Appendix I
Funding Plan

Yolo HCP / NCCP
Appendix I: Funding Plan
FINAL
April 2018

The funding plan estimates reasonably anticipated revenues sources available to fund the Yolo HCP/NCCP. Those sources are compared to estimated costs for plan preparation, permit term implementation, and post-permit activities to demonstrate that the Yolo HCP/NCCP is fully funded. The funding plan also calculates the fair share of costs assigned to offset the impacts of covered activities, and the development impact fee necessary to fully fund those costs.

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Table 1: Land Conversion & Mitigation (acres)

Community Types	Total Estimated and Allowable Permanent Loss[1]	Reserve Acres Needed to Mitigate One Acre of Loss[2]	Mitigation Share of Total Reserve
Formula	*a*	*b*	*c = a x b*
Cultivated (rice)	87	3.00	261
Cultivated (non-rice)	9,910	1.00	9,910
Grassland	1,734	1.50	2,601
Serpentine	-	NA	-
Chamise Chapparal	-	NA	-
Mixed Chaparral	-	NA	-
Blue Oak and Foothill Pine	-	NA	-
Blue Oak Woodland	3	3.00	9
Closed-Cone Pine-Cypress	-	NA	-
Montane Hardwood	-	NA	-
Valley Oak Woodland	-	NA	-
Alkali Prairie[3]	4	-	-
Vernal Pool Complex	-	NA	-
Fresh Emergent Wetland	88	2.00	176
Valley Foothill Riparian	588	2.00	1,176
Lacustrine and Riverine	236	2.00	472
Other Land Cover Types[4]	4,018	0.60	2,411
Total Land Cover Types Subject to HCP/NCCP Fees	**16,668**	**1.02**	**17,016**

Table 1: Land Conversion & Mitigation (acres)

Community Types	Total Estimated and Allowable Permanent Loss[1]	Reserve Acres Needed to Mitigate One Acre of Loss[2]	Mitigation Share of Total Reserve

[1] Amounts represent permanent maximum allowable loss under the permits issued for the Yolo HCP/NCCP. See Table 5-3, Loss of Natural Communities and Other Land Cover Types, and Table 5-4, Natural Community Benefits and Net Effects, and footnote 4.

[2] Factors represent mitigation ratios reasonably applicable at a regional scale in the context of the Yolo HCP/NCCP and do not represent a project-level analysis. Provided by ICF International (see sources). Mitigation factors for loss of wetland, riparian, and riverine land cover types does not include additional 1:1 mitigation funded by wetland fees.

[3] Alkali Prairie mitigation paid through land dedication of Woodland Regional Park by City of Woodland; see HCP/NCCP Chapter 6 for details.

[4] Includes orchards and vineyards (1,628 acres), pasture or truck/nursery (0 acres), Eucalyptus (141 acres), and semiagricultural/ incidental to agriculture (1,294 acres), Also includes those portions of the barren and developed land cover type that are (1) gravel and sand bars (38 acres), and (2) vegetated corridor that overlaps with Giant Garter Snake habitat (917 acres). These land cover types have conservation value by providing open space for connectivity, buffers around development, and habitat for covered species such as nesting opportunities for Swainson's hawk and white-tailed kite. See Chapter 2, Section 2.5, Other Land Cover Types, and Chapter 5, Section 5.6.7, Other Land Cover Types.

Sources: Yolo HCP/NCCP, Chapter 5, Table 5-3, Loss of Natural Communities and Other Land Cover Types, and Table 5-4, Natural Community Benefits and Net Effects; memorandum to P. Marchand, YHC Executive Director from Ellen Berryman, ICF International regarding Yolo HCP/NCCP mitigation ratios, June 15, 2015.

Table 2: Allocation of Plan Implementation Costs from Cost Model ($ 2017)

