



June 2, 2017

2017-46a revised

Jennifer Skupic
The Natomas Basin Conservancy
2150 River Plaza Drive, # 460
Sacramento, CA 95833

Subject: Proposal for Fisherman's Lake Marsh Complex Maintenance, SAFCA Properties

Dear Ms. Skupic,

Habitat Restoration Sciences, Inc. (HRS) is pleased to present this proposal to The Natomas Basin Conservancy (TNBC) for habitat maintenance services at the Fisherman's Lake Marsh Complex project site. The scope of services is based on discussions with TNBC on April 3, 2017, and our understanding of the project site. This proposal addresses site management and maintenance for the SAFCA Fisherman's Lake Properties. These properties include the Natomas Farms marsh, Sharma marsh, AKT marsh, AKT supply channel, upper portions of the TNBC recirculation ditch, Sharma East Drainage Swale, and AKT East Drainage Swale. This also includes areas surrounding the Sharma and AKT agricultural tracts west of each respective marsh. These areas contain approximately 49.08 acres of upland grassland, 11.47 acres of upland and seasonal side-slopes, 37.5 acres of open water channel, 37.7 acres of tule bench and seasonal wetland habitat, and approximately 14 acres of graveled access roads. An additional proposal will accompany this proposal and will address maintenance and site management for adjacent areas owned by TNBC. Although separate proposals are being submitted for different funding purposes, maintenance will occur simultaneously for the two management properties.

SCOPE OF WORK

Task 1 Maintenance Mowing

HRS will mow the grassland areas up to two times per year for three years as necessary to suppress annual grass weeds and prevent weed seed set. Mowing will be conducted at an approximately 6-inch cut height with care taken to avoid damage to the growth crowns of perennial native grasses.

Mowing will be performed by using a tractor mounted flail mower, rotary deck mowers, and string trimmers. Based on the project's Record Drawings there is a total of 60.55 acres of upland grassland and vegetated side-slopes that will require mowing and weed control. Areas that are subject to mowing include the uplands and side-slopes of all SAFCA Fisherman's Lake

Properties. Mowing will be performed from March through June for each year. Care will be taken early in the season to prevent tractor equipment from creating ruts and tracks in moist soils. For the purpose of this proposal, pricing for mowing operations are provided on an event basis.

Task 2 Maintenance Herbicide Applications to Grasslands and Cattails

HRS will apply herbicides as prescribed by a Pest Control Advisor. If requested by TNBC, a written Herbicide Application Notice can be submitted in advanced of the proposed herbicide application. HRS will apply herbicides up to three times per year throughout the maintenance period as necessary to suppress weeds and prevent seed set.

Weeds that will be targeted for control include non-native perennial grasses, cattails, and non-native broadleaf weeds. These weeds are typically found in the upland grasslands, side-slopes, tule benches, and supply ditches. HRS assumes the use of Capstone, Roundup Custom, Garlon, and Roundup Pro Concentrate may be necessary to perform the desired weed control in terrestrial and seasonal aquatic habitats for the variety of species that may be encountered. A 50-gallon spray rig mounted to ATV equipment and backpack sprayers will be utilized to spot-treat and broadcast spray target weed species. For the purpose of this proposal, pricing for herbicide applications are provided on an event basis.

Task 3 Maintenance Herbicide Application Open Water Channel

HRS will apply herbicides as prescribed by a Pest Control Advisor. If requested by TNBC, a written Herbicide Application Notice can be submitted in advanced of the proposed herbicide application. HRS will apply herbicides to all open water channels up to one time per year throughout the maintenance period as necessary to suppress weeds and prevent seed set.

HRS assumes that the primary weed that will require control may be Eurasian milfoil, curly pond-weed, and/or coon-tail and that the use of Sonar A.S. or similar product will be used to control these aquatic weeds as necessary. Prior to any treatments water levels will be lowered to reduce the herbicide's effect on native installed plants and increase herbicide concentration to focus on targeted species and will be detained for a minimum of 60 days. The timing of application of these herbicides may be performed in conjunction with dewatering for fish management, when feasible.

A 50-gallon spray rig mounted to ATV equipment will be utilized to broadcast spray target weed species in open water channels. Based on the project's Record Drawings there is a total of 37.5 acres of open water channel and approximately 187 acre-feet of water for all wetland cells at low water levels (at or near tule bench elevation). For the purpose of this proposal, pricing for herbicide applications are provided on an event basis.

