Vegetation Management	\$21,060
Other Covered Species Monitoring	\$52,880
Giant Garter Snake Monitoring	\$3,200
Swainson's Hawk Monitoring	\$1,600
Draft Annual Report	\$46,400
Final Annual Report	\$9,960
Direct Expenses	\$163,802
<b>Total</b>	<b>\$323,402</b>
<b>Other Costs</b>	
Connectivity -- Assessment	\$2,400
Connectivity -- O&M	\$5,000
Adaptive Management -- Periodic Review of NBHCP Monitoring Data	\$3,600
Adaptive Management -- Report to Review Adaptive Management.	\$6,120
<b>Total</b>	<b>\$17,120</b>
<b>TOTAL SPECIES AND HABITAT MONITORING COSTS</b>	<b>\$340,522</b>
Midpoint Program Reviews [1]	<b>\$135,000</b>

*"monitoring assumps"*

Source: Jones & Stokes, TNBC

[1] Overall program review (\$125,000) plus support for Sutter County midpoint review (\$10,000). These midpoint reviews are projected for 2014.

**Table 13**  
**Natomas Basin HCP**  
**Estimated Administrative Costs**

<b>2009 Update</b>			
<i>17,500 acres of development</i>			
<i>1/2 acre of mitigation land per gross acre of developed land</i>			
<i>25% marsh, 50% rice, 25% other</i>			
	2009 Annual Cost	2008 Annual Cost	Notes
<u>Administrative Expenses</u>			
Staff	\$312,069	\$298,673	
Benefits and Charges	\$99,862	\$107,522	
Board Expense	\$10,000	\$10,000	
<b>Subtotal</b>	<b>\$421,931</b>	<b>\$416,195</b>	
<u>Office Expense</u>			
Rent	\$66,000	\$65,000	
Telephone	\$20,000	\$20,000	
Copying and Printing	\$25,000	\$25,000	
Office Supplies	\$20,000	\$20,000	
Postage	\$3,000	\$3,000	
Equipment	\$10,000	\$10,000	
Auto Expense	\$18,000	\$18,000	
<b>Subtotal</b>	<b>\$162,000</b>	<b>\$161,000</b>	
<u>Miscellaneous Expense</u>			
Insurance	\$40,000	\$40,000	Liability, Directors & Officers, Boiler & Machinery, and Auto
Accounting	\$25,000	\$20,000	
Legal	\$60,000	\$60,000	
Fees and Taxes	\$100,000	\$100,000	
<b>Subtotal</b>	<b>\$225,000</b>	<b>\$220,000</b>	
<u>Contract Work</u>			
Contract Work, Public Education, and Publications [1]	\$42,500	\$125,000	
<b>Subtotal Costs</b>	<b>\$851,431</b>	<b>\$922,195</b>	
Contingency	\$127,715	\$138,329	15% Contingency
<b>Total Administration during Habitat Acquisition</b>	<b>\$979,145</b>	<b>\$1,060,524</b>	
<b>Total Administration after Habitat Acquisition</b>	<b>\$979,145</b>	<b>\$1,060,524</b>	

*"admin\_assumps"*

Source: TNBC FY 2009 budget estimate

[1] Excludes: Land management contract amount, which is included in the O&M costs in **Table 7** and monitoring costs, which are included in **Table 12**. Estimate for 2008 has been adjusted from the amount shown in last year's to account for the land management contract and monitoring costs.

**Table 14**  
**Natomas Basin HCP**  
**Supplemental Endowment Cost Assumptions**

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**2009 Update**  
*17,500 acres of development*  
*1/2 acre of mitigation land per gross acre of developed land*  
*25% marsh, 50% rice, 25% other*

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Item	Amount
<b>200-Acre Reserve or Purchase of Final 200 Acres</b>	
Total Cost per Acre	\$30,000
Acres	200
<b>Total Estimated Acquisition Cost</b>	<b>\$6,000,000</b>
Less Supplemental Endowment Fund Balance (excluding Changed Circum. portion)	(\$813,442)
<b>Total Remaining Cost</b>	<b>\$5,186,558</b>
Remaining Development (acres)	10,578
Total Cost per Developed Acre	\$490
<b>Total Cost per Habitat Acre</b>	<b>\$981</b>
<b>Changed Circumstance Contingency</b>	
<b>Total Cost per Habitat Acre</b>	<b>\$500</b>
<b>TOTAL COST PER HABITAT ACRE</b>	<b>\$1,481</b>

