

REQUEST FOR PROPOSALS
Eagle Lake
Dredging and Shoreline Stabilization Project
Elk Mountain Ranch
Carbon County, WY

Project Background

Eagle Lake is a small, off-channel, constructed reservoir located near Halleck Creek #4 on the Elk Mountain Ranch. A rapid, landscape scale assessment of lentic habitat conditions within the lake was conducted by Land Stewardship Associates, LLC and FIN-UP Habitat Consultants, Inc. in August and September, 2006. The results of this assessment are contained in the documents Elk Mountain Ranch - NATURAL RESOURCE MASTER PLAN - PARTS 1& 2 (LSA, LLC, 2006). The 2006 assessment identified limiting factors and potential restoration projects for fisheries on fishing lakes within the Elk Mountain Ranch, including Eagle Lake.

Noxious aquatic weeds, limited deep water habitat and eroding shorelines were identified in the 2006 assessment as potential problem areas needing immediate treatment. A planning and design document (Gallagher¹, 2007) was prepared, describing the recommended treatment plan for the fishing lakes on the ranch. Work under this request for proposals (RFP) will be limited to Eagle Lake. Depending on the outcome of this project, further work under the project plan will be considered. Interested parties to the RFP are encouraged to review the planning document for specific details of the work to be performed under this project. The document may be downloaded in PDF format from the Fin-Up.com website, using the link below:

http://www.fin-up.com/EMR_files/EMR_Phase_2_Eagle_Lake_RFP.pdf.

A Clean Water Act Section 404 permit application was submitted to the United States Army Corps of Engineers (USACE) Cheyenne Regulatory Office in July 2007. In September, 2007, the shoreline stabilization phase of the project was authorized under Nationwide Permit #13 by the USACE. The proposed method of dredging was determined to be non-jurisdictional in nature, precluding the need for authorization. Authorization for shoreline stabilization work under this project will expire in September, 2009.

Project Area and Extent

The project area is characterized by a broad valley bottom with extensive bull rush/cattail/carex riparian vegetation downstream of the reservoir, with pasture lands dominated by upland grass species surrounding the lake and upstream. The elevation of the lake is 7,475 ft (ASL). The lake consists of 6.8 surface acres at full pool, with an estimated capacity of 25 acre/ft. Vicinity and project level maps are available for download in JPEG format on the Fin-Up website at the following link:

<http://www.fin-up.com/EMR.htm>.

An earthen dam forms the north shore of the lake. The dam face facing the lake has eroded in several areas. The lake outlet consists of a culvert and head-gate. A large island was constructed in 2003 from dredged spoils from two deep trenches aligned in a north-south axis along the eastern side of the lake. This island is extremely unstable, and is rapidly eroding due to wind and wave action. A large spoils pile is also perched along the eastern shore of the lake, and is also eroding back into the lake. The dredged trenches are 15 to 20 feet wide, and depths average 12 feet below the full-pool level of the lake. The lake has been drained to dead-pool storage, approximately 1/2 of the full pool capacity of the lake (5 surface acres / 13 acre/ft). Nuisance aquatic and terrestrial noxious weeds are present in the project area, consisting of Common watermilfoil and Canada thistle.

¹Gallagher, J. Peter, 2007. *Lake Shoreline Stabilization & Enhancement Project, FIN-UP Habitat Consultants, Inc., Prepared for the Elk Mountain Ranch, June, 2007.*

Project Scope and Description

Detailed information on project methods and a description of the work may be found in the project document referenced above. It is important to note that the timelines stated in the planning document are no longer considered valid, and the RFP respondent should be prepared to provide an estimate of time necessary to complete each phase of the Eagle Lake project.

The project will consist of four phases: lake draining, old spoils hauling/lake dredging, shoreline stabilization, and borrow pit reclamation. A shoreline stabilization map, haul route map, tree and boulder harvest site map, lake contour and dredging plan map, and structure drawing details may be downloaded from the Fin-Up website at <http://www.fin-up.com/EMR.htm>.

Lake draining will commence immediately following ice breakup in late April or early May. The lake will not need to be completely drawn down, but only pumped down to a level sufficient to access the areas of the lake to be excavated that have been identified in the planning document. Water pumped from the lake will need to be either piped over the dam and into the wetland below, or through the 12" outlet culvert located on the western edge of the earthen dam. Incidental fish salvage will be the responsibility of the Elk Mountain Ranch and/or Fin-Up, Inc.

Spoils piles left over from the 2003 dredging will be shaped, graded, and re-seeded, with excess spoils being used to stabilize the erosion gullies on the downstream face of the dam or hauled from the project site. A large borrow pit, the Cow Pit, has been designated for storage of materials from the shoreline spoils piles and lake excavations. Access to the Cow Pit consists of a ranch two-track road that leads north approximately 1.6 miles from Eagle Lake to the Rattlesnake Pass Road, then 4.3 miles east along the county road to the borrow pit at the northeast corner of the ranch. Total round-trip haul distance is 11.8 miles. Approximately 5,725 yd³ of material will be removed from the eastern shore of the lake. The island elevation will be lowered approximately 4 - 5 feet, matching the existing landscape elevation of the shorelines, requiring removal of another 1,060 yd³ of materials.

Lake dredging will be conducted using methods considered "non-jurisdictional" by the US Army Corps of Engineers (USACE). This will require using a "scoop and haul" technique, ensuring that all disturbed materials below the ordinary high water mark of the lake are completely removed and stored on adjacent uplands. A plot of the dredged areas is shown in the Diagram 5 of the planning document, and may be downloaded from the Fin-Up website at <http://www.fin-up.com/EMR.htm>. The littoral zone along the south shoreline of the lake will be excavated approximately 1 - 1.5 ft in depth, and the deeper region of the lake adjacent to the dam will be expanded by excavating more material from the center of the lake. Approximately 3 ft of lake bed material will be removed from the center of the lake, with the lake bottom gradually rising to the littoral zone along the south side of the impoundment. The total estimated material to be removed from the lake is 24,000 yd³. Dredging of the lake may commence as soon as conditions allow, most likely in early July.

Root-wad revetments and log toe-slope stabilization techniques will be used to harden the shoreline to protect from erosive wave action. 550 feet of the lake shoreline along the east shore will be treated using the log toe slope stabilization. Another 300 feet of similar shoreline treatments will be installed on the west shoreline of the island once the excess materials have been removed. 30 trees will be required for the Eagle Lake shoreline stabilization work, and may be harvested from two sites approximately 3.3 miles from the lake. 60 boulders may be required for the work, and will be harvested from a site near the crest of Rattlesnake Pass, a distance of approximately 3.3 miles. Sedge mats will be used in conjunction with the trees, and will be harvested from the edges of the riparian area immediately downstream of the lake. 1,800 yd³ of 12" - 16" rip-rap will be placed along the lakeside face of the dam to provide armoring of the shoreline and stabilization of the dam face. Rip-

rap material is not readily available on the ranch, and will need to be hauled to the site. Shoreline stabilization treatments can be completed before, concurrent to, or after dredging is completed.

After dredging and hauling activities are complete, the Cow Pit will be graded to the same level as the surrounding landscape, and reseeded using native seed. Seed will be provided by the Elk Mountain Ranch. Additionally, sediment fencing may be required if necessary to ensure that no spoils erode from the storage sites back into any perennial waters before vegetation becomes established on the rehabilitated pits.

Equipment

The following equipment is suggested as a minimum to complete the project:

Phase 1 - Lake Draining

- Floating or trailer mounted pump with 5 cubic ft/sec (cfs) capacity.
- 50 ft. of suction hose and 200 ft of discharge hose.

Phase 2 - Scoop and Haul of Dredged Spoils

- 20 metric ton or larger excavator.
- Two 18-20 yd³ six-wheeled articulated dump trucks or similar.

Phase 3 - Lake Shoreline Stabilization

- 15 metric ton excavator with hydraulic / fixed thumb
- Rubber Wheel Loader capable of carrying several boulders up to 1 yd³ each
- Dump Truck, Side Dump, or similar equipment for transporting trees up to thirty feet in length from the harvest sites to the lake.
- Chain Saw

Phase 4 - Borrow Pit Reclamation

- Grader, 20 metric ton excavator, or small bulldozer.

The Contactor has the discretion to modify these equipment suggestions and/or substitute different equipment in their response to this RFP. Contractors are encouraged to propose modifications or alternatives to the methods described in this RFP and the planning documents that may increase efficiency for transporting materials and completing the scope of work under this project.

Project Schedule

- Issue RFP by March 1, 2008
- Close RFP on March 31, 2008.
- Pump the lake in late April / early May, 2008
- Begin Phases 2- 4 by July 1, 2008. Complete project by August 31, 2008.

Proposal Guidelines

We request that your proposal be based on a cost/hour or cost/day basis for providing equipment and operator services for each phase of the project. Proposals should include an estimate of the cost per cubic yard of spoils hauled to borrow pit. Any hourly, daily or contract minimums or other requirements should also be specified in the proposal. Proposals should generally follow the guidelines suggested below:

1. A list of the equipment the Contractor proposes to use to complete the work. This information should include:
 - a. Each equipment model #, type, years in service, and any special attributes (hydraulic/fixed thumb, zero tail, bucket capacity, clam-shell bucket, turbocharged, etc.)
 - b. Cost/hour for each piece of equipment and operator.
 - c. An estimate of the number of operators/workers required, including any additional costs.
 - d. Mobilization/De-Mobilization cost for each piece of equipment.
 - e. Cost/mile or cost/incident for minor mobilizations (20 miles or less) within the Elk Mountain Ranch that may be required during the course of the project for each piece of equipment.
 - f. Incidental costs, if any, for delays due to weather or other uncontrollable causes.
 - g. Any other identifiable costs related to providing equipment and operators for the project. These costs should include any contractor's minimum hourly work thresholds, travel expenses, or other expenses not specifically listed above.
 - h. Cost of rip/rap, including delivery charges.
 - i. Cost (\$/ft) for borrow pit sediment fencing, including installation.
 - j. (Optional) Photographs of the equipment to be used on the project.
2. Contactor's estimate of the time necessary to complete the different phases of the project.
 - a. Phase 1 - Draining Eagle Lake - April / May 2008
 - b. Phase 2 - Dredging and Hauling Operations - July / Aug. 2008
 - c. Phase 3 - Shoreline Stabilization - July / Aug. 2008
 - d. Phase 4 - Borrow Pit Reclamation - Aug 2008.
3. Previous dredging and/or bank stabilization experience - if any. References may be submitted, but are not required.
4. (Optional) Narrative descriptions of any proposed alternatives/modifications to the implementation plan. Narratives should be limited to three pages in length.

Other Considerations

Due to the nature of this project, it is anticipated that site visits may be requested before proposals can be prepared. Requests for site visits to the project area should be directed to Michael Murley, Elk Mountain Ranch Operations Manager at (307)-348-7140. Questions regarding the nature and scope of the project, design criteria and other project level inquiries can be directed to Pete Gallagher, FIN-UP Habitat Consultants, Inc. at (719) 332-2550 or via e-mail to pete@fin-up.com.

Proposals should be directed to Michael Murley at the Elk Mountain Ranch. Proposals should be sent to the address listed below:

Michael Murley - Manager
Elk Mountain Ranch Operations, Inc.
P.O. Box 36
Elk Mountain WY 82324
Attn: Eagle RFP

This RFP will expire on March 31, 2008, and proposals will be due *in the Ranch offices* by the close of business on March 31, 2008. Post marked proposals arriving after March 31, 2008 will not be considered.

Selection Criteria

Proposals for the project described herein will be evaluated on the following basis, with each item carrying similar weight:

- Proposal Comprehensiveness
- Suitability of Equipment
- Costs of Equipment
- Mobilization Costs
- Prior Experience
- Incidental Costs
- Proposals for modification/alteration of plan resulting in better efficiency of implementation.

Proposals will be weighed against these criteria, as opposed to simply accepting the lowest bid. Budget is only one factor that will be considered in awarding the contract for this project. In the event that all proposals exceed our estimated project budget, we will use other criteria in selecting a contractor who is willing to downscale the project scope to fit our budget. For example, if one proposal is outstanding in all respects but exceeds our budget by 10 percent, we will ask that contractor to undertake the project but reduce the scope of work (number of treatments) by a proportionate amount.