

Lake McMurray Year End Report



Prepared for
Skagit County and LMD

**AquaTechnex,
LLC**

www.aquatechnex.com

Bellingham, WA 98228

Local Offices

Centralia, WA Spokane Valley, WA Missoula, MT

Meridian (Boise), ID Bend, OR

Petaluma, CA Santa Ana, CA Palm Desert, CA

Introduction

The Lake McMurray community has for several decades supported the management of invasive aquatic weeds threatening the lake through the Lake Management District (LMD). Aquatechnex biologists were hired to develop an Integrated Aquatic Vegetation Management Plan for the lake in the late 1990's.

At the time, the littoral area of the lake was completely impacted by the noxious aquatic weed, Eurasian Milfoil. The plan focused on the eradication of this pest and was accepted by the Washington Department of Ecology prior to the 2000 treatment season. The plan was used to obtain a grant from the Ecology Freshwater Aquatic Weed Fund to perform the treatment.

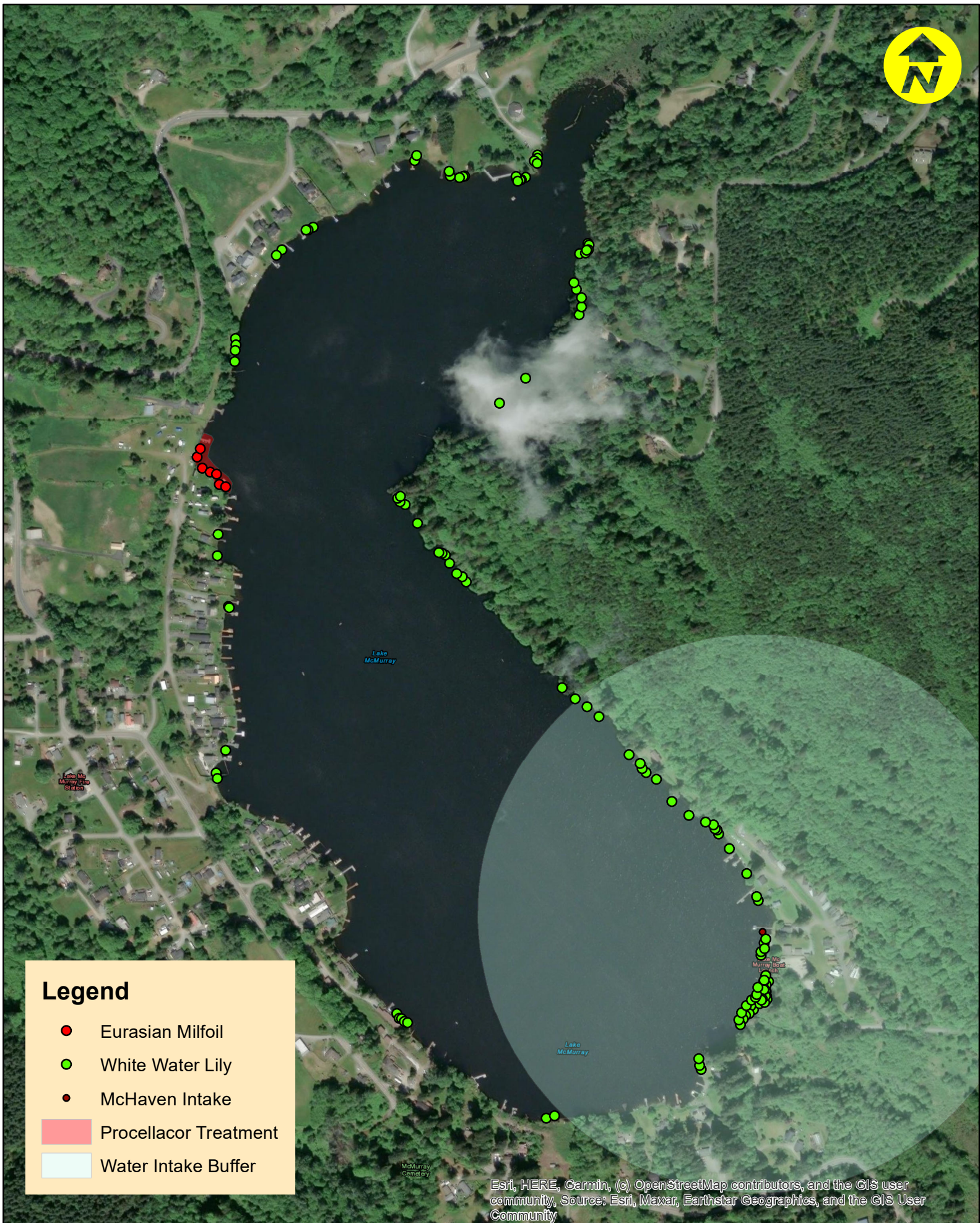
The 2000 Sonar herbicide treatment removed Eurasian Milfoil from the lake and as of 2021 or 21 years later milfoil was not detected until the summer of 2023.

