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NATOMAS BASIN HABITAT CONSERVATION PLAN FINANCING PLAN UPDATE

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EPS # 9047

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**Figure 1
Natomas Basin HCP
Summary of Existing and Proposed Habitat Mitigation Fee**

	Current Fee	Proposed Fee
Habitat Mitigation Fee		
Land Acquisition	\$1,830	
Restoration/Enhancement	\$198	
Administration O&M	\$475	
O&M Endowment Fund	\$100	
1998 Total Fee	\$2,656	\$2,656
Contingency [1]		\$656
Proposed 1999 Total Fee		\$3,292

[1] The Natomas Basin Conservancy program has been up and running for approximately six months and has acquired 1,296 acres of habitat land. Experience during this period has shown that the current habitat mitigation fee needs to be adjusted upward to account for the following factors:

- **Land costs** for the first 1,296 acres acquired have been higher than anticipated. The original plan estimated in-basin land costs of approximately \$3,658 per acre including transaction costs. Actual experience of the program shows land costs on average of \$4,070 per acre including transaction costs.
- **Rice lease revenues** are anticipated to be lower than initial estimates of \$175 per acre. The program now estimates lease rents of \$165 per acre.
- **Administration costs** have been reviewed by the NBC and are projected to be approximately \$365,060 per year while lands are acquired. Once all lands are acquired, the administration costs are projected to be approximately \$120,500 per year. The financing plan originally estimated administration costs of \$200,000 annually.

Figure 2
Natomas Basin HCP
Comparison of Existing and Proposed of Key Assumptions and Ending Fund Balances

	Current	Proposed
Assumptions & Fee		
Land Acquisition Values (per Acre)		
In-Basin Lands	\$3,325	\$3,700
Transaction Costs	\$333	\$370
Total Land Cost (Includes Trans. Costs)	\$3,658	\$4,070
Annual Administrative Costs	\$200,000	\$365,060
Habitat Mitigation Fee		
Land Acquisition (LA)	\$1,830	\$2,036
Restoration/Enhancement (RE)	\$198	\$200
Administration/O & M	\$475	\$800
O & M Endowment Fund	\$100	\$190
Subtotal Mitigation Fee	\$2,603	\$3,226
Fee Collection Administration	\$53	\$66
Estimated Total (1999\$)	\$2,656	\$3,292
Ending Fund Balances (Year 50)		
Land Acquisition [1]		(\$317,303)
Restoration & Enhancement		\$5,700
Operations & Maintenance		\$1,733,806
Endowment		\$5,472,241
Interest Earnings		\$133,952
Less Funds to cover O&M Expenses		<u>\$76,825</u>
Difference		\$57,127

Summary

[1] Deficit represents less than 1% of the total land acquisition budget and is a result of higher than expected initial land costs prior to the fee being adjusted upwards. Deficit could be funded through from reduced land prices in future acquisitions or from transfers the O&M budget surpluses or any available grant monies.

Figure 3
Natomas Basin HCP
Land Acquisition and Restoration/Enhancements Cost
and Acquired Habitat Land Utilization Assumptions

Part A - Assumptions				Notes:
Inflation	0.0%			
Interest Rate	2.5%			
Land Acquisition Values per Acre	<u>Land Value</u>			
In-Basin Lands	\$3,700	80%		\$3,000-\$5,000 per acre range \$2,000-\$3,500 per acre range per Recent Experience of NBHCP
Out-of-Basin Lands	\$2,500	20%		
Average Land Value (1)	\$3,700	Use In-Basin land value for contingency		
Plus Transaction Costs	\$370			10% of Land Value
Total Land Cost	\$4,070 per acquired acre			
Estimated Use of In-Basin Lands				
Marsh	25% (up to 75%)			includes 10% uplands area
Existing Rice	50%			includes 10% uplands area
Dry Converted to Rice	0%			includes 10% uplands area
Other Upland	25%			
Total Initial Use	100%			
Rice Converted to Marsh	After year 5, 400 acres in marsh 25% thereafter			includes 10% uplands area
Rice Lands				
Not Farmable/Uplands	5%			
Set-Aside/Fallow	5%			
Leased for Other Crops	10%			
Leased Rice Base Land	80%			
Total Rice Lands	100%			
Initial Restoration/Enhancement	<u>Use</u>	<u>Initial</u>	<u>Weighted</u>	
<i>Expended At Time Land Is Acquired</i>	<u>of Land</u>	<u>Costs (3)</u>	<u>Cost</u>	
Marsh (2)	0%	\$350	\$0	DFG estimate of \$200-500/acre
Existing Rice	75%	\$300	\$225	DFG estimate of \$200-500/acre
Dry Converted to Rice	0%	\$350	\$0	DFG estimate of \$200-500/acre
Other Upland	25%	\$350	\$88	DFG estimate of \$200-500/acre
Subtotal	100%		\$313	
<i>Expended At Time Land Is Converted</i>				
Rice Converted to Marsh	25%	\$350	\$88	DFG estimate of \$200-500/acre
Average Cost per Habitat Acre			\$400	weighted average cost per acre

assumptions

- (1) Assumes all acquisitions occur at the average in-basin land value. Since the primary purpose of out-of-basin mitigation is to relieve the pressure on land prices within the basin, acquiring lands out of the basin off-sets land prices increases within the basin.
- (2) Initial use of marsh land estimated at 0% because NBHCP estimates that little to no marshland is available for acquisition. However, rice land will be converted to marsh land.
- (3) Initial costs represent those costs on a per acre basis that the NBHCP will have to expend after the initial purchase of the land. In the case of the \$350 for rice converted to marsh, this is in addition to the \$200 initial cost for existing rice land.

Figure 4
Natomas Basin HCP
Operations & Maintenance Assumptions
and Estimation of Habitat Mitigation Fee

Part A - Assumptions Con't			Notes:
<p>Operations & Maintenance Costs</p> <p>Marsh \$126 per acre Not farmable ag. land \$74 per acre Fallow Rice \$84 per acre Land Leased for Planted Rice Base \$74 per acre Land Leased for Other Crops \$74 per acre Other \$0 per acre Hunting Blinds \$47 per acre</p> <p>Administrative Costs</p> <p>During Development \$365,060 per year After All Land Acquired \$120,470 per year</p> <p>Operations & Maintenance Revenues</p> <p>Crop Land Leases Planted Rice Base Acreage \$165 per acre/year normal ag. practices Other Crops (Flex. acreage) \$83 per acre/year normal ag. practices</p> <p>Hunting (Not Used) Ducks \$1,250 per hunter/year \$166.67 per acre Dove \$50 per hunter/year \$3.33 per acre Pheasants \$70 per hunter/year \$3.50 per acre</p>			<p>Figure 4 for detail roads, drainageways, sheds, etc. sugar beets, safflower, etc.</p> <p>Figure 5 for detail phased in over 3- 5 years</p> <p>\$135 - \$210 range \$150 - \$200 range over 2 years</p> <p>30-acre avg./4-person blinds 1 hunter per 15 acres 1 hunter per 20 acres</p>
<p>Part B - Estimation of Mitigation Fee</p> <p>Habitat Mitigation Fee</p> <p>Land Acquisition (LA) \$4,072 \$2,036 Restoration/Enhancement (RE) \$400 \$200 Administration/O & M \$1,600 \$800 O & M Endowment Fund \$380 \$190 Subtotal Mitigation Fee \$6,452 \$3,226</p> <p>Fee Collection Administration \$132 \$66</p> <p>Total (1999\$) \$6,584 \$3,292</p>	<p>Cost per Acre of Habitat <i>a</i></p>	<p>Mitigation Fee per Acre of Development <i>b = a x 0.5</i></p>	<p>2% of fee for collection</p>
<p>1998 Fee</p>	<p>\$5,312</p>	<p>\$2,656</p>	

assumptions

Figure 5
Natomas Basin HCP
Operations & Maintenance Costs by Land Use Activity

	Total Annual Cost	RD1000, NCMWC & SAFCA O & M	Habitat O & M	Winter Water	Spring/Summer Water	Property Taxes	Other Annual Costs
	<i>per acre</i>	(1)	(2)	(3)	(4)	(5)	(6)
Marsh	\$126	\$45	\$13	\$0	\$46	\$23	\$0
Unfarmable Rice Land	\$74	\$45	\$6	\$0	\$0	\$23	\$0
Fallow farmland	\$84	\$45	\$6	\$0	\$0	\$23	\$10
Land Leased for Rice	\$74	\$45	\$6	\$0	\$0	\$23	\$0
Land Leased for Other Crops	\$74	\$45	\$6	\$0	\$0	\$23	\$0
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Hunting	\$47	\$0	\$0	\$33	\$0	\$0	\$14

"o&m_assumps"

Notes:

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

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

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

(4) The current cost of water for rice lands is \$66 per acre. The NCMWC has not done a formal analysis of the water needs for marsh, but estimates that it would be similar in nature to rice production. In practice, every acre of the marsh and fallow rice lands would not necessarily be kept wet all summer due to rotation of wet/dry lands for wetland management practices. This analysis assumes that 70% of the area is kept wet all summer and 30% of the land is dry uplands.

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

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

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

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

Figure 6
Natomas Basin HCP
Estimated Annual Natomas Basin Conservancy (NBC) Administrative Costs

	Annual Cost	Notes
<u>Administrative Expenses</u>		
Staff	\$153,000	
Benefits	\$45,560	33.5% of salaries
Subtotal	\$198,560	
<u>Office Expense</u>		
Rent	\$22,200	1,000 sqft @ \$1.85
Telephone	\$3,000	\$250 / month
Copying	\$1,800	
Office Supplies	\$3,000	
Postage	\$1,200	
Auto Expense	\$7,300	500 miles/week @28 cents/mile
Subtotal	\$38,500	
<u>Miscellaneous Expense</u>		
Insurance	\$8,000	Liability and E&O
Accounting	\$8,000	
Legal	\$12,000	
Corporate Taxes	\$5,000	
Subtotal	\$33,000	
Contract Work/ Public Education/ Publications/Monitoring/Reports, etc.	\$95,000	
Total Administration	\$365,060	

"admin"

Source: NBC 1999 budget estimate

Note: This budget represents a typical early year once the program is up and running.
 Cost to be reduced after all lands are acquired.

Figure 7
Natomas Basin HCP
Cash Flow - 1999\$

Assumes:	0.0% Inflation
	2.5% Interest Rate

1999\$

	Total 1994-2045	0 1994	1 1996	5 2000	10 2005	20 2015	30 2025	40 2035	50 2045
LAND ACQUISITION									
Beginning Balance		\$0	\$0	(\$348,499)	(\$330,244)	(\$324,481)	(\$319,902)	(\$317,303)	(\$317,303)
Less Land Costs	(\$35,636,845)	\$0	\$0	(\$722,411)	(\$820,550)	(\$1,535,625)	(\$864,875)	\$0	\$0
Plus LA Fee Revenue	\$35,262,519	\$0	\$53,291	\$739,054	\$820,953	\$1,536,380	\$865,300	\$0	\$0
Plus Other Revenues/(Reimb.) (1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Plus Interest Earnings (2)	\$57,023	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ending Balance (3)	(\$317,303)	\$0	\$53,291	(\$331,856)	(\$329,840)	(\$323,727)	(\$319,477)	(\$317,303)	(\$317,303)
RESTORATION & ENHANCEMENTS									
Beginning Balance		\$0	\$0	\$994	\$2,799	\$3,329	\$3,959	\$4,709	\$5,602
Less Restoration/Enh. Costs	(\$3,500,010)	\$0	\$0	(\$70,999)	(\$80,644)	(\$150,921)	(\$85,000)	\$0	\$0
Plus R&E Fee Revenue	\$3,496,434	\$0	\$5,766	\$72,599	\$80,644	\$150,921	\$85,000	\$0	\$0
Plus Other Revenues/(Reimb.) (1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Plus Interest Earnings (2)	\$9,276	\$0	\$0	\$17	\$49	\$58	\$69	\$82	\$98
Ending Balance	\$5,700	\$0	\$5,766	\$2,611	\$2,848	\$3,387	\$4,029	\$4,792	\$5,700
OPERATIONS & MAINTENANCE									
Beginning Balance		\$0	\$0	\$1,108,942	\$968,177	\$2,196,724	\$2,745,478	\$2,509,837	\$1,810,632
Less O & M Costs	(\$33,892,772)	\$0	(\$13,832)	(\$466,375)	(\$535,687)	(\$745,869)	(\$891,981)	(\$722,107)	(\$722,107)
Plus Admin/O&M Fee Revenue	\$13,420,219	\$0	\$13,832	\$290,394	\$322,575	\$603,686	\$340,000	\$0	\$0
Plus Rice Revenues	\$20,542,634	\$0	\$0	\$103,329	\$174,018	\$388,378	\$537,394	\$613,595	\$613,595
Plus Hunting Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Plus Other Revenues (1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Plus Interest Earnings (2)	\$1,663,726	\$0	\$0	\$19,406	\$16,943	\$38,443	\$48,046	\$43,922	\$31,686
Subtotal Revenues	\$35,626,579	\$0	\$13,832	\$413,130	\$513,536	\$1,030,507	\$925,440	\$657,518	\$645,281
Plus Interest Earnings on Endowment (5)	\$1,225,876	\$0	\$0	\$0	\$0	\$0	\$0	\$64,589	\$76,825
Ending Balance (4)	\$1,733,806	\$0	\$0	\$1,055,697	\$946,026	\$2,481,361	\$2,778,937	\$2,445,247	\$1,733,806

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

(2) Interest is earned at 6% annually on 70% of the prior year's ending balance.

(3) Land acquisition deficit represents less than 1% of the total land acquisition budget and is a result of higher than expected initial land costs prior to the fee being adjusted upwards. Deficit could be funded through reduced land prices in future, transfers from O&M budget surpluses or any available grant monies.

(4) Ending balance accumulate additional funds to maintain operation and maintenance levels during periods of decreased revenues.

"cash_flow_50"

Figure 8
Natomas Basin HCP
O & M Endowment Account

Assumes:	0.0% Inflation 2.5% Interest Rate
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\$190 Fee per Acre for 19% of O & M Costs

	Reference	0 1994	1 1996	5 2000	10 2005	20 2015	30 2025	40 2035	50 2045
Annual Developed Acreage		0.0	[1] 29.1	363.0	403.2	754.6	425.0	0.0	0.0
Beginning Balance		\$0	\$0	\$333,255	\$765,187	\$2,167,689	\$3,729,073	\$4,852,332	\$5,415,114
Annual Fee Revenue	\$190 per acre	\$0	\$2,912	\$68,969	\$76,612	\$143,375	\$80,750	\$0	\$0
Less Funds transferred to cover O & M Expenditures		\$0	\$0	\$0	\$0	\$0	\$0	\$64,589	\$76,825
Interest Earnings (3)	2.5%	\$0	\$0	\$6,548	\$17,971	\$51,585	\$90,265	\$119,931	\$133,952
Ending Balance		\$0	\$2,912	\$408,771	\$859,769	\$2,362,649	\$3,900,088	\$4,907,673	\$5,472,241

- (1) Assumes revenues based on 1998 fee.
- (2) Assumes 20% of acres at 1998 fee and 80% at 1999 fee.
- (3) Interest earned on 60% of prior years annual revenue plus preceding year.

endowment