*"supp\_endow\_assumps"*

Source: The Natomas Basin Conservancy and EPS

**Table 15**  
**Natomas Basin HCP**  
**Development Projections**

**2009 Update**  
*17,500 acres of development*  
*1/2 acre of mitigation land per gross acre of developed land*  
*25% marsh, 50% rice, 25% other*

<b>Year</b>	<b>City of Sacramento</b>	<b>Metro Air Park</b>	<b>Sutter County</b>	<b>Total Acres</b>	<b>Adjustment for Acres with Prepaid Fees</b>	<b>Acres for Fee Calculations</b>
<b>Actual Acres</b>						
1996	30.41			<b>30.41</b>		<b>30.41</b>
1997	104.90			<b>104.90</b>		<b>104.90</b>
1998	1,380.36			<b>1,380.36</b>		<b>1,380.36</b>
1999	1,465.47			<b>1,465.47</b>		<b>1,465.47</b>
2000	598.07			<b>598.07</b>		<b>598.07</b>
2001	242.09			<b>242.09</b>		<b>242.09</b>
2002	777.81			<b>777.81</b>		<b>777.81</b>
2003	[1] 925.22	116.75		<b>1,041.96</b>		<b>1,041.96</b>
2004	178.08			<b>178.08</b>	169.67	<b>347.74</b>
2005	848.06			<b>848.06</b>	(169.67)	<b>678.39</b>
2006	132.27			<b>132.27</b>		<b>132.27</b>
2007	103.15			<b>103.15</b>		<b>103.15</b>
2008	19.11			<b>19.11</b>		<b>19.11</b>
<b>Subtotal</b>	<b>6,804.98</b>	<b>116.75</b>	<b>-</b>	<b>6,921.73</b>	<b>-</b>	<b>6,921.73</b>
<b>Projected Acres</b>						
2009						-
2010				-		-
2011	200.00			<b>200.00</b>		<b>200.00</b>
2012	200.00	186.63	373.35	<b>759.98</b>		<b>759.98</b>
2013	200.00	186.63	373.35	<b>759.98</b>		<b>759.98</b>
2014	200.00	186.63	373.35	<b>759.98</b>		<b>759.98</b>
2015	200.00	186.63	373.35	<b>759.98</b>		<b>759.98</b>
2016	150.00	186.63	373.35	<b>709.98</b>		<b>709.98</b>
2017	95.02	186.63	373.35	<b>654.99</b>		<b>654.99</b>
2018		186.63	373.35	<b>559.98</b>		<b>559.98</b>
2019		186.63	373.35	<b>559.98</b>		<b>559.98</b>
2020		186.63	373.35	<b>559.98</b>		<b>559.98</b>
2021		186.63	373.35	<b>559.98</b>		<b>559.98</b>
2022			373.35	<b>373.35</b>		<b>373.35</b>
2023			373.35	<b>373.35</b>		<b>373.35</b>
2024			373.35	<b>373.35</b>		<b>373.35</b>
2025			373.35	<b>373.35</b>		<b>373.35</b>
2026			373.35	<b>373.35</b>		<b>373.35</b>
2027			373.35	<b>373.35</b>		<b>373.35</b>
2028			373.35	<b>373.35</b>		<b>373.35</b>
2029			373.35	<b>373.35</b>		<b>373.35</b>
2030			373.35	<b>373.35</b>		<b>373.35</b>
2031			373.35	<b>373.35</b>		<b>373.35</b>
2032				-		-
2033				-		-
2034				-		-
2035				-		-
2036				-		-
2037				-		-
2038				-		-
2039				-		-
2040				-		-
2041				-		-
2042				-		-
2043				-		-
2044				-		-
2045				-		-
2046				-		-
2047				-		-
<b>Subtotal</b>	<b>1,245.02</b>	<b>1,866.25</b>	<b>7,467.00</b>	<b>10,578.27</b>	<b>-</b>	<b>10,578.27</b>
<b>TOTAL</b>	<b>8,050.00</b>	<b>1,983.00</b>	<b>7,467.00</b>	<b>17,500.00</b>	<b>0.00</b>	<b>17,500.00</b>