	Appendix H - Cost Model Source	Cost Allocation Method[1]	Newly Protected Lands (NPLs)	Pre-Permit Reserve Lands (PPRLs)	Subtotal Excluding Restored Lands	Restored/ Created Lands	Total
Allocation Factors							
Total Reserve (acres)	Table 2		24,406	8,000	32,406	956	33,362
Total Reserve		*Total*	*73%*	*24%*	97%	*3%*	*100%*
Reserve Excluding Restored		*Ex. Restored*	*75%*	*25%*	100%	*NA*	*100%*
Establish Reserve System							
Oversight & Management	Table 9	*Ex. Restored*	$ 2,046,650	$ 682,217	$ 2,728,867	$ -	$ 2,728,867
Acquire Newly Protected Lands	Tables 9, 10	*NA*	187,691,089	-	187,691,089	10,911,046	198,602,135
Enroll Pre-permit Reserve Lands	Table 9	*NA*	-	8,622,097	8,622,097	-	8,622,097
Pre-acquisition Surveys	Tables 9, 10	*NA*	1,697,742	-	1,697,742	63,656	1,761,398
Transaction Costs	Tables 9, 10	*NA*	17,250,000	385,785	17,635,785	750,000	18,385,785
Subtotal			$ 208,685,481	$ 9,690,099	$ 218,375,580	$ 11,724,702	$ 230,100,282
Manage and Enhance the Reserve System							
Oversight & Management	Tables 10, 11	*Ex. Restored*	$ 2,518,861	$ 839,621	$ 3,358,482	583,729	$ 3,942,211
Reserve Unit Mgt. Plans	Table 11	*Ex. Restored*	1,370,527	456,843	1,827,370	-	1,827,370
Invasive Species Control	Table 11	*Ex. Restored*	79,450	26,484	105,934	-	105,934
Management on PPRLs	Table 11	*NA*	-	2,451,373	2,451,373	-	2,451,373
Management on Alkali Prairie	Table 11	*NA*	1,060,000	-	1,060,000	-	1,060,000
Establish Hedgerows	Table 11	*NA*	1,292,580	328,410	1,620,990	-	1,620,990
Manage Hedgerows	Table 11	*NA*	603,857	153,424	757,281	-	757,281
Planting Nest Trees	Table 11	*NA*	656,424	166,780	823,204	-	823,204
Western Burrowing Owl	Table 11	*NA*	88,583	-	88,583	-	88,583
Remedial Measures	Tables 10, 11	*Ex. Restored*	906,991	302,331	1,209,322	216,821	1,426,143
Remedial (Swainson's Hawk)	Table 11	*NA*	1,165,270	-	1,165,270	-	1,165,270
Subtotal			$ 9,742,543	$ 4,725,266	$ 14,467,809	$ 800,550	$ 15,268,359
Special and Natural Community Monitoring, Research, and Scientific Review							
Natural Comm. Monitoring	Table 12	*NA*	$ 1,970,411	$ 1,280,581	$ 3,250,992	$ -	$ 3,250,992
Species Monitoring	Table 10, 12	*NA*	7,670,700	3,070,411	10,741,111	7,457,625	18,198,736
Oversight & Management	Table 12	*Ex. Restored*	2,777,583	925,861	3,703,444	-	3,703,444
Research	Table 12	*Ex. Restored*	357,527	119,176	476,703	-	476,703
Science Advisors	Table 12	*Ex. Restored*	472,230	157,410	629,640	-	629,640
Subtotal			$ 13,248,451	$ 5,553,439	$ 18,801,890	$ 7,457,625	$ 26,259,515
Other Restored/Created Wetland Costs							
Fresh Emergent Wetland	Table 10	*NA*	$ -	$ -	$ -	$ 3,880,231	$ 3,880,231

Table 2: Allocation of Plan Implementation Costs from Cost Model ($ 2017)

	Appendix H - Cost Model Source	Cost Allocation Method[1]	Newly Protected Lands (NPLs)	Pre-Permit Reserve Lands (PPRLs)	Subtotal Excluding Restored Lands	Restored/ Created Lands	Total
Valley Foothill Riparian	Table 10	*NA*	-	-	-	32,391,081	32,391,081
Lacustrine & Riverine	Table 10	*NA*	-	-	-	7,665,449	7,665,449
Site Improvements	Table 10	*NA*	-	-	-	743,588	743,588
Environmental Compliance	Table 10	*NA*	-	-	-	1,318,103	1,318,103
GG Snake Water Mgt.	Table 10	*NA*	-	-	-	781,625	781,625
Other Management Costs	Table 10	*NA*	-	-	-	1,386,580	1,386,580
Subtotal			$ -	$ -	$ -	$ 48,166,657	$ 48,166,657
Costs Associated with Local Partner Activities							
Cache Creek Area Plan	Table 14	*NA*	$ 11,083,150	$ -	$ 11,083,150	$ -	$ 11,083,150
Lower Putah Creek	Table 14	*NA*	10,436,600	-	10,436,600	-	10,436,600
Subtotal			$ 21,519,750	$ -	$ 21,519,750	$ -	$ 21,519,750
Other Costs							
Plan Administration	Table 13	*Total*	$ 24,925,723	$ 8,194,758	$ 33,120,481	$ 1,024,345	$ 34,144,826
Contingency	Table 15	*Ex. Restored*	23,045,551	7,681,850	30,727,401	-	30,727,401
Subtotal			$ 47,971,274	$ 15,876,608	$ 63,847,882	$ 1,024,345	$ 64,872,227
Total Permit Term Costs			**$ 301,167,499**	**$ 35,845,412**	**$ 337,012,911**	**$ 69,173,879**	**$ 406,186,790**

Note: This table allocates Plan costs between three reserve components: newly protected lands, pre-permit reserve lands, and restored lands.

