

**Lake Wilderness
Citizen Advisory Committee
October 16, 2018
6:00 PM to 7:00 PM**

Lake Wilderness Lodge – Rainier Room
22500 SE 248TH Street
Maple Valley, WA 98038

- | | |
|---|-------------|
| 1. Call to Order | Chair |
| 2. Roll Call | Staff |
| 3. Approval of Agenda | Chair |
| 4. Approval of July 24, 2018 Meeting Minutes | Chair |
| 5. Public Comment (three minutes per person) | Chair |
| 6. Reports | Chair |
| a. AquaTechnex Survey and Treatment Report | Staff |
| b. LWPA Volunteer Patrol Survey Maps | |
| c. Draft 2018 Annual Report | Staff |
| d. Washington State Lake Protection Association – White Paper | Staff |
| 7. Continued Business | Chair |
| a. Budget discussion | Staff |
| b. Wilderness Stormwater in flow follow up | Staff |
| c. Update on Nature Vision | Staff |
| 8. New Business | Chair |
| a. Open Government Trainings | Staff |
| b. Recruitment of 2019-2010 members | Staff |
| c. Lake Wilderness Beach House update | Staff |
| 9. Public Comment | Chair |
| 10. Next meeting | Chair/Staff |
| 11. Adjourn | Chair |

**Draft
Lake Wilderness
Citizen Advisory Committee Meeting
July 24, 2018
Lake Wilderness Lodge
Rainier Room
6:00 PM to 7:00 PM**

1. CALL TO ORDER

Chair Wichelmann called the meeting to order at 6:00 pm.

2. ROLL CALL

Ms. Pistoll took roll call and noted we have a quorum. The following committee members were in attendance; Pat Anderson, Laurie MacKenzie, Linda McMonagle, Sam Whitman, Paul Wichelmann, and Diana Pistoll. Paul Eaton was absent.

3. APPROVAL OF AGENDA

A motion was made and seconded to approve the agenda. Motion carried 4-0

4. APPROVAL OF MAY 23, 2018 MEETING MINUTES

A motion was made and seconded to approve the May 23, 2018 meeting minutes with the following changes: Item 6 Reports, a. Lake Stewardship Monitoring Reports, in the first sentence put a period after the word "in", and begin the 2nd sentence with a capital letter "t" on the word "The" and delete the word "that" where it follows the word "graphs" and change "toee" to "to see". Under Item 7 Continues Business a., Budget Discussion, delete the first two sentences and replace with the following: "Ms. Pistoll said she anticipates that the carry forward of the unencumbered 2017 education budget and the unencumbered lake treatment budget will be approved by Council at the May 29th meeting. The carry forward of the unencumbered education budget amount is \$4390.00, and the lake treatment budget amount is \$6,000." Under item 8 New Business, topic a. Lake Surveys and Recommendations, in the first sentence replace the word "where" with "in which". In the last sentence of the first paragraph use lower case when refereeing to "big leaf" pondweed and change "big leaf" pondweed wherever mentioned in the minutes. In the third paragraph refer to Coontail, as lower case "coontail" in this sentence and wherever else it is referenced in the minutes. In the fifth paragraph, third sentence delete "about possible have" and add "to have" and in the fourth sentence delete "it doesn't go into the shallow" and add "for the".

Motion carried 4-0

5. PUBLIC COMMENT

Linda McMonagle, 25616 Lake Wilderness LN SE, Maple Valley said SE 257th Street, which is sided by wetlands on both sides, is holding water in the roadbed because the road shoulders need to be maintained or pulled to allow rainwater to run off.

Paul Wichelmann, 25618 Lake Wilderness LN SE, Maple Valley said that Chris Knutson of King County Lake Stewardship came out and installed an instrument on his dock that will capture lake temperature and lake level.

Laurie MacKenzie, 25612 Lake Wilderness LN SE, Maple Valley said that Mr. Knutson also provided the LWPA with a cost estimate of approximately \$10,000 for an option of having more sophisticated equipment installed on a member's dock that would generate data on various physical characteristics of the lake.

6. REPORTS

7. CONTINUES BUSINESS

a. Budget Discussion

Ms. Pistoll reviewed the budget in the agenda packet and handed out a more current budget summary. She said Nature Vision's July 2018 invoice in the amount \$1811.45 had not been processed when she printed budget summary for the meeting's agenda packet a week earlier. She noted that Nature Vision's agreement has been amended to increase their compensation by the \$5,000 from the 2018 lakes education budget, and the duration was extended to December 31, 2019. She also noted that the latest budget summary also reflects an additional \$130.00 for salary and wages and \$41.39 for benefits which are for her administration time.