"development"

[1] Excludes 200 acres of development required to pay supplemental habitat fees

**Table 16**  
**Natomas Basin HCP**  
**Habitat Status**

**2009 Update**  
 17,500 acres of development  
 1/2 acre of mitigation land per gross acre of developed land  
 25% marsh, 50% rice, 25% other

Habitat Properties	Year Acquired	Total Acres	Hunting Acres	2007 (end of year)				2008 (end of year)				2009+ (end of year)			
				Rice	Marsh	Other	Total	Rice	Marsh	Other	Total	Rice	Marsh	Other	Total
<b>Regular Mitigation</b>															
Betts/Kisimat/Silva	1999	338.49	338.5	0.0	192.5	146.0	<b>338.5</b>	0.0	192.5	146.0	<b>338.5</b>	0.0	192.5	146.0	<b>338.5</b>
Lucich North [1]	1999	267.99	0.0	0.0	247.3	20.7	<b>268.0</b>	0.0	247.3	20.7	<b>268.0</b>	0.0	247.3	20.7	<b>268.0</b>
Lucich South [1]	1999	351.89	0.0	334.0	16.5	1.4	<b>351.9</b>	315.9	16.5	19.5	<b>351.8</b>	315.9	16.5	19.5	<b>351.8</b>
Bennett North	1999	226.68	226.7	151.9	74.2	0.5	<b>226.7</b>	151.9	74.2	0.5	<b>226.7</b>	151.9	74.2	0.5	<b>226.7</b>
Bennett South [3]	1999	132.49	0.0	80.7	22.7	29.1	<b>132.5</b>	80.7	22.7	29.1	<b>132.5</b>	80.7	22.7	29.1	<b>132.5</b>
Brennan [3], [5]	2000	0.00	0.0	0.0	0.0	0.0	<b>0.0</b>	0.0	0.0	0.0	<b>0.0</b>	0.0	0.0	0.0	<b>0.0</b>
Frazer	2000	92.60	92.6	0.0	68.4	24.2	<b>92.6</b>	0.0	68.4	24.2	<b>92.6</b>	0.0	68.4	24.2	<b>92.6</b>
Souza [2]	2001	40.00	0.0	0.0	0.0	40.0	<b>40.0</b>	0.0	0.0	40.0	<b>40.0</b>	0.0	0.0	40.0	<b>40.0</b>
Natomas Farms [2]	2001	96.46	0.0	0.0	51.7	44.8	<b>96.5</b>	0.0	51.7	44.8	<b>96.5</b>	0.0	51.7	44.8	<b>96.5</b>
Ayala [2], [6]	2002	0.00	0.0	0.0	0.0	0.0	<b>0.0</b>	0.0	0.0	0.0	<b>0.0</b>	0.0	0.0	0.0	<b>0.0</b>
Sills [4]	2002	436.06	218.0	402.6	0.0	33.8	<b>436.4</b>	416.1	0.0	20.0	<b>436.1</b>	416.1	0.0	20.0	<b>436.1</b>
Cummings [2]	2002	66.83	0.0	0.0	40.0	26.8	<b>66.8</b>	0.0	41.0	25.8	<b>66.8</b>	0.0	41.0	25.8	<b>66.8</b>
Alleghany [2]	2002	50.26	0.0	0.0	0.0	50.3	<b>50.3</b>	0.0	0.0	50.3	<b>50.3</b>	0.0	0.0	50.3	<b>50.3</b>
Atkinson [3]	2003	205.40	0.0	50.0	0.0	155.4	<b>205.4</b>	49.4	0.0	155.9	<b>205.3</b>	49.4	0.0	155.9	<b>205.3</b>
Ruby Ranch [3]	2003	91.08	0.0	0.0	0.0	91.1	<b>91.1</b>	91.1	0.0	0.0	<b>91.1</b>	91.1	0.0	0.0	<b>91.1</b>
Huffman East	2003	116.75	0.0	116.7	0.0	0.0	<b>116.7</b>	116.7	0.0	0.0	<b>116.7</b>	116.7	0.0	0.0	<b>116.7</b>
Tufts	2004	147.95	148.0	138.0	0.0	9.9	<b>148.0</b>	137.2	0.0	10.8	<b>148.0</b>	137.2	0.0	10.8	<b>148.0</b>
Bolen North	2005	113.62	0.0	85.2	0.0	28.4	<b>113.6</b>	103.3	0.0	10.3	<b>113.6</b>	103.3	0.0	10.3	<b>113.6</b>