[1] "NA" indicates that cost data was drawn directly from cost model results without need for further allocation. All costs for restored lands, except a share of Plan Administration costs, are drawn directly from the cost model. Where cost model does not provide sufficient detail to allocate costs, cost allocation based on reserve acreage share (see cost allocation factors at top of table).

Sources: Appendix H - Cost Model.

Table 3: Endowment Fund Cash Flow 50-Year Permit Term ($ 2017)

Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
Opening Fund Balance	$ -	$ 113,000	$ 229,000	$ 349,000	$ 473,000	$ 601,000	$ 733,000	$ 870,000	$ 1,011,000	$ 1,157,000
Plan Contribution	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000
Interest Earnings[1]	2,000	5,000	9,000	13,000	17,000	21,000	26,000	30,000	35,000	39,000
Total Revenues	$ 113,000	$ 116,000	$ 120,000	$ 124,000	$ 128,000	$ 132,000	$ 137,000	$ 141,000	$ 146,000	$ 150,000
Post-Permit Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Net Cash Flow	$ 113,000	$ 116,000	$ 120,000	$ 124,000	$ 128,000	$ 132,000	$ 137,000	$ 141,000	$ 146,000	$ 150,000
Closing Fund Balance	$ 113,000	$ 229,000	$ 349,000	$ 473,000	$ 601,000	$ 733,000	$ 870,000	$ 1,011,000	$ 1,157,000	$ 1,307,000

Year	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
	11	*12*	*13*	*14*	*15*	*16*	*17*	*18*	*19*	*20*
Opening Fund Balance	$ 1,307,000	$ 1,462,000	$ 1,622,000	$ 1,788,000	$ 1,959,000	$ 2,135,000	$ 2,317,000	$ 2,505,000	$ 2,699,000	$ 2,900,000
Plan Contribution	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000
Investment Earnings[1]	44,000	49,000	55,000	60,000	65,000	71,000	77,000	83,000	90,000	96,000
Total Revenues	$ 155,000	$ 160,000	$ 166,000	$ 171,000	$ 176,000	$ 182,000	$ 188,000	$ 194,000	$ 201,000	$ 207,000
Post-Permit Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Net Cash Flow	$ 155,000	$ 160,000	$ 166,000	$ 171,000	$ 176,000	$ 182,000	$ 188,000	$ 194,000	$ 201,000	$ 207,000
Closing Fund Balance	$ 1,462,000	$ 1,622,000	$ 1,788,000	$ 1,959,000	$ 2,135,000	$ 2,317,000	$ 2,505,000	$ 2,699,000	$ 2,900,000	$ 3,107,000

[1] Investment earnings estimated based (Opening Fund Balance + (Plan Contribution / 2)) x (Real return on investment). Real return on investment rate = 3.25%

Real return on investment rate based on 7.25% total return net of fees charged by individual investment fund managers, minus 3% for inflation, and minus 1% for investment management.

Sources: Chapter 8, Table 8-5, *Yolo HCP/NCCP Post-Permit Costs, Annual Average Costs in Perpetuity*; National Fish and Wildlife Federation (for real return on investment rate).

Table 4: Endowment Fund Cash Flow 50-Year Permit Term ($ 2017) (continued)

Year	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
	21	*22*	*23*	*24*	*25*	*26*	*27*	*28*	*29*	*30*
Opening Fund Balance	$ 3,107,000	$ 3,321,000	$ 3,542,000	$ 3,770,000	$ 4,005,000	$ 4,248,000	$ 4,499,000	$ 4,758,000	$ 5,025,000	$ 5,301,000
Plan Contribution	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000
Investment Earnings[1]	103,000	110,000	117,000	124,000	132,000	140,000	148,000	156,000	165,000	174,000
Total Revenues	$ 214,000	$ 221,000	$ 228,000	$ 235,000	$ 243,000	$ 251,000	$ 259,000	$ 267,000	$ 276,000	$ 285,000
Post-Permit Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Net Cash Flow	$ 214,000	$ 221,000	$ 228,000	$ 235,000	$ 243,000	$ 251,000	$ 259,000	$ 267,000	$ 276,000	$ 285,000
Closing Fund Balance	$ 3,321,000	$ 3,542,000	$ 3,770,000	$ 4,005,000	$ 4,248,000	$ 4,499,000	$ 4,758,000	$ 5,025,000	$ 5,301,000	$ 5,586,000