She said that AquaTechnex has invoiced for their treatment and survey work completed to date. She said King County Lake Stewardship projects typically invoice at the end of the year after all the lake work is done. The exception being the item titles KC Hydrilla Project - Pipe Lake & Lake Lucerne. She said the \$2,040 shown for that budget is kept in the event assistance is needed from the city for an invasive plant issue. She said in September 2016 a boat survey was done on both Pipe and Lucerne by Ecology staff and King County Chris Knutson. She said there were no invasive plants identified during that boat survey, however, it would be prudent to perform an in-lake diver survey of those lakes. She said she will submit a request to increase the 2019 budget to 5K.

Mr. Anderson said the Volunteer milfoil patrol will be doing their survey and will have it completed by the end of August.

b. Wilderness Stormwater in flow follow up

Ms. Pistoll reiterated reporting at the last meeting that the King County Surface Water staff Lori Cronin would no longer be doing the sampling from the trail and slope. She said Maple Valley will resume recruitment for the City's next Stormwater Manager and that person will be responsible for the future sampling. She said the last sampling that was done was May 4, 2017.

She said she corresponded with the King County Parks and Recreation Capital Improvement Project Manager Linda Frkuska regarding the North Segment of the Lake

Wilderness Trail. She said Ms. Frkuska indicated that the cost estimates were over budget therefore the 2018 construction start date is off the table.

c. Education Update on Nature Vision

Ms. Pistoll said she wanted share Nature Vision's success stories from having taught 1,057 Tahoma School children in grades K-6. She said teacher comments were included in the agenda packet, however, a stack of thank you letters from the students in their own words are available to review. She asked if the committee wanted to take a few minutes to look at a few of them, they are pretty cute and very much appreciated.

Ms. Pistoll said teachers are grateful for the Nature Vision programs and want the programs back next year and in subsequent years. She said she will be checking to see whether we can move the Nature Vision program to a Surface Water as a program enhancement in order that it is not subject to the decisions of this committee. She said she would still request the \$5,000 budget under lakes education and perhaps we can do something else with those funds next year.

8. NEW BUSINESS

a. Post treatment outcome

Ms. Pistoll said the lake was treated on June 4, 2018. She said Dave Barber, a milfoil patrol volunteer, reported that the lake is looking good and the treatment was effective. Mr. Anderson said there are still some big leaf pondweed plants by Mike Mayer's shoreline.

Ms. MacKenzie said that we don't want to sterilize the lake.

Ms. McMonagle said she has seen some freshwater clam shells but she said the lake used to have a lot of freshwater clams. Mr. Anderson said they used to see a lot of crawdads too.

Ms. Mackenzie said she has clam shells on her dock. Mr. Anderson said that Muskrats would eat the clams and snails, however, he noted he hasn't seen the Muskrats this year nor has he seen the Otter for a while. Ms. McMonagle said she has seen the Otter sliding on the dock in the snow.

Ms. McMonagle commented that there used to be people who came up from Oregon and harvested snails from the lake but she hasn't seen them for a long time.

Ms. Pistoll said those snails were non-native Chinese mystery snails and that Maple Valley Police spoke to the individual who was harvesting to let them know it was illegal to transport wildlife across state lines and they haven't been back since.

Mr. Anderson said there was still a lot of Coontail.

b. Open Government Trainings

Ms. Pistoll gave a reminder that those who have not done their Open Government Meetings and Public Records Retention training need to do the training and print their form of completion and provide it to the City. She said this training is required of all city volunteers serving on committees.

c. Recruitment of 2019-2020 members.

Ms. Pistoll said recruitment will get underway in the fall to fill positions expiring at the end of 2018.

Mr. Anderson said he is encouraging new people to get involved in the lake, in the CAC or the LWPA, to help keep it beautiful. He said as long as it's beautiful people are just happy but the minute something goes wrong you'll hear from them. He expressed concern about what could happen to the lake when he, and Dave Barber and Charlie Benedict are no longer around as they've done the heavy lifting for years. He said his wife Briget gave a good speech at the picnic and told everyone to get involved and if they see something on or in the lake to get ahold of the LWPA.

Ms. Pistoll said she saw no cause for worry that the lake will be neglected by the City. She said over 200,000 people visit Lake Wilderness Park annually and they are attracted to our robust Park programs and the beautiful lake and park. She said Maple Valley Council has continually supported lakes programs and the City is committed to protecting and preserving this cherished resource.

9. PUBLIC COMMENT

There was no public comment.

10. NEXT MEETING

The next regularly scheduled meeting will be on Tuesday, October 16, 2018. At 6 pm.