Bolen South	2005	102.38	0.0	0.0	0.0	102.4	<b>102.4</b>	0.0	0.0	102.4	<b>102.4</b>	0.0	0.0	102.4	<b>102.4</b>
Rosa East [3]	2005	106.28	0.0	0.0	0.0	106.3	<b>106.3</b>	0.0	0.0	106.3	<b>106.3</b>	0.0	0.0	106.3	<b>106.3</b>
Rosa Central [3]	2005	100.02	0.0	0.0	0.0	100.0	<b>100.0</b>	0.0	0.0	100.0	<b>100.0</b>	0.0	0.0	100.0	<b>100.0</b>
Vestal South	2005	94.95	0.0	71.2	0.0	23.7	<b>95.0</b>	95.0	0.0	0.0	<b>95.0</b>	95.0	0.0	0.0	<b>95.0</b>
Nestor	2006	233.16	0.0	225.0	0.0	8.2	<b>233.2</b>	218.4	0.0	14.8	<b>233.2</b>	218.4	0.0	14.8	<b>233.2</b>
Bolen West	2006	155.14	0.0	145.0	0.0	10.1	<b>155.1</b>	146.7	0.0	8.4	<b>155.1</b>	146.7	0.0	8.4	<b>155.1</b>
Frazer South	2006	110.37	0.0	0.0	0.0	110.4	<b>110.4</b>	110.4	0.0	0.0	<b>110.4</b>	110.4	0.0	0.0	<b>110.4</b>
Bianchi West	2006	110.16	0.0	80.0	0.0	30.2	<b>110.2</b>	80.0	0.0	30.2	<b>110.2</b>	110.2	0.0	0.0	<b>110.2</b>
Elsie	2006	158.03	0.0	158.0	0.0	0.0	<b>158.0</b>	150.0	0.0	8.0	<b>158.0</b>	150.0	0.0	8.0	<b>158.0</b>
<b>Easements</b>															
Sills South-West border	2005	12.58	0.0	0.0	0.0	12.6	<b>12.6</b>	0.0	0.0	12.6	<b>12.6</b>	0.0	0.0	12.6	<b>12.6</b>
Sills South-East border	2005	5.20	0.0	0.0	0.0	5.2	<b>5.2</b>	0.0	0.0	5.2	<b>5.2</b>	0.0	0.0	5.2	<b>5.2</b>
Bianchi North	2006	3.54	0.0	0.0	0.0	3.5	<b>3.5</b>	0.0	0.0	3.5	<b>3.5</b>	0.0	0.0	3.5	<b>3.5</b>
<b>Subtotal</b>		<b>3,966.33</b>	<b>1,023.7</b>	<b>2,038.4</b>	<b>713.3</b>	<b>1,215.0</b>	<b>3,966.7</b>	<b>2,262.7</b>	<b>714.3</b>	<b>989.2</b>	<b>3,966.2</b>	<b>2,292.9</b>	<b>714.3</b>	<b>959.0</b>	<b>3,966.2</b>
<b>Supplemental Mitigation</b>															
Huffman East	2003	19.00	0.0	0.0	0.0	19.0	<b>19.0</b>	0.0	0.0	19.0	<b>19.0</b>	0.0	0.0	19.0	<b>19.0</b>
Huffman West	2003	181.03	0.0	0.0	0.0	181.0	<b>181.0</b>	0.0	0.0	181.0	<b>181.0</b>	0.0	0.0	181.0	<b>181.0</b>
<b>Easements</b>															
RD1000 @ LUCS	2003	4.64	0.0	0.0	0.0	4.6	<b>4.6</b>	0.0	0.0	4.6	<b>4.6</b>	0.0	0.0	4.6	<b>4.6</b>
RD1000 @ BENN	2003	1.12	0.0	0.0	0.0	1.1	<b>1.1</b>	0.0	0.0	1.1	<b>1.1</b>	0.0	0.0	1.1	<b>1.1</b>
<b>Subtotal</b>		<b>205.79</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>205.8</b>	<b>205.8</b>	<b>0.0</b>	<b>0.0</b>	<b>205.8</b>	<b>205.8</b>	<b>0.0</b>	<b>0.0</b>	<b>205.8</b>	<b>205.8</b>
<b>Total Mitigation</b>		<b>4,172.1</b>	<b>1,023.7</b>	<b>2,038.4</b>	<b>713.3</b>	<b>1,420.8</b>	<b>4,172.5</b>	<b>2,262.7</b>	<b>714.3</b>	<b>1,195.0</b>	<b>4,172.0</b>	<b>2,292.9</b>	<b>714.3</b>	<b>1,164.8</b>	<b>4,172.0</b>