Year	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
	31	*32*	*33*	*34*	*35*	*36*	*37*	*38*	*39*	*40*
Opening Fund Balance	$ 5,586,000	$ 5,880,000	$ 6,184,000	$ 6,498,000	$ 6,822,000	$ 7,157,000	$ 7,502,000	$ 7,859,000	$ 8,227,000	$ 8,607,000
Plan Contribution	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000
Investment Earnings[1]	183,000	193,000	203,000	213,000	224,000	234,000	246,000	257,000	269,000	282,000
Total Revenues	$ 294,000	$ 304,000	$ 314,000	$ 324,000	$ 335,000	$ 345,000	$ 357,000	$ 368,000	$ 380,000	$ 393,000
Post-Permit Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Net Cash Flow	$ 294,000	$ 304,000	$ 314,000	$ 324,000	$ 335,000	$ 345,000	$ 357,000	$ 368,000	$ 380,000	$ 393,000
Closing Fund Balance	$ 5,880,000	$ 6,184,000	$ 6,498,000	$ 6,822,000	$ 7,157,000	$ 7,502,000	$ 7,859,000	$ 8,227,000	$ 8,607,000	$ 9,000,000

[1] Investment earnings estimated based (Opening Fund Balance + (Plan Contribution / 2)) x (Real return on investment). Real return on investment rate = 3.25%

Real return on investment rate based on 7.25% total return net of fees charged by individual investment fund managers, minus 3% for inflation, and minus 1% for investment management.

Sources: Chapter 8, Table 8-5, *Yolo HCP/NCCP Post-Permit Costs, Annual Average Costs in Perpetuity*; National Fish and Wildlife Federation (for real return on investment rate).

Table 4: Endowment Fund Cash Flow 50-Year Permit Term ($ 2017) (continued)

Year	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065
	41	*42*	*43*	*44*	*45*	*46*	*47*	*48*	*49*	*50*
Opening Fund Balance	$ 9,000,000	$ 9,405,000	$ 9,823,000	$ 10,255,000	$ 10,701,000	$ 11,162,000	$ 11,638,000	$ 12,129,000	$ 12,636,000	$ 13,159,000
Plan Contribution	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000	$ 111,000
Investment Earnings[1]	294,000	307,000	321,000	335,000	350,000	365,000	380,000	396,000	412,000	429,000
Total Revenues	$ 405,000	$ 418,000	$ 432,000	$ 446,000	$ 461,000	$ 476,000	$ 491,000	$ 507,000	$ 523,000	$ 540,000
Post-Permit Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Net Cash Flow	$ 405,000	$ 418,000	$ 432,000	$ 446,000	$ 461,000	$ 476,000	$ 491,000	$ 507,000	$ 523,000	$ 540,000
Closing Fund Balance	$ 9,405,000	$ 9,823,000	$ 10,255,000	$ 10,701,000	$ 11,162,000	$ 11,638,000	$ 12,129,000	$ 12,636,000	$ 13,159,000	$ 13,699,000

	Total Year 1 - 50	**Ongoing** *51+*
Opening Fund Balance	$ -	$ 13,699,000
Plan Contribution	**$ 5,550,000**	$ -
Investment Earnings[1]	**$ 8,149,000**	445,000
Total Revenues	**$ 13,699,000**	$ 445,000
Post-Permit Costs	$ -	$444,077
Net Cash Flow	$ 13,699,000	$ 923
Closing Fund Balance	$ 13,699,000	$ 13,699,923

[1] Investment earnings estimated based (Opening Fund Balance + (Plan Contribution / 2)) x (Real return on investment). Real return on investment rate = 3.25%

Real return on investment rate based on 7.25% total return net of fees charged by individual investment fund managers, minus 3% for inflation, and minus 1% for investment management.

Sources: Chapter 8, Table 8-5, *Yolo HCP/NCCP Post-Permit Costs, Annual Average Costs in Perpetuity*; National Fish and Wildlife Federation (for real return on investment rate).

Table 4: Plan Preparation Cost

FY 2003-04 to FY 2011-12	
Total Costs	$ 5,864,000
State & Federal Grant Funding	(2,283,000)
Net Local Funding[1]	$ 3,581,000
FY 2012-13 Net Local Funding (actual)	670,000
FY 2013-14 Net Local Funding (actual)	164,900
FY 2014-15 Net Local Funding (actual)	164,900
FY 2015-16 Net Local Funding (actual)	164,900
FY 2016-17 Net Local Funding (actual)	164,900
FY 2017-18 Net Local Funding (estimated)	164,900
Net Costs To Be Reimbursed	$ 5,075,500

[1] "Net Local Funding" through FY 2011-12 was provided by the Swainson's Hawk Mitigation Trust Account (held by the Yolo Habitat Conservancy) from mitigation fee revenues generated prior to Plan adoption. Reimbursement of this amount will be returned to that account for mitigation of impacts that occurred prior to Plan adoption.

Sources: Yolo Habitat Conservancy.