In the years between 2000 and 2024 the community focused on management of other noxious aquatic weeds. The primary remaining problem species was White Water Lily. This plant was well established throughout the littoral zone of the lake. In addition, the McHaven community had concerns about using a herbicide near their potable water intake. As such an aquatic plant harvesting operation was focused on this plant. Harvesting has successfully reduced this problem species to scattered plants located around the littoral area of the lake.

Pre-Treatment Survey

The survey of Lake McMurray was completed the week of July 7th, 2024. In the past few years the primary problems in the lake have been the invasive White Water Lily. This plant dominated much of the shoreline of the lake for several years. The community on the southeast corner of the lake utilizes the lake as a water supply and the focus in those areas has been aquatic plant harvesting. Lilies outside of the quarter mile buffer have been addressed with both harvesting and with spot treatments with systemic herbicides under the DOE permit. It was reported last year that there were some pioneering colonies of Eurasian Milfoil present in the lake as well.

The White Water Lily communities in the lake have largely been reduced to levels where they are not problematic. The image below is from 2020 pre harvest and this condition was similar in other parts of the lake.



Legend

- Eurasian Milfoil
- White Water Lily
- McHaven Intake
- Procellacor Treatment
- Water Intake Buffer

Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Lake McMurray 2025 Noxious Weed Survey



This image was taken in the summer of 2020 and shows the White Water Lily infestation present at that point. Ongoing aquatic harvesting through the next few years and especially in 2024 have reduced this population to just a few scattered plants. These were again targeted in 2025 to continue progress.

The survey conducted this July found that the White Water Lily problem is largely mitigated. Areas around the water intake (pictured above) had one to a few small lily pads scattered through the zone, a very significant reduction from what is shown above. There are also very small scattered patches around the margins of the lake. The largest patches observed were about 10 feet by 20 feet and adjacent to the park on the north end of the lake, this is the zone that the community there has had issues with treatment over the years. At this point, it's not clear if a harvester would have more than a few hours of work around the margins of the lake where treatments traditionally have not occurred. We can revisit this when we perform the treatment suggested below.

There is one area of the lake that has some relatively thick Eurasian Milfoil beds present in 2024. These have been there for a year or more as they have filled in and starting to form dense mats. The entire shoreline of Lake McMurray was severely impacted with this noxious weed in 1999 and that led to the development of the Integrated Aquatic Vegetation Management Plan and the Lake Management District. In the summer of 2000, our company performed a whole lake Sonar Aquatic Herbicide treatment that was highly successful in removing this plant from the lake. Successive surveys annually had not discovered this weed at any level until last year. So that treatment provided well over 20 years of control. This weed can be re-introduced via boat trailers and this infestation is close to the boat ramp at the camp ground on the west shoreline, it is possible that it came in there, or fragments could have been introduced at the main public access and drifted to this location. In any event, these plants should be targeted and killed now as they are a significant threat to the lake



Eurasian milfoil beds located on the west side of the lake as mapped in 2024. There were scattered milfoil plants remaining in this area during the 2025 survey and were targeted again.

