

## QUICK GUIDE TO PERMITTING

### Hydraulic Project Approval (HPA)

<https://wdfw.wa.gov/licenses/environmental/hpa>

Washington Department of Fish & Wildlife (WDFW) requires a HPA for most activities involving removal of aquatic plants, whether noxious or beneficial. However, for most home owner actions involving hand-held tools or equipment, possession of the WDFW pamphlet titled "Aquatic Plants and Fish" counts as the HPA (see table 1 on page 6 for pamphlet vs. individual HPA restrictions).

Search online for "Rules for Aquatic Plant Removal and Control WDFW"

The WDFW website includes additional information about the HPA process, including the types of HPAs, the process for application, and a link to apply on-line. In most cases weed removal HPAs should be obtainable with a phone call to WDFW.

### Dredging and Bottom Barriers

<https://www.dnr.wa.gov/programs-and-services/aquatics/leasing-and-land-transactions>

Although the WDFW officially handles the HPAs, DNR approval is also required for activities affecting the lake bottom. This is done via a Joint Aquatic Resources Permit Application (JARPA) to get a "license" for the project. Licenses include an initial fee and annual renewal fees for up to five years.

### Aquatic Herbicide Permits

<https://ecology.wa.gov/Regulations-Permits/Permits-certifications/>

[Aquatic-pesticide-permits](#)

Any application of chemical to the water requires a permit from Ecology, and the process is quite involved. Applications for control of the aquatic weeds listed above fall under the "Aquatic Plant and Algae Management General Permit." Provisions include that only "Licensed Pesticide Applicators" (Licensed in the State of Washington with an aquatic endorsement per WAC16-228-1545 3(t)) can be covered by the permit. The permit also requires that public notice of the intent to apply chemicals be published in the local paper, sent to various government agencies, and mailed or delivered to all potentially affected neighbors (generally defined in the permit as within one-quarter mile in each direction along the shoreline), as well as posted notices before application and during the water-use restriction period.

## HOW CAN I HELP PROTECT LAKE HEALTH?

1. Remove any new growths of lily pads as soon as they appear (in addition to following a mitigation plan for established growth). The silt accumulation in middle lake as a result of the lily pads can be slowed by reducing their coverage area.
2. Report sightings of milfoil to [lakeroesigercc@gmail.com](mailto:lakeroesigercc@gmail.com).
3. If you use watercraft in places other than this lake, be sure to wash the hull and trailer thoroughly after each use to remove any plant or animal life.
4. Limit nutrient inputs into the lake. Avoid using fertilizers and other phosphate-containing chemicals (soaps) near the lake. Limit stream bed erosion by lining the beds with either plants or rocks to hold the soil in place. Do not remove native plants from streambeds. Limit surface water run-off by creating catch-basins or rain-garden spaces to allow surface water to collect and percolate into the soil rather than running straight into the lake.
5. Participate in volunteer lake health community events: Stay tuned for dates.



## Aquatic Weed Info. Spring 2020 Lake Health Committee

Detailed version of this document complete with helpful links available online at [lakeroesigercommunity.org](http://lakeroesigercommunity.org)

**PROTECTING THE HEALTH OF OUR LAKE** includes mitigating the growth of invasive species. What can each of us do to help, and what can we accomplish together as a team?

### IDENTIFY INVASIVE SPECIES

#### Fragrant Water Lily

Spreads relatively slowly but very difficult to remove once established. An analogy would be the "underwater equivalent of bamboo." Middle lake area is approximately 41 acres; approximately 26 acres of that is covered with lily pads during the non-winter months. The lilies are moving into the south and north lake as well, overcoming natural habitat and prematurely aging the lake, increasing the speed of accumulation of silt. **PLEASE REMOVE small patches before they become fully established!** See pg. 2



#### Grass-leaved Arrowhead

Plants form a "monoculture" crowding out native vegetation (and possibly milfoil).



#### Eurasian Milfoil

Highly invasive and easily spread both by neglect and by improper removal techniques. It easily fragments, and each fragment can start a new plant.



**If you find milfoil, please report its location to Lake Roesiger Community Club ([lakeroesigercc@gmail.com](mailto:lakeroesigercc@gmail.com)).** A portion of annual club dues have gone toward professional milfoil removal previously and will continue to support milfoil containment and eradication. **Note that all lake property owners are encouraged to join the Lake Roesiger Community Club.**

*The Lake Roesiger Community Club also accepts donations for the purpose of supporting noxious weed containment and eradication in the lake.*

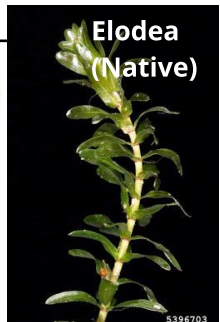
**For more information on invasive weeds**, consult the Submersed-Aquatic-Plant-ID-Guide, found online at [snhomishcountywa.gov](http://snhomishcountywa.gov), or visit the Washington State Noxious Weed Control Board website for much more information including, laws, classifications, and many helpful links.

**NATIVE PLANTS** commonly confused with milfoil, especially when viewed in the water from above, include Bladderwort and Common Elodea

Bladderwort  
(Native)



Elodea  
(Native)



## READY TO INTERVENE?

### CHECK PERMITTING GUIDELINES FIRST (See back of pamphlet)

Part of the challenge is the maze of regulatory agencies that are involved.