Table 5: Average Cost per Reserve Acre Including Endowment Contribution & Plan Preparation Costs ($ 2017)

	Cost Allocation Method	Newly Protected Lands	Pre-Permit Reserve Lands	Restored Lands	Total
Allocation Factors					
Total Reserve (acres)		24,406	8,000	956	33,362
Total Reserve	*Total Acres*	*73%*	*24%*	*3%*	*100%*
Total Reserve Excluding Endowed (acres)		24,406	3,143	956	28,505
Non-endowed Reserve	*Non-endowed Acres*	*86%*	*11%*	*3%*	*100%*
Total Plan Costs Including Endowment Contribution & Plan Preparation Costs					
Plan Implementation from Cost Model	*See Table 2*	$ 301,167,499	$ 35,845,412	$ 69,173,879	$ 406,186,790
Endowment Contribution	*Non-endowed Acres*	4,773,000	610,500	166,500	5,550,000
Plan Preparation	*Total Acres*	3,705,115	1,218,120	152,265	5,075,500
Total Cost		$ 309,645,614	$ 37,674,032	$ 69,492,644	$ 416,812,290
Total Reserve Acres		24,406	8,000	956	33,362
Average Cost Per Acre		**$ 12,687**	**$ 4,709**	**$ 72,691**	**$ 12,494**

Note: Endowment and plan preparation costs are not included in the cost model (Appendix H) and are calculated separately in this Appendix I.

Sources: Appendix I - Funding Model, Tables 2, 3, and 4.

Table 6: Land Cover Fee ($ 2017)

		Total
Mitigation Cost Share in Acres[1]		17,016
Cost per Acre[2]	$	12,687
Mitigation Cost Share	$	215,881,992
Land Conversion (acres)		16,668
Land Cover Fee per Acre of Land Conversion	**$**	**12,952**

[1] Excludes acquisition of restored lands that are funded separately by wetland fees.

[2] Cost per acre based on total costs and total acres for newly acquired lands, the reserve component that is applicable to mitigation of land conversion impacts. Pre-permit reserve lands are part of the Plan's conservation commitment (see Chapter 6, Table 6-1(b)).

Sources: Appendix I - Funding Model, Tables 1 and 5.

Table 7: Wetland Fee ($ 2017)

	Cost Allocation Method	Fresh Emergent Wetland	Valley Foothill Riparian	Lacustrine & Riverine	Total
Allocation Factors					
Restored Lands (acres)		88	608	260	956
All Aquatic Lands	*All Aquatic*	*9%*	*64%*	*27%*	*100%*
Fresh Emergent Wetland and Lacustrine & Riverine Only	*FE&LR Only*	*25%*	*NA*	*75%*	*100%*
Allocation of Restoration Costs					
Cost Model					
Acquire Newly Protected Lands (fee title interest)	*All Aquatic*	981,994	6,983,070	2,945,982	$ 10,911,046
Pre-acquisition Surveys	*All Aquatic*	5,729	40,740	17,187	63,656
Transaction Costs	*All Aquatic*	67,500	480,000	202,500	750,000
Oversight & Management	*All Aquatic*	$ 52,536	$ 373,586	$ 157,607	583,729
Remedial Measures	*All Aquatic*	19,514	138,765	58,542	216,821
Species Monitoring - Restored Lands	*All Aquatic*	671,186	4,772,880	2,013,559	7,457,625
Fresh Emergent Wetland Restoration	*See Table 2*	3,880,231	-	-	3,880,231
Valley Foothill Riparian Restoration	*See Table 2*	-	32,391,081	-	32,391,081
Lacustrine & Riverine Restoration	*See Table 2*	-	-	7,665,449	7,665,449
Site Improvements	*All Aquatic*	66,923	475,896	200,769	743,588
Environmental Compliance	*All Aquatic*	118,629	843,586	355,888	1,318,103
Giant Garter Snake Water Management	*FE&LR Only*	195,406	NA	586,219	781,625
Other Management Costs	*All Aquatic*	124,792	887,411	374,377	1,386,580
Plan Administration	*All Aquatic*	92,191	655,581	276,573	1,024,345
Subtotal		$ 6,276,631	$ 48,042,596	$ 14,854,652	$ 69,173,879
Other Plan Costs					
Endowment Contribution	*All Aquatic*	$ 14,985	$ 106,560	$ 44,955	$ 166,500
Plan Preparation	*All Aquatic*	13,704	97,449	41,112	152,265
Subtotal		$ 28,689	$ 204,009	$ 86,067	$ 318,765
Total Restoration Costs		$ 6,305,320	$ 48,246,605	$ 14,940,719	$ 69,492,644
Wetland Fee					
Total Restoration Costs		$ 6,305,320	$ 48,246,605	$ 14,940,719	$ 69,492,644
Wetland Fee per Acre of Wetland Impact (1:1 ratio)		**$ 71,651**	**$ 79,353**	**$ 57,464**	
Land Conversion		88	588	236	912
Wetland Fee Revenue		$ 6,305,288	$ 46,659,564	$ 13,561,504	66,526,356

Sources: Chapter 6, Table 6-8; Appendix I - Funding Model, Tables 2 and 5.

Table 8: Average Costs per Reserve Acre ($ 2017)

			Source
Newly Protected Lands Acquisition			
Acquire Conservation Easements on Newly Protected Lands		$ 187,691,089	Appendix H - Cost Model, Table 9
Pre-acquisition Surveys		1,697,742	Appendix H - Cost Model, Table 9
Transaction Costs		17,250,000	Appendix H - Cost Model, Table 9
Total		$ 206,638,831	Calculation
Newly Protected Lands (acres)		24,406	Ch. 6, Table 6-1(b)
Average Cost per Acre		**$ 8,467**	Calculation
Restored/Created Lands - Costs Eligible for State & Federal Funding	**Valley Foothill Riparian**	**Lacustrine & Riverine**	
Total Restoration Costs	$ 48,246,605	$ 14,940,719	Appendix I - Table 7
Costs Not Eligible for State & Federal Funding			
Oversight & Management	$ 373,586	$ 157,607	Appendix I - Table 7
Plan Administration	655,581	276,573	Appendix I - Table 7
Endowment Contribution	106,560	44,955	Appendix I - Table 7
Plan Preparation	97,449	41,112	Appendix I - Table 7
Subtotal	1,233,176	520,247	Appendix I - Table 7
Net Costs Eligible for State & Federal Funding	$ 47,013,429	$ 14,420,472	Calculation
Restored/Created Lands (acres)	608	260	Ch. 6, Table 6-8
Net Cost per Acre	**$ 77,325**	**$ 55,463**	Calculation
Agricultural easement value w/out row crop requirement, allows orchards/vineyards			
Agricultural easement cost (non-rice) with requirement to maintain as row crops		$ 10,200	Appendix H - Cost Model, Table 9
Easement value associated with restriction on conversion to orchards/vineyards		7,000	Estimate by HCP/NCCP Team
Net easement value without row crop requirement, allows orchards/vineyards		**$ 3,200**	Calculation

Note: The purpose of this table is to provide per acre acquisition cost estimates for use in Tabled 9 and 10.

Table 9: Local Funding Sources (50-Year Permit Term) ($ 2017)

	Assumptions	50-Year Total	2015 1	2016 2	2063 49	2064 50
City of Davis - Open Space Program						
Reserve acquisition (nominal $)[1]	$ 200,000 per year	$ 10,000,000	200,000	200,000	200,000	200,000
Reserve acquisition cost (real $)[2]	3.0% discount factor	$ 5,146,000	194,175	188,519	46,990	45,621
Reserve acquisition (acres)[3]	$ 8,467 per acre	608	23	22	6	5
Yolo County Cache Creek Area Plan - Gravel Mining Fee						
Conservation Activities under the Cache Creek Resource Management Plan / Cache Creek Improvement Program (real $)[4]	$ 221,663 per year	$ 11,083,000	221,663	221,663	221,663	221,663
Net Gains Lands						
Reserve acquisition (acres)[5]	276 acres	276	5.5	5.5	5.5	6.5
Value of habitat conservation easement donated by County (real $)[6]	$ 10,200 per acre	$ 2,815,000	56,100	56,100	56,100	66,300
Reclaimed Agricultural Lands						
Reserve acquisition (acres)[7]	865 acres	865	17.3	17.3	17.3	17.3
Value of agricultural conservation easement provided by gravel companies (real $)[7]	$ 3,200 per acre	$ 2,768,000	55,360	55,360	55,360	55,360
Total CCRMP Funding		$ 16,666,000				
Solano County Water Agency / Lower Putah Creek Coordinating Committee						
Conservation activities (real $)[4]	$ 208,732 per year	$ 10,437,000	208,732	208,732	208,732	208,732
Foundations & Non-profit Organizations						
Revenue acquisition cost (real $)[8]	$ 200,000 per year	$ 10,000,000	200,000	200,000	200,000	200,000
Reserve acquisition (acres)[3]	$ 8,467 per acre	1,200	24	24	24	24

Table 9: Local Funding Sources (50-Year Permit Term) ($ 2017)

	Assumptions	50-Year Total	2015 1	2016 2	2063 49	2064 50

[1] City of Davis funding for reserve assembly not identified separately in the cost model. This local funding would offset reserve assembly and possibly other Plan costs. Non-binding funding commitment expressed in nominal dollars (not adjusted for inflation) so amount is discounted based on anticipated inflation to be consistent with the funding model (real $ 2017). See Chapter 8, Sec. 8.4.2.1, City of Davis, for further detail on the City's commitment.

[2] Reflects estimate inflation in total Yolo HCP/NCCP costs. Estimated by Urban Economics based on historical rates.

[3] Cost per acre based on weighted average easement acquisition for newly-protected lands (see in this appendix, Table 9, *Average Acquisition Cost per Reserve Acre*).

[4] Funding for these Cache Creek and Lower Putah Creek ongoing activities that contribute to achievement of Yolo HCP/NCCP objectives. Activities are in addition to other Plan activities and therefore identified separately in the cost model (see Appendix H - Cost Model, Table 14, *Costs associated with Local Partner activities*). Costs updated for inflation from original 2015 estimates. See Cache Creek and Lower Putah Creek sections of Chapter 8, Sec. 8.4.1, *Local Funding*, for further explanation of activities.

[5] Yolo County voluntary commitment for CCRMP contribution to Yolo HCP/NCCP reserve. See Chapter 8, Sec. 8.4.2.2 *Cache Creek Resources Management Plan* for further detail.

[6] Cost per acre based on value of easement acquisition (see in this appendix, Table 9, *Average Acquisition Cost per Reserve Acre*).

[7] The CCAP requires gravel mining companies to reclaim previously mined lands to agricultural uses with an agricultural lands conservation easement. Easement does not restrict conversion to orchards and vineyards so the value of this local funding contribution is based on this less-restrictive agricultural easement (see in this appendix, Table 9, *Average Acquisition Cost per Reserve Acre*). The Conservancy will incur additional costs, not represented here but included in the cost model, working with land owners to add an additional layer of protection for covered species habitat on these reclaimed lands, e.g. preventing conversion to orchards and vineyards, so that these lands can qualify for inclusion in the reserve.

[8] See Chapter 8, Sec. 8.4.2.4, *Foundations and Other Non-profit Organizations* for further detail.

Sources: Yolo Habitat Conservancy Local Cost Share Sources and Potential Approaches, memorandum to USFWS and CDFW staff from P. Marchand, YHC Executive Director, and Chris Alford, Alford Environmental, June 26, 2015; Appendix H - Cost Model, Table 14; Resources Law Group; Appendix I - Funding Model, Table 8.

Table 10: State and Federal Funding ($ 2017)

			Source
Newly Protected Lands - Acquisition Costs Only			
Conservation Lands (acres)	8,231		Ch. 6, Table 6-1(b)
Average Cost per Acre	$ 8,467		App. I, Table 8
Total Acquisition Funding		$ 69,691,877	Calculation
Restored/Created Lands - Acquisition and Restoration/Creation Costs			
Valley Foothill Riparian			
Conservation Commitment (acres)	20		Ch. 6, Table 6-8
Average Cost per Acre	$ 77,325		App. I, Table 8
Funding Commitment	$ 1,546,500		Calculation
Lacustrine & Riverine			
Conservation Commitment (acres)	24		Ch. 6, Table 6-8
Average Cost per Acre	$ 55,463		App. I, Table 8
Funding Commitment	$ 1,331,112		Calculation
Total Restored/Created Lands Funding		$ 2,877,612	Calculation
State & Federal Funding Commitment		**$ 72,569,489**	Calculation

Table 11: Operating Fund Interest Income ($ 2017)

Total Mitigation Fee Funding[1]	$	282,408,000
Permit Term (years)		50
Average Annual Funding (50-year permit term)	$	5,648,000
Exclude Reserve Assembly Costs[2]		45%
Average Fund Balance	$	2,542,000
Interest Rate[3]		1.01%
Annual Interest Income	$	26,000
Permit Term (years)		50
Total Interest Income	**$**	**1,300,000**

[1] Operating fund balance estimate only includes mitigation fee funding because substantially all other funds likely to be grants for land acquisition received as reimbursement for prior expenditures or local funding credited to Plan but managed by a separate agency.

[2] To be conservative in estimating interest revenue, assumes average fund balance equals one year of costs excluding reserve assembly costs, i.e. assume land acquisition funds are expended as soon as they are available. Estimated based on total reserve assembly costs (Table 3) as a percent of total Plan costs including endowment and plan reimbursement (Table 6).

[3] Based on most recently available 10-year average annual return from the California Pooled Money Investment Fund managed by the California State Treasurer's Office

Sources: California State Treasurer's Office; Appendix I - Funding Model, Tables 3, 6, and 13.

Table 12: Total Plan Costs and Endowment Fund Balance ($ 2017)

			Appendix I Funding Model Source
Total Plan Costs Including Endowment Fund Balance, Year 50			
Plan Implementation from Cost Model	$ 406,187,000		Table 2
Contribution to Endowment Fund Balance[1]	5,550,000		Table 3
Plan Preparation	5,076,000		Table 4
Total Cost Before Endowment Fund Investment Income		$ 416,813,000	Calculation
Endowment Fund Investment Income to Year 50[2]		8,149,000	Table 3
Total Plan Costs Including Endowment Fund Balance, Year 50		**$ 424,962,000**	Calculation
Endowment Fund Balance, Year 50			
Contribution to Endowment Fund Balance[1]	$ 5,550,000		Table 3
Endowment Fund Investment Income to Year 50[2]	8,149,000		Table 3
Total Endowment Fund Balance, Year 50		**$ 13,699,000**	Calculation

Note: The components of total plan costs and the endowment fund balance are presented in this table to document the source of the total amounts shown in the following table, Table 13, *Funding Plan.*

[1] The contribution to the endowment fund balance is the amount of funding needed from other revenues generated by the Plan (primarily land cover fees) to fully fund the endowment by Year 50.

[2] Endowment fund investment income that helps build the endowment fund balance prior to Year 50 was not included in prior tables as a cost because it represents the estimated return on investment generated by endowment fund contributions as the fund balance grows from Year 1 through 50. In this appendix Table 13, *Funding Plan*, the total endowment fund balance in Year 50 is shown as a cost, and the investment income component is shown as a revenue that partially offsets this cost.

Table 13: Funding Plan ($ 2017)

Yolo HCP/NCCP Funding, Costs & Net Revenue				Appendix I Funding Model Source
Yolo HCP/NCCP Funding				
Mitigation Funding				
Land Cover Fee	$ 215,882,000		50.8%	Table 6
Wetland Fees	66,526,000		15.7%	Table 7
Temporary Effect Fee[1]	-		<1%	NA
Subtotal Mitigation Funding[2]		$ 282,408,000	66.5%	Calculation
Conservation Funding				
Local Sources				
Davis Open Space Program[3]	$ 5,146,000		1.2%	Table 9
Cache Creek Area Plan	16,666,000		3.9%	Table 9
Lower Putah Creek	10,437,000		2.5%	Table 9
Foundations & Non-profit Organizations	10,000,000		2.4%	Table 9
Subtotal Local Sources		42,249,000	9.9%	Calculation
State & Federal Sources[4]		72,569,000	17.1%	Table 10
Other Local, State & Federal Sources		18,287,000	4.3%	Estimate
Subtotal Conservation Funding		$ 133,105,000	31.3%	Calculation
Other Funding				
Endowment Fund Investment Income	$ 8,149,000		1.9%	Table 3
Operational Fund Interest Income	1,300,000		<1%	Table 11
Subtotal Other Funding		9,449,000	2.2%	Calculation
Total Yolo HCP/NCCP Funding		**$ 424,962,000**	**100.0%**	Calculation
Yolo HCP/NCCP Costs				
Plan Implementation (50-Yr. Permit Term)	$ 406,187,000		95.6%	Table 2
Endowment Fund Balance, Yr. 50	13,699,000		3.2%	Table 3
Plan Preparation	5,076,000		1.2%	Table 4
Total Yolo HCP/NCCP Costs		**424,962,000**	**100.0%**	Table 12
Yolo HCP/NCCP Net Revenue				
Surplus / (Deficit)		$ -	0.0%	Calculation

Table 13: Funding Plan ($ 2017)

Yolo HCP/NCCP Funding, Costs & Net Revenue	Appendix I Funding Model Source

[1] Temporary effects and consequent fee revenue are likely to be quite small relative to permanent effects, and any estimates likely to be speculative, so temporary effects fee revenue is not estimated for purposes of the funding plan. Any such revenue will be credited to the development fee obligation at each five-year adjustment of the funding plan and fee levels adjusted accordingly (see section 8.4.1.6 *Adjustment of Development Fees*).

[2] Mitigation funding represents more than the fair share amount shown in this appendix in Table 2, *Mitigation Fair Share of Total Reserve*, because mitigation must fund newly protected lands that have a higher average per acre cost than pre-permit reserve lands (see in this appendix, Table 6, *Average Cost per Reserve Acre Including Endowment Contribution & Plan Preparation Cost*).

[3] The City of Davis funding objective is $10 million over 50 years in nominal dollars (not adjusted for inflation). The amount shown here is based on $200,000 per year, discounted for inflation over the permit term. The actual amount of funding adjusted for inflation will vary, depending on the timing of acquisitions and inflation rates.

[4] State and federal funding sources equal the amount necessary to fully fund the conservation share of total Plan costs after deducting anticipated local conservation funding sources.