There are scattered communities of the White Water Lily around the lake.

Treatment Operations

Two treatment programs were utilized on the lake during the summer of 2025.

We deployed an aquatic plant harvester to the lake the week of August 18th. The team was equipped with a trailer conveyor to remove harvested plant material. Mobilization and one day of harvesting was charged to the LMD. The Harvester circumnavigated the lake and cut White Water Lily growth where it occurred. This should have additional benefits carrying over into 2026 as these remaining lilies are the “food” production engine for the lily tubers in the lake sediments. The reduction from 2020 to now has been extensive in the high use areas of the lake.

The Eurasian Milfoil was treated on August 19th with Procellacor herbicide. This systemic herbicide should further reduce the milfoil present in this area of the lake. Prior to treatment the permit notification requirements were performed, mailing a 10 day notice to all lake front property owners adjacent to and within ¼ mile of the treatment zone. On the day of treatment additional shoreline posting was performed.

Operations Next year

It appears that White Water Lily growth is probably reaching the point where little or no action would be required. The survey early in the summer will determine if there is enough biomass to trigger harvesting. The areas outside the buffer zone around the McHaven water intake could be spot treated, much of the remaining growth are individual or few plants alongside docks and other obstructions where the harvester can't effectively operate. We will evaluate this in the early summer and report recommendations.

The Eurasian Milfoil plants found last summer were well established and it is probable that fragmentation that occurs in the fall have spread around the lake a bit. By next summer if colonies exist they should be visible to survey. Again the early summer survey will determine what is necessary in regard to keeping the milfoil under control. The areas treated in the past recently should be relatively free from plants.



PESTICIDE APPLICATION RECORD (Version 1)

NOTE: This form must be completed same day as the application
and it must be retained for 7 years (Ref. chapter 17.21 RCW)

Washington State Department of Agriculture
Pesticide Management Division
PO Box 42560
Olympia WA 98504-2560
(877) 301-4555

1. Date of Application - Year: 2025 Month: August Day: 19th Start Time: 1:30 pm
Stop Time: 3:00 pm

2. Name of person for whom the pesticide was applied:

Firm Name (if applicable): Skagit County Noxious Weed Board

Street Address: 1800 Continental Pl City: Mt. Vernon State: WA Zip: 98273

3. Licensed Applicator's Name (if different from #2 above): Terry McNabb License No.: 7973

Firm Name (if applicable): AquaTechnex Tel No.: 360-330-0152

Street Address: P.O. Box 118 City: Centralia State: WA Zip: 98531

4. Name of person(s) who applied the pesticide (if different from #3 above): Scott Conrade

License No(s). If applicable: 102514

5. Application Crop or Site: Lake McMurray- Eurasian Watermilfoil

6. Total Area Treated (acre, sq. ft., etc.): 1.2 acres

7. Was this application made as a result of a WSDA Permit? ☒ No ☐ Yes (If yes, give Permit No.) #

8. Pesticide Information (please list all information for each pesticide, including adjuvants (buffer, surfactant, etc.), in the tank mix):

a) Full Product Name	b) EPA Reg. No.	c) Total Amount of Pesticide Applied in Area Treated	d) Pesticide Applied/Acre (or other measure)	e) Concentration Applied
Procellacor EC	67690-80	0.4	13.33 pdu / acre	
			/	
			/	
			/	
			/	

9. Address **or exact location** of application. NOTE: If the application is made to one acre or more of agricultural land, the field location must be shown on the map on page two of this form.

10. Wind direction and estimated velocity (mph) during the application: 5 mph from S-SW

11. Temperature during the application: 75 Degrees F

12. Apparatus license plate number (if applicable):

13. ☐ Air ☒ Ground ☐ Chemigation

14. Miscellaneous Information: