

Grasslands Mitigation Bank

Endowment Analysis

January 2015

Management Plan Action		Cost Unit	Hourly Rates										Fixed Costs		Total	Occurrence Cycle in Years	Secured Stewardship
			Land Mgr. (\$125)		Sr. Tech (\$90)		Tech (\$75)		Field Crew (\$35)		Ad staff (\$50)		Cost	Qty			Endowment
			Hr	Cost	Hr	Cost	Hr	Cost	Hr	Cost	Hr	Cost					
Section I - Introduction (No Action)					-		-		-		-						
Section II - Property Description (No Action)					-		-		-		-						
Section III - Habitat and Species Description (No Action)					-		-		-		-						
Section IV - Management and Monitoring				-	-		-		-		-						
A HABITAT TYPES AND SPECIES ELEMENTS																	
	Element A.1 Seasonal Wetlands and GGS Habitats			-		-		-		-		-					
	Task A.1.1: Annual and Monthly Surveys and Inspections	Hourly and Capital	24	3,000	24	2,160		-		-		-			\$ 5,160	1	\$ 147,429
	Task A.1.2: Removal of Invasive Plants	Hourly and Capital	2	250	4	360			16	560			\$30	10.0	\$ 1,470	5	\$ 7,832
	Element A.2 Giant Garter Snake Habitat														\$ -		\$ -
	Task A.2.1: Water Supply and Delivery (Cost/acre/year)	Capital											\$14	840.0	\$ 11,760	1	\$ 336,000
	Task A.2.2: Water Management	Hourly	2	250	8	720		-	57	1,995		-		1.0	\$ 2,965	1	\$ 84,714
	Task A.2.3: Replacement/Repair of WaterControl Facilities	Hourly and Capital	4	500		-	8	600		-		-	\$5,000	8.0	\$ 41,100	15	\$ 60,857
	Task A.2.4: Ditch Cleaning (500' per year, each year)	Hourly and Capital							16	560			\$250	2.0	\$ 1,060	1	\$ 30,286
	Task A.2.5: Vegetation Management	Hourly and Capital	2	250	4	360	-	-	8	280		-	\$1,400	1.0	\$ 2,290	1	\$ 65,429
B SITE SECURITY AND ACCESS ELEMENT								-									
	Element B.1 – Trash and Trespass							-									
	Task B.1.1: Trash Removal	Capital				-		-	2	70	-	-	\$50	1.0	\$ 120	1	\$ 3,429
	Task B.1.2: Replacement of Gates and Fencing	Hourly and Capital					3	225	12	420			\$400	4.0	\$ 2,245	25	\$ 1,647
	Task B.1.3: Replacement of Signs	Hourly and Capital							8	280			\$5	10.0	\$ 330	10	\$ 804
C AGRICULTURAL USE ELEMENT																	
	Task C.1.1 Contract with Grazing Lessee	Hourly															
D OUTREACH AND RECREATIONAL USE ELEMENTS																	
	Element D.1 Hunting (no funds used from Endowment)																
	Element D.2 Educational and Scientific Use																
	Task D.2.1: Coordination of Educational and Scientific Use	Hourly	8	1,000	3	270		-		-		-			\$ 1,270	1	\$ 36,286
E BIOLOGICAL MONITORING ELEMENTS																	
	Element E.1 Giant Garter Snake			-		-		-		-		-					
	Task E.1.1: Quantitative GGS Monitoring (Trapping Contract)	Capital											\$17,250	1.0	\$ 17,250	5	\$ 91,909
	Element E.2 Vegetation (GGS Habitats and Seasonal Wetlands)																
	Task E.2.1: Quantitative Vegetation Survey (includes High Resolution Aerial Photograph)	Hourly and Capital	4	500		-	24	1,800		-		-	\$600	1.0	\$ 2,900	5	\$ 15,451
F ANNUAL REPORTING AND ADMINISTRATION																	
	Task F.1: Annual Report	Hourly	4	500	16	1,440	8	600		-	2	100	\$0.10	100.0	\$ 2,650	1	\$ 75,714
	Site Administration	hourly	8	1,000											\$ 1,000	1	\$ 28,571
	Misc Supplies Expense	Capital											\$250.00	1.0	\$ 250	1	\$ 7,143
	Misc Mileage	Capital											\$0.56	2880.0	\$ 1,613	1	\$ 46,080

