Walters Lake Aquatic Plant Control Program Annual Report

A publication of the Walters Lake Improvement Board

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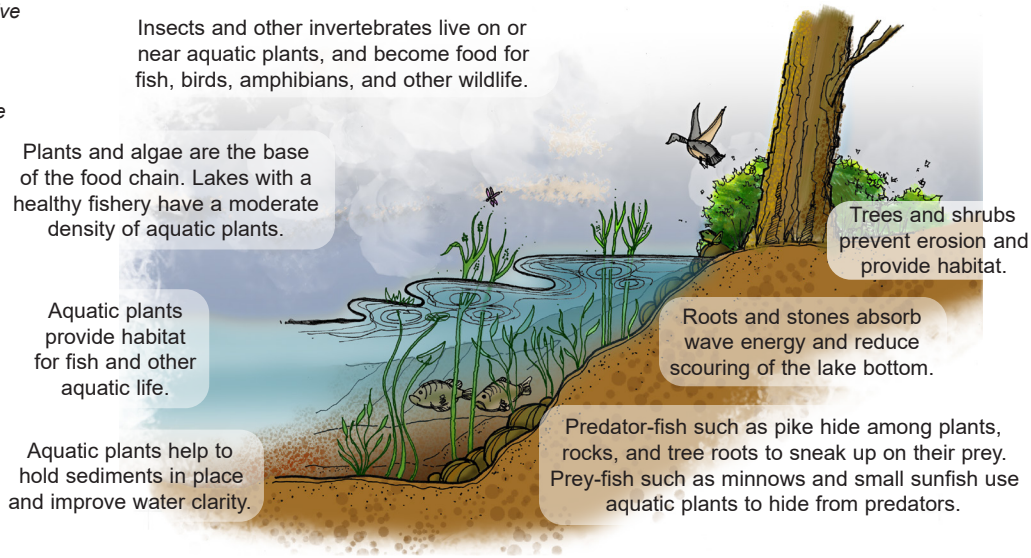
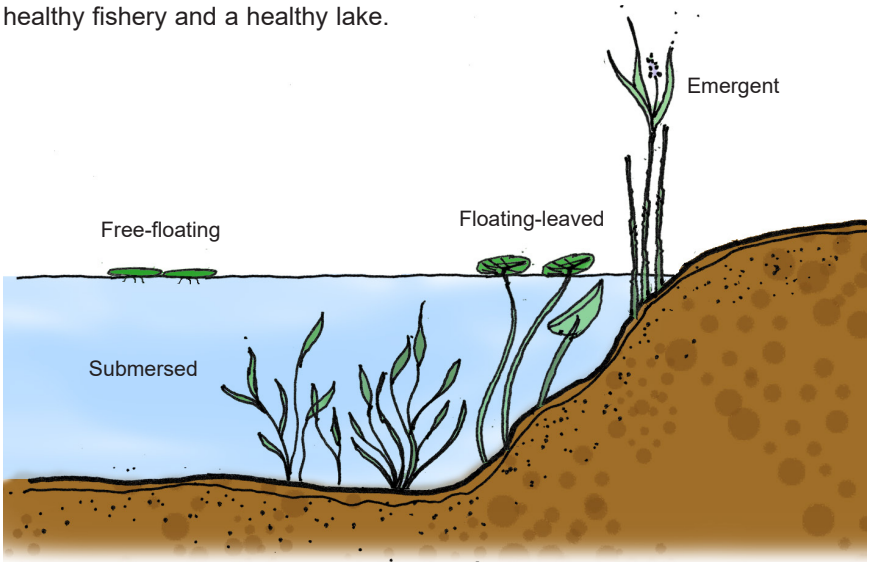
For the past several years, a nuisance plant control program has been ongoing on Walters Lake. The primary objective of the program is to prevent the spread of invasive aquatic plants while preserving beneficial plant species. This report contains an overview of plant control activities conducted on Walters Lake in 2022.

Aquatic plants are an important component of lakes. They produce oxygen during photosynthesis, provide food, habitat and cover for fish, and help stabilize shoreline and bottom sediments.



There are four main aquatic plant groups: submersed, floating-leaved, free-floating, and emergent. Each plant group provides important ecological functions. Maintaining a diversity of aquatic plants is important to sustaining a healthy fishery and a healthy lake.