Task 4 Water Management

HRS will provide water management for the site by controlling the levels of weir gates, weir board replacement, operation of water wells, and coordination with the Natomas Central Mutual Water Company. Routine site inspections and adjustments will be made weekly to ensure that adequate water levels are maintained. Water will be maintained at summer and winter water levels in respective months for all wetlands.

Water management for the Fisherman's Lake Marsh Complex will be managed simultaneously with the TNBC Natomas Farms and Cummings tracts. However, in an effort to split the cost for water management between the two projects the total amount of weekly visits required within one year has been divided amongst each proposal (i.e. 26 weeks for each). For the purpose of this proposal, pricing for water management is provided on an event basis.

Task 5 Fish Management

HRS will provide non-native fish management by dewatering the aquatic habitat within the wetland cells. A total of three wetland cells will be dewatered per maintenance year and will likely be performed during the summer months (June-August) to insure complete draw down of the open water channels. Dewatering of all wetland cells during summer months will not be performed in an effort to provide adequate aquatic habitat for Giant Garter Snake.

The wetlands will be dewatered by removing weir boards and allowing water flow out of the wetland. A 2-3" pump will be used to remove standing water at any point along the open water channel that does not have positive drainage. Fish management services will be coordinated with TNBC prior to performing activities. For the purpose of this proposal, fish management will be performed on a time and materials basis according to the rate sheet attached as **Exhibit A**.

Task 6 Beaver Management

At the time of writing this report, HRS does not have any staff that is licensed for trapping with the California Department of Fish and Wildlife (CDFG). However, HRS staff will seek to obtain licensing for beaver trapping and will only perform this activity once legal licensing is acquired. In addition to potential beaver trapping services, HRS may routinely remove debris and fallen trees from water control structures and other portions of the site that are placed or fallen by beavers. If it is deemed necessary, HRS may install and/or maintain exclusionary devices (welded wire fencing) around the entrances to water control structures where beaver activity is present. Due to the unknown abundance of beaver that may occupy the site, beaver trapping, cleaning of debris and/or exclusion will be performed on a time and materials basis according to the rate sheet attached as **Exhibit A**.

Task 7 Infrastructure Repair

On occasion site infrastructure may need to be repaired or maintained including fences, gates, water control boards, and well pumps. Trash and debris removal may also be required due to illegal dumping or beaver debris. Since these repairs and general maintenance tasks are typically unexpected, HRS will provide these services on a time and materials basis according to the rate sheet attached as **Exhibit A**. HRS does not have personnel that is qualified to perform major well system repairs, but can provide that service through a subcontractor.

This scope of work covers labor and materials, and is based upon our understanding of the project demands and scope of work. Additional services required beyond this scope of work would need to be negotiated between HRS and the client accordingly.

COST ESTIMATE

TASK NO.	UNIT	QTY	DESCRIPTION	UNIT PRICE	TOTAL PRICE
1	EV	6	Maintenance Mowing	\$11,276.00	\$67,656.00
2	EV	9	Maintenance Herbicide Application to Grasslands and Cattails	\$4,560.00	\$41,040.00
3	EV	3	Maintenance Herbicide Application to Open Water Channel	\$8,000.00	\$24,000.00
4	EV	78	Water Management	\$575.00	\$44,850.00
TOTAL					\$177,546.00

All fees for tasks 1 to 4 will be billed monthly on an event basis. Assuming all events will be necessary to complete the work, the total for this work is one hundred seventy seven thousand, five hundred forty six dollars and no cents (**\$177,546.00**).

Tasks 5 to 7 will be billed on a time and materials basis based on the rates displayed on Exhibit A. Work performed under these tasks will be performed in close coordination with TNBC. The most common rates that will likely be used include Foreman, Assistant Foreman, Skilled Laborer, Maintenance Laborer, Truck Usage, and Water Trailer. Our 2017 Rate Schedule is attached as **Exhibit A**.

OPTIONAL RENEWAL

The option to renew this proposal will be made available for an additional two years. TNBC may choose to renew this proposal for one of two years or both beyond the initial three-year maintenance period. Costs for services under tasks 1-4 may be renewed at the Unit Prices in the following Renewal Estimate table. The table reflects the initial Unit Prices with a 3 and 5 percent increases, respectively, due to cost of living increases. Tasks under time and materials will be renewed based on new annual rate sheets that will be made available to TNBC for their consideration.

RENEWAL ESTIMATE

TASK NO.	DESCRIPTION	UNIT PRICE YEAR 4 (+3%)	UNIT PRICE YEAR 5 (+5%)
1	Maintenance Mowing	\$11,614.25	\$11,839.75
2	Maintenance Herbicide Application to Grasslands and Cattails	\$4,696.80.00	\$4,788.00
3	Maintenance Herbicide Application to Open Water Channel	\$8,240.00	\$8,400.00
4	Water Management	\$592.25	\$603.75

ASSUMPTIONS: HRS assumes this is a prevailing wage project. HRS assumes no responsibility for permits or purchase on all water supplied by NCMWC and utilities to operate water wells.

EXCLUSIONS: This proposal does not include permit fees, water costs, water meter fees, electrical fees, hazardous materials removal, coring, boring, or rock breaking. This proposal does not include any street sweeping. This proposal does not include the creation of SWPPP plans.

Thank you for the opportunity to bid on this work for TNBC. If you have any questions regarding this scope of work, you can contact me at (916) 408-2990 or iboyd@hrs.dudek.com.

Sincerely,

HABITAT RESTORATION SCIENCES, INC.



Mark Girard, President & Co-Founder
Habitat Restoration Contractor
A, C-27 License # 842661



Ian Boyd
Restoration Ecologist/QAL

Attachment: Exhibit A, Rate Schedule

**Habitat Restoration Sciences, Inc.
2017 Standard Schedule of Charges**

Professional & Management Personnel

Habitat Management Coordinator/Principal	\$210.00/hr
Senior Project Manager	\$160.00/hr
Senior Engineer/ Senior Landscape Architect/ Senior Geologist	\$160.00/hr
Engineer/Landscape Architect/Geologist	\$120.00/hr
Senior Habitat Restoration Specialist.....	\$130.00/hr
Habitat Restoration Specialist	\$100.00/hr
CADD Designer/GIS Technician.....	\$75.00/hr
Administration/Clerical Support	\$65.00/hr

Field Personnel

Landscape Supervisor/Project Manager.....	\$125.00/hr
Specialty Equipment Operator/Operating Engineer	\$110.00/hr
QSD/QSP SWPPP Services	\$110.00/hr
Landscape Assistant Supervisor.....	\$105.00/hr
Foreman	\$85.00/hr
Assistant Foreman	\$65.00/hr
Skilled Laborer (QAL, 5+ Years' Experience).....	\$50.00/hr
Maintenance Laborer.....	\$33.00/hr

Equipment/Vehicles

Truck Usage	\$125.00/day
Water Trailer/Buffalo	\$75.00/day
Dump Trailer	\$100.00/day
GPS Unit.....	\$90.00/day
Quad/Mule.....	\$100.00/day
ATV with Spray Rig	\$150.00/day
Boat / Kubota Zero Turn Mower	\$225.00/day
Dingo Equipment/Tractor	\$450.00/day
CAT /John Deere Dozer, Excavator (305 or smaller), Skid Steer, etc.	\$450.00/day
CAT 308 Excavator.....	\$600.00/day
CAT 315 Excavator.....	\$850.00/day
Water Truck / Dump Truck.....	\$450.00/day
Chipper / Hydroseeder	\$450.00/day
Masticator Attachment	\$300.00/day
Roll-off Truck.....	\$600.00/day plus tipping fees

Emergency and Holidays – Minimum charge of two hours will be billed at 1.5 times the normal rate. Sundays are double time at 2.0 times normal rate.

Material and Outside Services – Herbicides, subcontractors, rental of special equipment, special fencing or signage materials, outside data processing and computer services, etc., are charged at 1.15 times the direct cost.

Travel Expenses –Per Diem where overnight stay is involved is charged at cost.

Invoices, Late Charges. - All fees will be billed to Client monthly and shall be due and payable upon receipt. Invoices are delinquent if not paid within thirty (30) days from the date of the invoice. Client agrees to pay a monthly late charge equal to one percent (1%) per month of the outstanding balance until paid in full.