Stewardship subtotal \$1,039,580
 10.0% Contingency \$103,958
 3.5% CAP Rate
 Grand Total \$1,143,538

Explanation of Cost Basis for Endowment Task Items January 2015

Management Plan Action	Description of Task from Management Plan	Cost Basis Explanation
Section I - Introduction (No Action)		
Section II - Property Description (No Action)		
Section III - Habitat and Species Description (No Action)		
Section IV - Management and Monitoring		
A HABITAT TYPES AND SPECIES ELEMENTS		
Element A.1 Seasonal Wetlands and GGS Habitat		
Task A.1.1: Annual and Monthly Surveys and Inspections	Monitor the Bank's Seasonal Wetlands and GGS Habitats to preserve and protect the biological integrity and purpose of the Bank.	Monthly site visits conducted as part of routine water management (Task A.2.2). Annual site inspection conducted by Land Manager and Senior Tech. 3.5 hours of travel time and 4.5 hrs of inspection time each. 16 additional hours each for Land Manager and Senior Tech. are included for coordination with Field Crew.
Task A.1.2: Removal of Invasive Plants	If necessary, invasive pest plants will be controlled by hand removal, mechanical equipment, biological controls, or herbicides.	Every five years, on average, Field Crew (local contractor) will devote two full days to removal of invasive plants. Land Manager will supervise mapping (2 hrs) and approve plan for treatment developed by Senior Tech. (4 hours). Cost includes 10 acres of chemical control by contractor at \$30 per acre.
Element A.2 Giant Garter Snake Habitat		
Task A.2.1: Water Supply and Delivery	Water supplied to the GGS Habitat is provided by Central California Water District on the basis of cost per acre-foot delivered to the Bank	During normal year allocations, the Bank GGS Habitat will receive approximately 840 acre-feet of water to maintain the emergent marsh for GGS. Current costs for water through CCID are \$7 per acre-foot. In order to accommodate occasional drought conditions and other costs associated with water delivery the item was budgeted at \$14 per acre-foot.
Task A.2.2: Water Management	The Bank Manager will visit the Property at least once a month (twice a month in summer) to maintain proper water depth. Water levels in the GGS Habitat must be monitored to make sure that there is adequate water for GGS foraging and vegetation maintenance.	Water management is completed by Field Crew twice a month between April through September (3 hours per visit) and monthly between October through March of each year (totals 57 hours). Supervision and coordination are provided by the Land Manager (2 hours) and the Senior Tech. (8 hours).

Explanation of Cost Basis for Endowment Task Items January 2015

Management Plan Action		Description of Task from Management Plan	Cost Basis Explanation
	Task A.2.3: Replacement/ of Water Control Facilities	Under expected wear and tear, water control and delivery facilities (screw gates, culverts, berms, etc.) will periodically need to be replaced. If the Bank Manager determines a water control facility needs to be replaced or refurbished, the Bank Manager will complete the work during the GGS active period. Each year, a portion of the supply and drainage ditches will need to be cleaned (one side only) in order to maintain adequate flow capacity in these facilities.	Every fifteen years, on average, four hours of planning by the Land Manager will be needed for this task. Eight hours of time from the Biological Tech. to supervise field work. Capital/contract costs for structures are estimated at \$5,000 each for eight water control structures, installed (half replaced every fifteen years). Two days per year of ditch cleaning will be necessary; costs include backhoe rental for two days, and two days labor.
	Task A.2.4: Vegetation Management	Based upon the best professional judgment of the Bank Manager, portions of the Bank Property will be grazed, disked, or mowed to maintain basking areas for GGS and prevent excessive emergent plant densities in the GGS aquatic habitat areas.	Every year, costs are included for 8 hours of labor (Field Crew) and \$1,400 for chop and disc tules (20 acres per year at \$70 per acre.) Work will be completed on a rotational basis, and only as needed.
B SITE SECURITY AND ACCESS ELEMENT			
	Element B.1 – Trash and trespass		
	Task B.1.1: Trash Removal	Collect and remove trash and repair and rectify vandalism and trespass impacts on site visits.	Annual costs include up to one ton of waste disposal (\$50) at Merced County landfill in Los Banos and two hours of Field Crew time to load and transport.
	Task B.1.2: Replacement of Gates and Fencing	Replace gates and fencing as necessary to maintain security at the Bank Property.	Costs include twelve hours of labor (Field Crew), three hours of labor (Biological Tech.) and a capital cost of \$1,600 for replacing four gates with wing fences every twenty five years.
	Task B.1.3: Replacement of Signs	Replace signs and posts as necessary to maintain security at the Bank Property.	Costs include eight hours of labor (Field Crew) and \$50 in capital cost to replace approximately 10 signs every ten years.
C AGRICULTURAL USE ELEMENT			
	Task C.1.1: Contract with Grazing Lessee	The Bank Manager will contract with a grazing lessee for spring and summer grazing within the Bank Property at appropriate stocking rates and intervals adjusted for economic viability for the lessee and ecological benefit to the Bank Property.	Costs are included under F-Site Administration below. Time is include three hours of time for the Bank Manager or Monitoring Biologist to work with the grazing lessee on setting up the grazing plan for the year and monitor the results.
D OUTREACH AND RECREATIONAL USE ELEMENTS			
	Element D.1 Manage Waterfowl Hunting (no funds used from endowment)		No funds are required from the Endowment for this item
	Element D.2 Scientific and Educational Use		

Explanation of Cost Basis for Endowment Task Items January 2015

Management Plan Action		Description of Task from Management Plan	Cost Basis Explanation
	Task D.2.1: Coordination of Scientific and Educational Site Visits	The Bank Manager will coordinate and lead educational or interpretive site visits, as necessary.	Costs are included for three hours of the Senior Biological Tech. and 8 hours of the Land Manager each year for scientific and educational site visits with outside parties including the IRT.
E BIOLOGICAL MONITORING ELEMENTS			
	Element E.1 Giant Garter Snake Monitoring		
	Task E.1.1: Quantitative GGS Monitoring (Contract)	The Bank Manager will monitor GGS at the Bank Property every five years in perpetuity.	Costs of \$17,250 are budgeted for an outside contractor every five years for trapping of GGS throughout the Bank Property.
	Element E.2 Vegetation Monitoring		
	Task E.2.1: Quantitative Vegetation Survey	The Bank Manager will acquire an aerial photograph of the Bank Property every five years and monitor vegetation and map the extent of Seasonal Wetlands and GGS habitats within the Bank Property.	Cost includes 24 hours of labor(Biological Tech.) to perform quantitative vegetation survey and prepare map every five years. Costs also include four hours of Land Manager time to supervise the survey and interpretation of the aerial photo. A fixed cost of \$600 is budgeted for the aerial photo and is based on the current market rate for a high resolution aerial photograph.
F ANNUAL REPORTING AND ADMINISTRATION			
	Task F.1: Annual Report	The Bank Manager will prepare an annual report including a summary, and circulate the report to the Signatory Agencies, and other parties by November 30 of each year.	A total of 30 hours of labor costs are budgeted on an annual basis for the research and completion of the Annual Report. Additionally, 100 pages of photocopy are charged at 10 cents per page.
	Site Administration	General coordination by the Land Manger.	Eight hours of time for the Land Manager is included under this task to coordinate with IRT, easement holder or gazing lessee each year.
	Miscellaneous Supplies Expense	Gernal expenses associated with field work of the Bank	Materials include field stakes, flagging, batteries for GPS, radios, etc...Cost is estimated at \$250 per year each year.
	Mileage	Mileage is for travel to and from the Bank Property for monthly, annual, and monitoring site visits.	Costs for mileage were calculated at \$0.56 cents a mile for 2,880 miles of travel to and from the Bank Property.