SKAGIT COUNTY
PUBLIC WORKS DEPARTMENT

1800 Continental Place, Mount Vernon, WA 98273-5625
(360) 416-1400 FAX (360) 416-1405

Request for Proposals for Aquatic Vegetation Management

Lake Management District No. 4
(Clear Lake and Beaver Lake)

Summary
Skagit County Public Works and Lake Management District No. 4 for Clear and Beaver Lakes seek professional services from a qualified contractor for the purpose of aquatic plant management in Clear Lake and Beaver Lake for a one (1) year contract (2021-2022). The County's needs are outlined in the following request for proposals (RFP).

Timeframe
The County will adhere to the following timeframe for selection of firm:

- Issue RFP — Tuesday, April 13, 2021
- Deadline for Proposal Submittal — Monday, April 26, 2021
- Selection of Firm — Friday, May 7, 2021

Submittal Criteria
All proposals should be labeled "RFP LMD 4 Aquatic Plant Management" and sent to:

(*Preferred) Email: tracya@co.skagit.wa.us

OR mailed /delivered to:

Skagit County Public Works
Attn: Tracy Alker
1800 Continental Place
Mount Vernon, WA 98273-5625

All proposals must be received by 4:30 p.m. on Monday, April 26, 2021. Proposals will be limited to a maximum of twelve (12) pages, including cover letter and graphics. This page limit does not include the below requested copy of a Final Report.

You must be a contractor on the **MRSC Roster** to submit an RFP for this project.

Interested firms should submit the following:

- Statement of Qualifications
- Summary of approach to complete the Scope of Work (SOW)
- Cost Proposal

The proposal must contain the following information:

- The names of individuals (and the names of their respective employers) who will be providing aquatic plant management for this project, and their areas of expertise.

- Specific experience and/or relevant certifications/licenses of all individuals relative to this proposed project.
- A proposed outline detailing tasks, team composition, methods, equipment used, products and project schedule, including the number of hours required to complete each task or product (if applicable).
- A proposed budget based on the costs associated with the tasks outlined in this RFP.
- A description of any fines or penalties issued to the firm, or any individual working on the project, concerning permit and/or regulatory violations associated with aquatic plant management activities within the past ten (10) years.
- A minimum of three (3) project references. Include project name, date(s), description of project, and a contact name/telephone number.
- An example of an aquatic plant management Final Report (including maps) prepared within the last three (3) years. Report should cover a project similar in scope to the task outlined in this RFP.

Terms and Conditions

The selected firm will be required to enter into a Professional Services Agreement with Skagit County Public Works. In addition to demonstrating skills and abilities to conduct aquatic vegetation surveys and produce associated maps, the successful candidate must:

- Carry a Washington State Business License.
- Provide proof of comprehensive or commercial general liability, professional liability and automobile liability insurance coverage in the amount of $1,000,000 for the duration of the contract. Additionally,
- certificate of insurance should name Skagit County as an additional insured that will be secured for the above by endorsement.
- Provide current Washington State Department of Agriculture Commercial Applicators License with Aquatic Endorsement.

Background

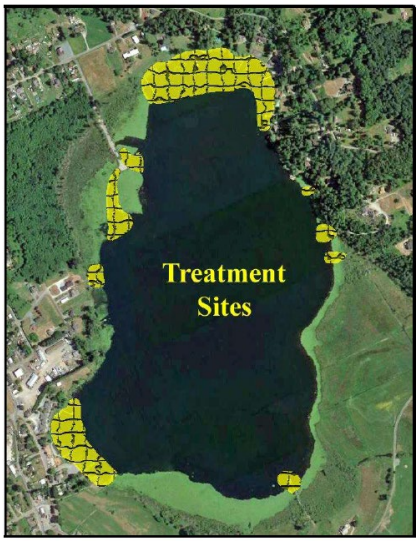
Clear Lake

Clear Lake is approximately 200 acres in surface area with a mean depth of 23 feet and a maximum depth of 44 feet. The shoreline totals approximately 2.4 miles in length. A seasonal stream enters the lake from the northeast and represents the only surface water body that feeds the lake. The outlet located along the southern shoreline provides a connection to Beaver Lake and likely serves as a conduit that facilitates the spread of plant fragments between the lakes during rain and flood events. Extensive wetlands around the lake have been mapped by National Wetland Inventory (NWI) and provide valuable habitat for fish and wildlife. Most of the development around the lake occurs within the unincorporated community of Clear Lake, along the western shoreline, which supports low to moderate density residential development. A State owned public boat launch on the lake provides access for fishing, water-skiing, boating, and wildlife viewing. A County-owned recreation facility provides public lake access for swimmers.

Beaver Lake

Beaver Lake, located immediately south of Clear Lake, totals 75 acres in surface area. This small lake has a mean depth of 5 feet and a maximum depth of 10 feet. Due to the shallow nature of the lake, the littoral zone encompasses the entire lake area. The shoreline spans 1.5 miles. Drainage from Clear Lake empties into Fox Creek, which enters Beaver Lake on the northeast shoreline and provides the only consolidated surface water input to Beaver Lake. The outlet, located at the southwest end of the lake, connects to Turner Creek, a tributary of East Fork Nookachamps Creek. Based on field observations, the outlet allows constant drainage from Beaver Lake and could potentially transport noxious weed fragments downstream or potentially re-infest Beaver Lake and/or Clear Lake during flood events when the Nookachamps system backs up with Skagit River water. The land adjacent to Beaver Lake is rural in nature. A public boat launch on the lake provides access for fishing and wildlife viewing. There are no residential homes located on this lake.

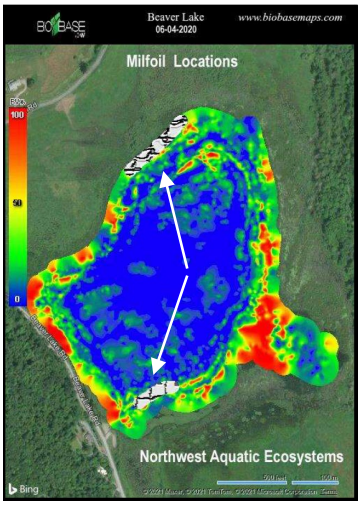
Scope of Work



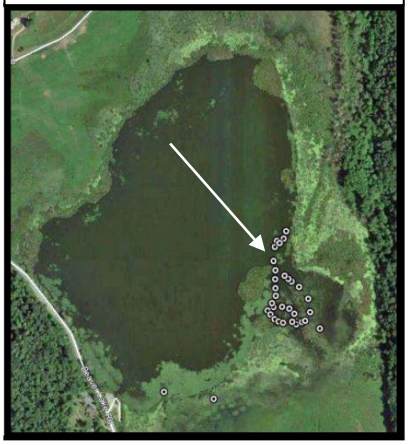
Clear Lake: In Clear Lake, the proposed project aims to eradicate or reduce invasive Eurasian Milfoil and control noxious fragrant water lilies and nuisance submersed native aquatic plants that have become problematic along residential shorelines where they impair beneficial uses of the lake. The native aquatic plants are not targeted for control along the undeveloped shorelines. Only a few Eurasian Milfoil plants currently coexist in mixed stands of native aquatic plant species along the northwest shoreline and near the County-owned public swimming beach along the southwest shoreline that will need to be targeted in 2021. Milfoil can be specifically targeted with a systemic herbicide or controlled in conjunction with native weed control in order to stay within budget. The native submersed aquatic plants have started to become more problematic than Milfoil for some lake users around residential shorelines, docks, and swimming areas that will need to be controlled as the budget allows in 2022. There are two (2) parcels located along that eastern shoreline that receive no treatments per their request. Broadleaf pondweed (*Potamogeton amplifolius*) is the most problematic and difficult to control particularly in one area along the shallow northern residential shoreline. Aquathol K has proven to be more effective than diquat in controlling this particular pondweed species in the soft sediment areas as long as it is within the budget. It is important to notify Brian Adams at the County Parks Department, at least **forty-eight (48) hours in advance** of the treatments so his Department can give the public as much advanced notice of the beach closure as possible. Nuisance submersed aquatic plant control is limited to no more than 50% of the shoreline (~6,300 feet) along residential shorelines, swimming areas, and docks where the weeds have become problematic for lake users. Lilies have been greatly reduced over the years in Clear Lake. In 2020, the herbicides Triclopyr and imazapyr 1% mix were applied directly to the lily pads. The lilies that are growing along a section of the northern shoreline are sporadic and small in nature, so the herbicides tend to wash off easily from boat wave action

and do not respond as well to treatments. A granular formulation in conjunction with liquid surface might be more effective as long as it is within the budget.

Beaver Lake: In Beaver Lake, the proposed project aims to eradicate Eurasian Milfoil. No other aquatic plants will be targeted for control in Beaver Lake in 2021. In 2020, Milfoil was identified at the north, northwest, and southeast ends of Beaver Lake. However, the greatest Milfoil expansion occurred in an area of the lake that is difficult to access without an airboat because of its shallow nature and dense native macrophhyte growth along the eastern shoreline. Although there are no residential homes on Beaver Lake, the lake is frequently used by the public for fishing so it is important to visibly post the treatment notice at the Beaver Lake boat launch prior to any fishing activity.