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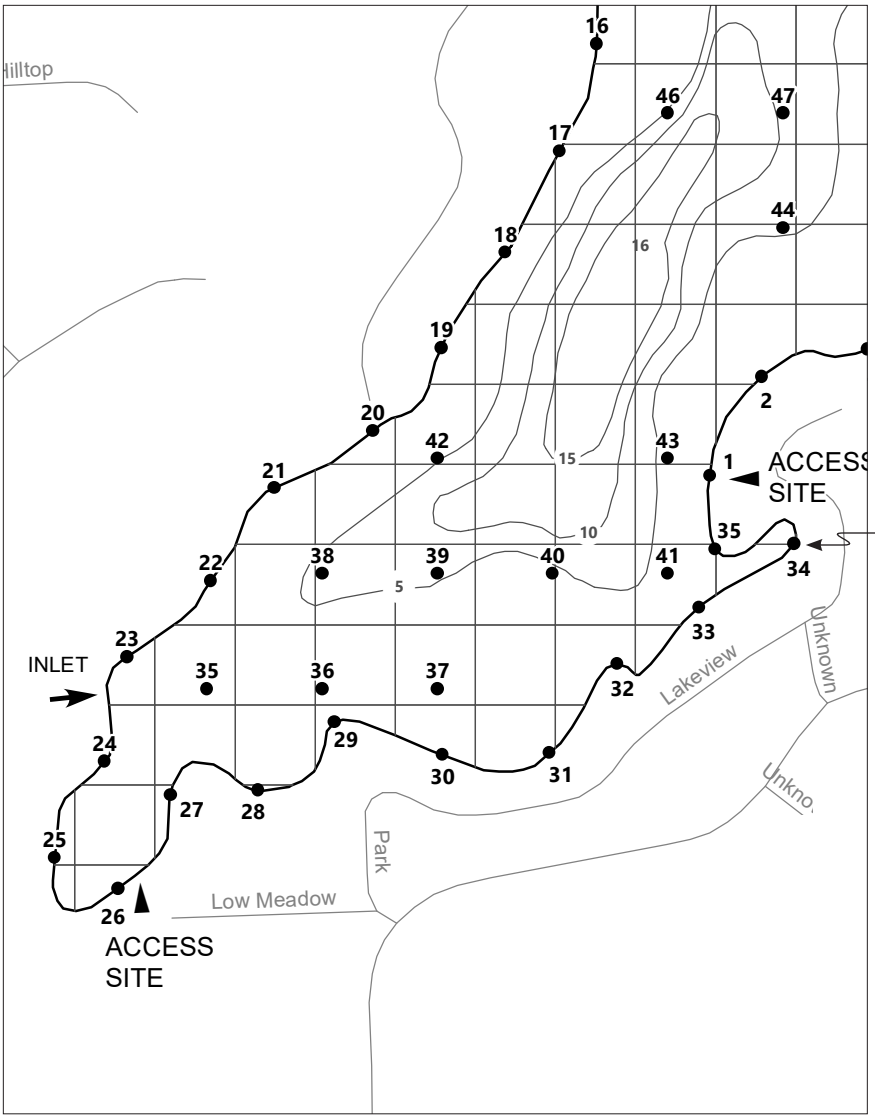
Plant control activities are coordinated under the direction of an environmental consultant, Progressive AE. Biologists from Progressive conduct GPS-guided surveys of the lake to identify problem areas, and detailed treatment and harvest maps are provided to the plant control contractors. Follow-up surveys are conducted throughout the growing season to evaluate results and the need for additional treatments or harvesting. In 2022, surveys of the lake were conducted on May 4, June 1, June 28, August 1, and August 30.



GPS reference points established along the shoreline and shallow offshore areas of Walters Lake are used to guide plant surveys and to accurately identify the location of nuisance plant growth areas.

Plant control in Walters Lake involves the select use of herbicides to control invasive plant growth. Primary plants targeted for control in Walters Lake include Eurasian milfoil and starry stonewort. Both of these plants are non-native (exotic) species that tend to be highly invasive and have the potential to spread quickly if left unchecked.

Eurasian milfoil (*Myriophyllum spicatum*)

Starry stonewort (*Nitellopsis obtusa*)

Plant control activities conducted on Walters Lake in 2022 are summarized in the table below.

WALTERS LAKE
2022 NUISANCE AQUATIC PLANT CONTROL SUMMARY

Date	Work Type	Acres Treated
May 4	Survey	
May 12	Herbicide: E. milfoil, algae control	17.25
May 16	Herbicide: algae control	19.25
June 1	Survey	
June 13	Herbicide: E. milfoil, algae contol, starry stonewort	9.75
June 23	Harvesting: Starry stonewort, nuisance native plants	18.75
June 28	Survey	
July 12	Herbicide: E. milfoil, algae control	1.50
August 1	Survey	
August 8	Herbicide: E. milfoil	1
August 25	Harvest: Starry stonewort, algae control	10
August 30	Survey	
Total		**77.5**

In addition to the surveys of the lake to identify invasive plant locations, a vegetation survey of Walters Lake was conducted on August 30 to evaluate the type and abundance of all plants in the lake. The table below lists each plant species observed during the survey and the relative abundance of each. At the time of the survey, 12 submersed species, two floating-leaved species, and eight emergent species were found in the lake. Walters Lake maintains a moderate diversity of beneficial, native plants species.

WALTERS LAKE AQUATIC PLANTS
August 30, 2022

Common Name	Scientific Name	Group	Percent of Sites Where Present
Chara	*Chara* sp.	Submersed	77
Illinois pondweed	*Potamogeton illinoensis*	Submersed	64
Wild celery	*Vallisneria americana*	Submersed	61
Starry stonewort	*Nitellopsis obtusa*	Submersed	29
Eurasian milfoil	*Myriophyllum spicatum*	Submersed	21
Whitestem pondweed	*Potamogeton praelongus*	Submersed	11
Thin-leaf pondweed	*Potamogeton* sp.	Submersed	9
Water smartweed	*Persicaria amphibia* var. *stipulacea*	Submersed	5
Brittle-leaf naiad	*Najas minor*	Submersed	4
Variable-leaf pondweed	*Potamogeton diversifolius*	Submersed	2
Curly-leaf pondweed	*Potamogeton crispus*	Submersed	2
Large-leaf pondweed	*Potamogeton amplifolius*	Submersed	2
White waterlily	*Nymphaea odorata*	Floating-leaved	46
Yellow waterlily	*Nuphar* sp.	Floating-leaved	25
Pickerelweed	*Pontederia cordata*	Emergent	21
Cattail	*Typha* sp.	Emergent	14
Purple loosestrife	*Lythrum salicaria*	Emergent	14
Small bur-reed	*Sparganium natans*	Emergent	7
Bulrush	*Schoenoplectus* sp.	Emergent	7
Arrowhead	*Sagittaria latifolia*	Emergent	2
Swamp loosestrife	*Decodon verticillatus*	Emergent	2
Phragmites	*Phragmites australis*	Emergent	2

Invasive plant species