- Department of Natural Resources (**DNR**) "owns" the lake bottom and oversees its care.
- Washington Department of Fish & Wildlife (**WDFW**) has authority over the water and is responsible for care of creatures living in it.
- Department of Ecology (Ecology) has authority over anything that could harm the environment, specifically chemicals.
- Even the Army Corps of Engineers may get involved in a Joint Aquatic Resources Permit Application (**JARPA**).

The Governor's Office for Regulatory Innovation and Assistance offers an aquatic permitting pamphlet that may be helpful for many instances including weed removal.

**Visit [Oria.wa.gov](http://Oria.wa.gov) and search for Aquatic Permitting.**

### HAND METHODS USUALLY DO NOT REQUIRE PERMITS BEYOND A COPY OF THE WDFW "AQUATIC PLANTS AND FISH" PAMPHLET, AVAILABLE ONLINE.

**Hand Pulling** (All debris MUST BE removed from the lake.)

A good solution for the arrowhead, as it seems to uproot fairly easily if you grab at the base of the plant. Milfoil should only be removed by persons trained to capture the entire plant. **If you find milfoil, please report its location to Lake Roesiger Community Club** ([lakeroesigercc@gmail.com](mailto:lakeroesigercc@gmail.com)).

**Hand Tools** (Available on websites such as [weedersdigest.com](http://weedersdigest.com))

*Be sure not to disturb any milfoil while you are trying to mitigate lily pads or arrowhead.*

Want to test before buying your own?  
Available for checkout from the club:  
Lily Pad Ripper, Lake Rake



The lily pad ripper does a reasonably good job getting through the root mass, however the lily pad root masses can be tough, so pulling it

behind a boat, or better, behind a pickup truck (on a long rope) is much easier than pulling by hand. The challenge with middle lake is that the ripper can also catch the buried logs. As

an easier alternative, a tree pruner saw (left) or Root Slayer style root shovel can be used to cut through the lily pad roots until they float out and can be removed. A muck shovel is an option to make sure the smaller pieces are removed.



### Power Tools

Typically require additional permits. Check out [weedersdigest.com](http://weedersdigest.com) for pictures and descriptions of handheld dredgers and aquatic vegetation groomers. Power tool categories listed in the "Aquatic Plants and Fish" pamphlet include mechanical harvesting and cutting, rotoation, and dredging. Per WAC 220-660-290, mechanical harvesting/cutting and diver-operated dredging need only the pamphlet; however it is strongly recommended to confirm with WDFW first. Rotoation and other forms of dredging require an individual HPA.

Please note that, according to WDFW, **Aqua-Thrusters** (the underwater equivalent of leaf blowers) are not considered removal tools, **are not permittable or allowed.**

## METHODS REQUIRING PERMIT FROM STATE (DNR, WDFW)

### Barriers and Screens

Essentially putting a tarp over the plants to starve them of light. Typically they are either heavy burlap or man-made fabric, held down with sand bags. (Some come with a frame which makes moving or removing them every couple of years, as required by the DNR, easier.) Both contractors who met with the Community Club recommended barriers for lily pad control. The "Aquatic Plants and Fish" pamphlet ([oria.wa.gov](http://oria.wa.gov)) defines how much area can be covered at a time. Note that the barriers must be maintained to prevent silt from accumulating on them, which could allow new plants to regrow on top; and to stay free of silt or holes, lest growth find root on top of or through the mat. Even mats that float on top of the water discourage plant growth. A property owner who kept a floating mat in the same location for two or more years before strategically moving it to a new location could potentially make great progress at reducing or eliminating lily pads.



### Chemicals

Although legal with proper permitting, current community sentiment runs counter to chemical application for both environmental and health reasons. This pamphlet was created in part to provide information about other less controversial and more environmentally friendly options. Permits for the use of herbicides is controlled by the Department of Ecology, and their website indicates that the user will likely also need to be covered under a National Pollution Discharge Elimination System (NPDES) permit. See back of pamphlet for more information.

***Never apply herbicides without following the permitting process. This could endanger the health of the lake, its inhabitants, and the people in and around it.***

### Mechanical Harvesting or Cutting

A boat-mounted mower can be rented or purchased, but due to cost and labor concerns, this method does not appear to be a good option for our lake at this time.

## REFERENCES AND RESOURCES

This pamphlet is a result of ongoing research on behalf of the Lake Roesiger Community Club by the Lake Health Committee, formed in 2019 and tasked with the mission of researching and proposing solutions to keep our lake healthy.

We have consulted online resources, contractors, government agencies, and biologists. Our shared problem is not easily solved, but we can unify in search of solutions, being careful to respect one another and honor the law.

CONTRACTORS and VENDORS:

SeaScapesNW, Milfoil King, Northwest Aquatic Mangement, [weedersdigest.com](http://weedersdigest.com)

AGENCIES AND GOVERNMENT CONTACTS:

Snohomish County Surface Water Management, Lake Health  
Snohomish County Executive's Office  
Washington Department of Fish and Wildlife (WDFW)  
Department of Natural Resources (DNR)