Milfoil Expansion in Shallow Area



The contractor will be responsible for securing the Aquatic Plant and Algae Management NPDES General Permits for both lakes from the Washington State Department of Ecology, and strictly adhering to permit requirements and herbicide application restrictions, surveying and mapping the locations of the invasive and nuisance native aquatic vegetation, visibly and securely posting public notices per permit requirements, applying aquatic herbicides or other approved aquatic plant management techniques, producing a detailed written project report at the end of each season, attending at least one (1) public meeting each year, and maintaining active communications with Skagit County staff, the Lake Management District Advisory Committee, and lakeside residents.

Project Tasks:
The contractor will be responsible for the following project tasks:

Task 1: Aquatic Vegetation Surveys

1.1 Pre-Treatment Survey

- Notify Skagit County staff in writing no less than three (3) work days in advance of the survey dates. The Contractor shall be prepared to accommodate County staff during all survey operations.
- Conduct one (1) pre-treatment aquatic vegetation survey during the spring (or early summer) of 2021 to identify and map the density and distribution of invasive and nuisance aquatic vegetation throughout Clear Lake and Beaver Lake and determine what materials and how much will be used. Surveys should include surface observation as well as the rake-toss technique along transects, GPS coordinates, and sonar technology to accurately map plant densities.
- Communicate the survey results to County staff, including recommended actions and estimated costs that may serve as the basis for developing a task assignment for additional work under this contract.

1.2 Post-Treatment Survey

- Notify Skagit County staff in writing no less than three (3) work days in advance of the survey date to discuss if the remaining budget will allow for the post-treatment surveys. The Contractor shall be prepared to accommodate County staff during all survey operations.
- If the budget allows, conduct at least one (1) post-treatment aquatic vegetation survey to evaluate the efficacy of aquatic herbicide treatments and to look for any new invasive aquatic plant growth and determine if follow-up treatments will be necessary. If a second treatment is necessary, and if the budget allows, the second post-treatment survey should be conducted no more than thirty (30) to forty-five (45) days after any required secondary treatment.

- Communicate the survey results to County staff, including recommended actions and estimated costs that may serve as the basis for developing a task assignment for additional work under this contract.

1.3 Aquatic Plant Control Maps

- Produce maps illustrating the distribution and density of aquatic vegetation communities. Project specifications and Federal Geographic Data Committee standard metadata must be provided for all maps. Maps will include the pre-treatment survey results, the treatment areas, aquatic plant species targeted for treatment, and the post-treatment results.

Task 2: Aquatic Plant Management

2.1 Aquatic Plant and Algae Management General Permit

- The Contractor is responsible for applying, obtaining, and complying with the Aquatic Plant and Algae Management General Permit for Clear and Beaver Lakes from the Washington State Department of Ecology and providing a copy of the permit and pesticide application records to the County staff.
- All contractor personnel applying the aquatic herbicide shall be approved as a Washington State Licensed aquatic herbicide applicator(s).

2.2 Public Notification

- Notify Skagit County staff in writing no less than three (3) work days in advance of the treatment date.
- Comply with all State and local public notification requirements for herbicide treatments and provide the County with copies of notifications.
- Contact the County Assessor's Office to get the most current mailing addresses of property owners within the boundaries of the Lake Management District and mail notices at least ten (10) days in advance of the treatments.
- Coordinate with the Skagit County Parks Department to visibly post beach closure notices at the Clear Lake public swim beach prior to applying herbicides.
- Visibly post notices on docks, along the shoreline and boat launches at both Clear Lake and Beaver Lake per permit requirements before applying herbicides.
- Adhere to permit requirements for removing notices after herbicide treatments are applied.

2.3 Clear Lake Herbicide Treatments

Submersed aquatic vegetation treatments should occur shortly after the **July 15 fish timing treatment window**:

- Eurasian Milfoil: Eradicate or control Eurasian Milfoil with an approved herbicide that specifically targets Milfoil or in conjunction with controlling the nuisance submerse aquatic plants.
- Nuisance Native Aquatic Plants: Control nuisance submersed aquatic plants in Clear Lake with a contact herbicide such as aquathol k or diquat or a combination as the budget allows. A second treatment might also be warranted if it is within budget.
- Noxious Water Lilies: Control noxious fragrant water lilies with a 1% solution of imazapyr or other approved herbicides (approximately 3 acres each year). A granual formulation might be necessary to apply on the lilies in the northern sector of the lake where the lilies are sporadic and small in nature as long as it is within budget.
- Apply aquatic herbicides in accordance with the label specifications and permit requirements.
- Perform water quality monitoring as required by the NPDES permit to monitor residual herbicides.
- Take precautionary measures and protect from harm existing populations of any state-listed sensitive plants located near the treatment sites.

2.4 Beaver Lake Herbicide Treatments

- Eurasian Milfoil: Control Eurasian Milfoil with a systemic herbicide to eradicate Eurasian Milfoil in Beaver Lake. An airboat will likely be needed to access the shallow area of the lake where the

greatest Milfoil infestation is located. When the water levels are high, the treatments will need to be postponed until later in the season to ensure the safety of the livestock.
- Perform water quality monitoring as required by the NPDES permit to monitor residual herbicides.
- Apply aquatic herbicides in accordance with the label specifications and permit requirements.
- Take precautionary measures and protect from harm existing populations of any state-listed sensitive plants such as Carex comosa located near the treatment area.

Task 3: Project Reports: A final report shall be submitted electronically no later than February 28, 2022 to Skagit County Public Works staff. The report will summarize pre- and post- treatment plant densities, areas treated, the type and amount of herbicide used, treatment results, and recommendations for 2022. The report will include:

- Map showing pre-treatment plant densities of submersed aquatic plants.
- Maps detailing the treatment areas and the aquatic plant species targeted.
- Map showing post-treatment plant density of submersed aquatic plants.
- Estimated acreage treated for each targeted aquatic plant species.
- A description of methods, herbicides, and equipment used.
- An assessment of the overall efficacy of the herbicide treatment.
- A copy of all permits and pesticide application records.
- Recommended actions for continued management in 2022.

Task 4: Communications

- Maintain active communication with Skagit County staff (email preferred) and shoreline residents, recreational boaters, and fishermen.
- Provide a brief written description of the work accomplished on all invoices. Include copies of all publications and written materials along with the related invoices.
- Attend at least one (1) Lake Management District Advisory Committee meeting each year to discuss aquatic plant management issues and concerns, treatment results from the prior year and make recommendations for the subsequent year.

Annual Estimated Schedule of Work (1 Year Contract)*

Date	Task
June	Pre-Treatment Aquatic Vegetation Survey
July -Aug	Apply herbicide treatments to control aquatic plants
July - August	Post-Treatment Aquatic Vegetation Survey
Early August	Secondary treatment if necessary
February	Annual Project Reports Due
February-March	Attend the annual advisory committee meeting to report results and recommendations

**Skagit County Public Works reserves the right to modify the annual schedule of work.*

Selection Criteria

The proposals will be evaluated by the Lake Management District No. 4 Advisory Committee and Skagit County Public Works staff based on the following criteria:

- Qualifications of firm
- Work performance
- Scope of work approach
- Cost

Project Cost Estimates

Note: For consistency, please use this format for cost estimates. Unit prices for all items, all extensions, and total amount of bid shall be shown. The total contract amount and tasks shall depend on available funding and the scope of work approved by the LMD 4 Advisory Committee. The actual treatment quantity will depend on pre-treatment survey results and the available budget.

Item #	Description	Quantity	Unit	Unit Price *(including sales tax)*	Total Amount *(including sales tax)*
1	Pre-treatment aquatic vegetation survey and mapping	2	Per Survey	$	$
2	Post-treatment aquatic vegetation survey and mapping to analyze success of treatments and to look for new infestations	2	Per Survey	$	$
3	Washington State Department of Ecology's Aquatic Plant and Algae Management NPDES General Permit	2	Per Permit	$	$
4	Annual project report (electronic)	1	Per Report	$	$
5	Public meetings and communications	1	Per Meeting	$	$
6	Public treatment notifications mailed to property owners	57	Per Notice	$	$
7	Public treatment notifications posted on docks, shorelines, and public boat launch	57	Per Notice	$	$
8	Noxious water lily and spatterdock control with the herbicide Imazapyr (or something equivalent)	1	Per Acre	$	$
9	Yellow flag iris and purple loosestrife control with the herbicide Imazapyr (or something equivalent)	1	Per Lot	$	$
10	Submersed native aquatic weed control- diquat (or something equivalent)	1	Per Acre	$	$
11	Submersed native aquatic weed control- aquathol k (or something equivalent)	1	Per Acre	$	$
12	Submersed native aquatic weed control- diquat/aquathol k mixed solution (or something equivalent)	1	Per Acre	$	$
13	Eurasian Milfoil control with a systemic herbicide	1	Per Acre	$	$
				TOTAL BID (*Including Washington State Sales Tax= 8.1%*):	$