"habitat status"

- [1] Hunting lease assigned to seller of property for extended term as a condition of property sale.
- [2] Hunting precluded by Sacramento County "No Shoot Zone" ordinance.
- [3] Not hunted for safety reasons.
- [4] Sills acreage reduced by 139.15 acres in 2005 as a result of a land trade for Rosa East and Rosa Central.
- [5] Brennan traded in 2006 for Nestor and Bolen West.
- [6] Ayala traded in 2006 for Frazer South, Bianchi West, and Elsie.

**Table 17**  
**Natomas Basin HCP**  
**TNBC 2009 Budget Proposal**  
**Budget Line Item Information**

Amount	Line item	Discussion	Table in NBHCP Fee Update Model
<b>I. Revenue</b>			
\$0	Mitigation fees-Sacramento	<p>Estimate zero acres in the City for which HCP fees will be paid. The fees paid do not necessarily correlate to the number of acres of mitigation lands budgeted for acquisition within the budget year. The Conservancy often will acquire mitigation lands in the next fiscal year. Therefore, mitigation land acquisition costs may extend to the future year's budget.</p> <p>The budgeted fee amount is calculated based on the proposed 2009 per acre fee adjusted to account for the many cases in which the entire fee is not paid, but rather, the land is dedicated and all but the non-Land Acquisition Fund portion of the fee is paid. To adjust for these cases, it is assumed that only 20% of the fee payers will pay the Land Acquisition portion of the fee, whereas 100% of the fee payers will pay all other portions of the fee. In addition, the fee collection administration portion is excluded from the budget since this amount is not available for habitat use.</p>	<p><b>Table 2:</b> proposed fee per acre by fee component.</p> <p><b>Table 15:</b> annual development projections.</p>
\$0	Mitigation fees-Sutter County	<p>Estimate zero acres for Sutter County mitigation in 2009.</p> <p>The same comments as shown for Sacramento mitigation fees would apply if any fees were projected.</p>	<p><b>Table 2:</b> proposed fee per acre by fee component.</p> <p><b>Table 15:</b> annual development projections.</p>
\$0	Mitigation fees-other	<p>Estimate zero acres for Metro Air Park mitigation in 2009.</p> <p>The same comments as shown for Sacramento mitigation fees would apply if any fees were projected.</p>	<p><b>Table 2:</b> proposed fee per acre by fee component.</p> <p><b>Table 15:</b> annual development projections.</p>
\$173,021	Investment income-land acquisition fund	<p>Interest is accrued on account balances. Interest fluctuates periodically, and the total investment income will vary depending on the date available funds are used for various expenditures as well as interest rate changes. Assumes interest earned at rate of 3% of prior year ending balance. Please see current financial statement to derive "corpus" amounts upon which interest income will be accrued.</p>	<p><b>Table A-4:</b> estimated annual interest earnings</p>

**Table 17**  
**Natomas Basin HCP**  
**TNBC 2009 Budget Proposal**  
**Budget Line Item Information**

<b>Amount</b>	<b>Line item</b>	<b>Discussion</b>	<b>Table in NBHCP Fee Update Model</b>
\$220,889	Investment income-admin/o&m fund	Interest is accrued on account balances. Interest fluctuates periodically, and the total investment income will vary depending on the date available funds are used for various expenditures as well as interest rate changes. Assumes interest earned at rate of 3% of prior year ending balance. Please see current financial statement to derive "corpus" amounts upon which interest income will be accrued.	<b>Table A-6:</b> estimated annual interest earnings
\$9,830	Investment income-restoration and enhancement fund	Interest is accrued on account balances. Interest fluctuates periodically, and the total investment income will vary depending on the date available funds are used for various expenditures as well as interest rate changes. Assumes interest earned at rate of 3% of prior year ending balance. Please see current financial statement to derive "corpus" amounts upon which interest income will be accrued.	<b>Table A-5:</b> estimated annual interest earnings
\$239,472	Investment income-endowment fund	Interest is accrued on account balances. Interest fluctuates periodically, and the total investment income will vary depending on the date available funds are used for various expenditures as well as interest rate changes. Assumes interest earned at rate of 3% of prior year ending balance. Please see current financial statement to derive "corpus" amounts upon which interest income will be accrued.	<b>Table A-7:</b> estimated annual interest earnings
\$40,629	Investment income-supplemental endowment fund	Interest is accrued on account balances. Interest fluctuates periodically, and the total investment income will vary depending on the date available funds are used for various expenditures as well as interest rate changes. Assumes interest earned at rate of 3% of prior year ending balance. Please see current financial statement to derive "corpus" amounts upon which interest income will be accrued.	<b>Table A-8:</b> estimated annual interest earnings
\$343,540	Farm rent	Projected cash rent for 2009 for farms currently under contract.  In future years, rice rent is based on the model assumptions of \$125 per acre on 90% of rice acres and rent for other crops is based on \$15 per acre on 50% of upland acres.	<b>Table 7:</b> assumptions for years after 2009. <b>Table A-6:</b> estimated annual rice acres.
\$125,000	Miscellaneous income	Includes projected gross rent from residence, grazing, hunting, etc. and other mitigation fees from one-time projects that surface from time-to-time.  In future years, the model assumes \$10 per acre on all hunting acres.	<b>Table 7:</b> per acre revenue assumptions <b>Table A-6:</b> estimated annual upland and hunting acres.
<b>\$1,152,382</b>	<b>Subtotal</b>		
\$0	Fee Collection Administration		
<b>\$1,152,382</b>	<b>Total revenue</b>		



**Table 17**  
**Natomas Basin HCP**  
**TNBC 2009 Budget Proposal**  
**Budget Line Item Information**

<b>Amount</b>	<b>Line item</b>	<b>Discussion</b>	<b>Table in NBHCP Fee Update Model</b>
<b>II. Expenditures</b>			
<b>Administration</b>			
<b>Administrative</b>			
\$312,069	Staff	This includes four staff members: Executive Director, Manager of Finance and Accounting, Office Manager and a new position for 2009, Habitat Land Supervisor for second half of the year. (Does not include anticipated compensation adjustments for 2009)	<b>Table 13</b>
\$99,862	Benefits and charges	Includes statutory payments and fringe benefits. Includes basic retirement plan and group health insurance plan (employer-sponsored health savings account with a high deductible group health insurance plan). Retirement plan involves no on-going liability to the Conservancy after employee separation and can be discontinued in any given year by action of the Board. Eligibility for participation in the plan (a Simplified Employee Pension-Individual Retirement Account, or SEP-IRA) at 13% of gross salary begins after completion of 12 months employment.	<b>Table 13</b>
\$10,000	Board expense	Includes \$100/meeting fee; anticipates 10 Board members for entire year. Includes small amount for miscellaneous Board expenses.	<b>Table 13</b>
<b>Office expense</b>			
\$66,000	Rent	Includes use of break room, security, certain telecommunications facilities and certain tenant improvements in addition to basic office space (\$5,490 per month for 2,542 square feet).	<b>Table 13</b>
\$20,000	Telephone	For basic telecommunications service.	<b>Table 13</b>
\$25,000	Copying & printing	For oversize photocopying, surveys, aerial photos and non-project associated printing.	<b>Table 13</b>
\$20,000	Office supplies	Essential and common office supplies.	<b>Table 13</b>
\$3,000	Postage	General postage for TNBC business.	<b>Table 13</b>
\$10,000	Equipment	For basic office equipment, furniture, and a special field equipment acquisition.	<b>Table 13</b>
\$18,000	Vehicle expense	For vehicle allowance and mileage expenses for TNBC staff as well as Board and TAC as needed.	<b>Table 13</b>

**Table 17**  
**Natomas Basin HCP**  
**TNBC 2009 Budget Proposal**  
**Budget Line Item Information**

<b>Amount</b>	<b>Line item</b>	<b>Discussion</b>	<b>Table in NBHCP Fee Update Model</b>
<b>Miscellaneous expense</b>			
\$40,000	Insurance	Basic business insurance for TNBC.	<b>Table 13</b>
\$25,000	Accounting	For general accounting work and fiscal year-end audit.	<b>Table 13</b>
\$60,000	Legal	General legal work. Budgeted amount will likely decrease in future years.	<b>Table 13</b>
\$100,000	Fees & taxes	These are general corporation fees, property taxes on equipment at TNBC headquarters and Endowment Fund management fees.	<b>Table 13</b>
<b>Contract work, monitoring, and contingency</b>			
\$42,500	Contract work, public education and publications	Similar to last year's budget, and includes general contract work, public education, and publications. Includes \$20,000 for the Ag Water Waiver program instituted by regional and state water regulatory agencies.	<b>Table 13</b>
\$127,715	Contingency	15% contingency on all above administration items.	<b>Table 13</b>
\$285,000	Land Management	Estimated amount based on 2008 total estimated costs.	<b>Table 7</b>
\$340,522	Biological monitoring	2009 contract amount with Jones & Stokes plus connectivity, and adaptive management. Pertains exclusively to biological monitoring as required by the 2003 NBHCP. Amount may change based on completion and implementation of the Biological Effectiveness Monitoring Program.	<b>Table 12</b>
\$125,000	SSMP Preparation and Revision	Estimated amount by TNBC for SSMP revision. In future years, subject to model assumptions.	<b>Table 7:</b> estimated cost per acquired acre.
<b>Mitigation land</b>			
\$0	Mitigation land	For 2009 there are no mitigation land purchase requirements. Most land acquisition is covered by the "dedication" requirement, so there will be no direct outlay of cash proposed for this. Even if the dedication is not required, since the Conservancy has 12 months to mitigate fee-paid land, there is a good deal of fungibility.	<b>Table 5:</b> estimated cost per acre for years after 2007. <b>Table A-4:</b> estimated annual acres acquired
<b>Loan repayment</b>			
\$0	Loan repayment	The Conservancy borrows from time-to-time on its line of credit with the City of Sacramento. No outstanding indebtedness exists at the end of 2008 so no loan repayments are forecast for 2009. When repayments are made, they are made at a rate of 75 percent of non-Endowment Fund fee income.	

**Table 17**  
**Natomas Basin HCP**  
**TNBC 2009 Budget Proposal**  
**Budget Line Item Information**

Amount	Line item	Discussion	Table in NBHCP Fee Update Model
	<b>Operations</b>		
\$452,788	Property taxes	This estimate is based on the 2008-2009 property taxes. Actual property tax equals \$170,562 (excluding \$60,451 for RD 1000). The remainder represents a contingency based on future property tax assumptions.	<b>Table 10</b>
\$323,218	Water -- RD 1000 and NCMWC	Estimate of water costs based on rate and acres assumptions in Financing Model.  For Reclamation District 1000, the actual 2008 costs paid were used to estimate an average amount of \$13.99 per acre. The Natomas Mutual Water Company's assessment rate is projected to be \$121.00 per acre, but Conservancy farm tenants pay up to \$65.00 per acre leased. Adjustments are made for marsh watering, fallow ground and winter water.	<b>Table 7:</b> estimated cost per acre <b>Table A-6:</b> estimated annual acres including supplemental mitigation.
\$638,919	Property maintenance	General property maintenance items, including fences, signs, road maintenance, weed control, field leveling and general repairs. Channel clearing projects on Cummings, Natomas Farms, Nestor and Vestal. Also includes electricity costs for lights and irrigation pumps (\$25,000).  For 2009, estimate is based on general maintenance and planned projects. In subsequent years, estimate is based on assumptions in Financing Model.  Estimate includes contingency.	<b>Table 8:</b> estimated cost per acre. <b>Table A-6:</b> estimated annual acres including supplemental mitigation.
<b>\$3,144,593</b>	<b>Subtotal</b>		
\$0	<b>Restoration and enhancement</b>	There is no planned restoration and enhancement in 2009.	<b>Table 6:</b> estimated costs per acre for years after 2007. <b>Table A-5:</b> estimated annual acres for restoration and enhancement.
<b>\$3,144,593</b>	<b>Total expenses</b>		

"budget"