11. ADJOURN

A motion was made and seconded to adjourn. The meeting adjourned at 6:55 pm.



"Advancing the Science of Lake Management"

P.O. Box 3005
Lynnwood WA 98046
Tel: 360-508-1276
www.aquatechnex.com

Lake Wilderness 2018 Survey and Treatment Report

Prepared by AquaTechnex, LLC.

In 2018, AquaTechnex completed two surveys of Lake Wilderness. At each survey, the entire lake was inspected for the presence of Eurasian Watermilfoil. A native species composition survey was completed at the second survey in September. Biomass data was also collected using hydroacoustic mapping of the lake bottom. At our survey in May, a specialized underwater drone was utilized for an additional sweep of deeper water areas. This was in addition to regular rake tosses that are used to bring up plant samples for identification.

During the first AquaTechnex survey on May 22nd, the presence of Eurasian Watermilfoil (EWM) was detected at two locations on the lake. The native plant, Large Leaf Pondweed was also present along much of the Western shoreline. AquaTechnex and the City of Maple Valley took these findings into account and created three treatment polygons with prioritization of important recreational areas on the lake. The treatment areas included the public beach area, the community beach on the eastern shore, and the area along the Southwestern shoreline where most homes are on the lake. These treatment areas were all treated with a mix of two contact herbicides, Endothall (Dipotassium Salt) and Diquat Dibromide. The EWM plant found next to the boat launch was removed by hand, while the other EWM plant was included in the chemical treatment area.

On September 24th, the second survey was conducted. No Eurasian Watermilfoil was found at this second survey and native plants were found to be at reasonable, non-nuisance levels. (Please see attached survey maps and Biobase data on pages 2-4).

For 2019, surveying is again recommended to check for the presence of Eurasian Watermilfoil and to assess if any native plants are present at nuisance levels. As always, the presence of a resident or board member at the surveys is encouraged. This provides a good learning opportunity for the resident or board member and helpful information on the patterns of the lake for AquaTechnex.

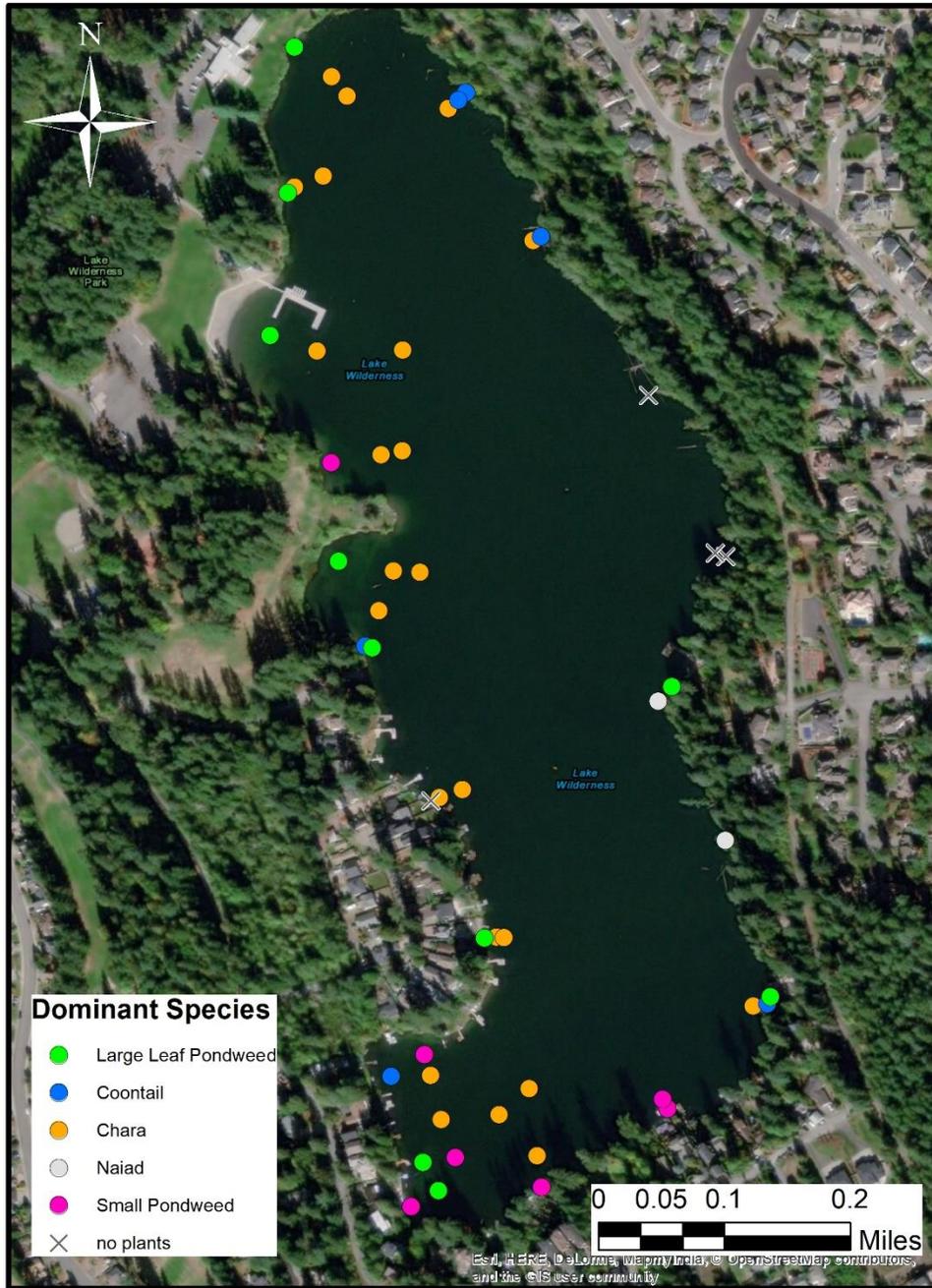
Thank you for choosing AquaTechnex to assist in your lake management efforts. If you have any questions regarding this report please contact Grant Bennett at the information below.

Regards,
Grant Bennett
Aquatic Specialist
AquaTechnex, LLC.
360-508-1276
grant@aquatechnex.com
www.aquatechnex.com

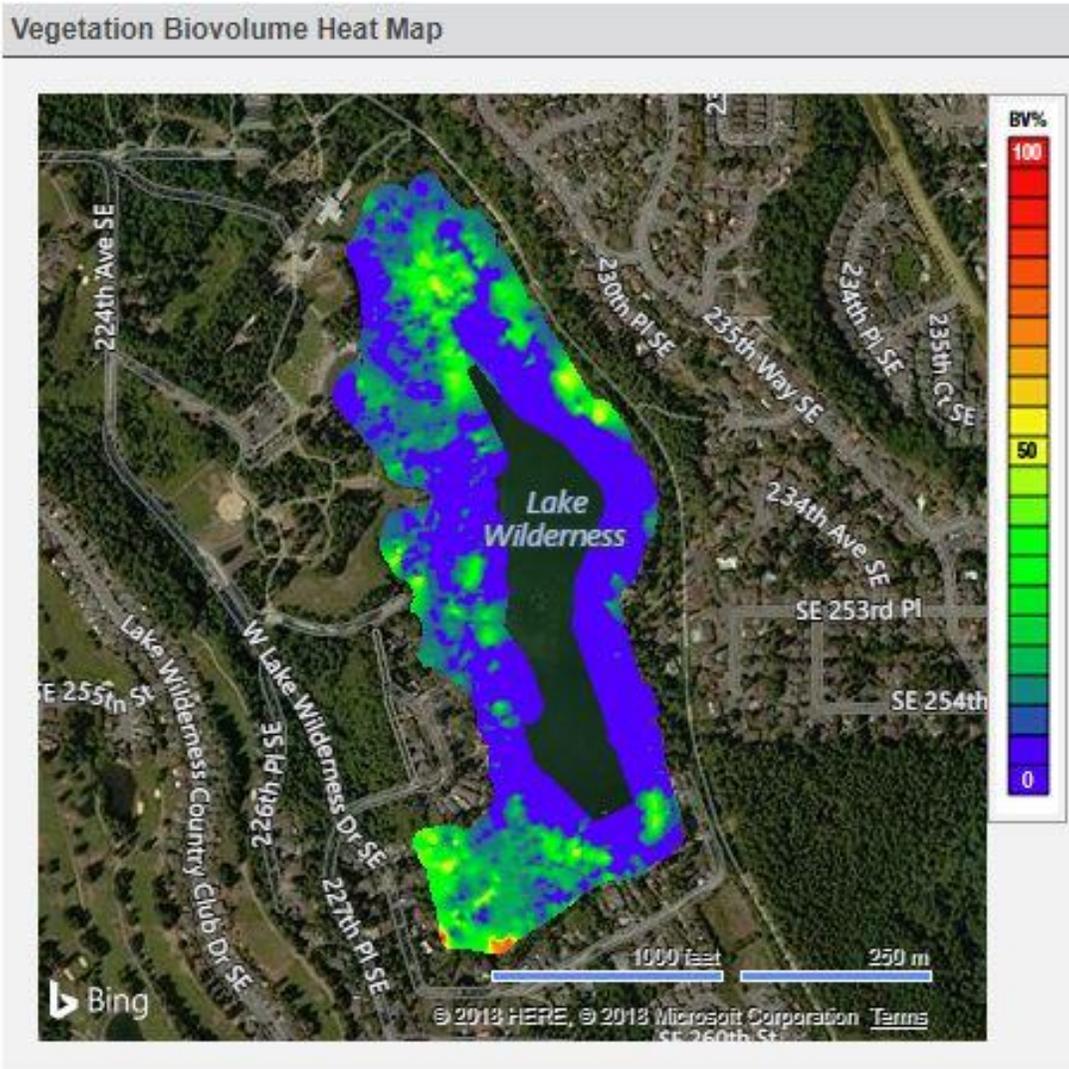
Lake Wilderness Survey 5-22-18



Lake Wilderness Survey 9-24-18



Lake Wilderness Biobase 9-24-18:



Color represents percentage of water column taken up by biomass with blue being 0% and red being 100%

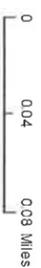
King County iMap



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Date: 5/18/2015

1 in : 376 feet



 King County
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Date: 5/18/2015

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King County, Perometry, Internamodal, Cert.

Lake Wilderness Citizen Advisory Committee

2018 Annual Report

October 2018

The Lake Wilderness Citizen Advisory Committee (LWCAC) presents the 2018 annual report on the aquatic plant management and lake stewardship activities for Lake Wilderness. The LWCAC is comprised of five Regular voting members and one or more Alternate members. The 2018 members include:



View From South Shore Looking North
Photo courtesy of Dave Barber

Paul Wichelmann, Chair

Paul Eaton, Vice Chair

Pat Anderson, Member

Linda McMonagle, Alternate Member #1

Laurie MacKenzie, Alternate Member #2

Sam Whitman, Member Representative,

King County Parks and Natural Resources

Diana Pistoll, City Member Representative

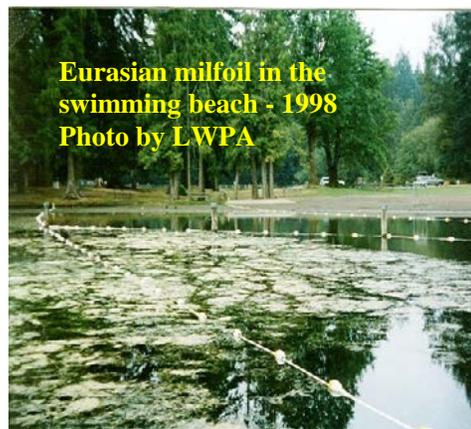


Eurasian milfoil
(*Myriophyllum spicatum*)

Background on Lake Wilderness Preservation Association (LWPA) and Lake Wilderness Citizen Advisory Committee (LWCAC).

In January 1994 Lake Wilderness shoreline property owners Patrick W. Anderson, Roger King, and Mac McMonagle formed the Lake Wilderness Preservation Association (LWPA), a volunteer group. They worked to gather community support from other property owners to manage an infestation of Eurasian milfoil (*Myriophyllum spicatum*) a noxious non-native aquatic plant. The LWPA members partnered with King County Surface Water Management Division and obtained a grant to develop the lake's first Integrated Aquatic Vegetation Management Plan (IAVMP) in 1997. The IAVMP, as updated in 2004, continues to guide the aquatic plant management options and actions for Lake Wilderness today, in accordance with the Washington State Department of Ecology Aquatic Plant and Algae General National Pollution Discharge Elimination System Permit. A survey conducted during the development of the original IAVMP revealed that Eurasian milfoil had spread rapidly and dominated the lake.

In 1998, LWPA members canvassed Lake Wilderness watershed residents to gather support for the City of Maple Valley's first special assessment district to fund the lake work long-term. The Lake Management District No. 1, established by a simple majority of watershed property owners, was formed in 1998 under Ordinance O-98-57. A whole-lake herbicide treatment was performed that same year which successfully eradicated Eurasian milfoil from the lake.



Eurasian milfoil in the swimming beach - 1998
Photo by LWPA

Pursuant to the creation of the special assessment district, a plant advisory board was to be established to oversee the annual work program for the lake. The LWPA informally fulfilled that role until 2002 when Maple Valley City Council adopted Resolution R-02-220 creating the Lake Management District Advisory Committee. The Lake Management District Advisory Committee terminated concurrently with the sunset of the special assessment district in 2006.

The current Lake Wilderness Citizen Advisory Committee was created by Council adoption of Resolution R-06-495 as amended by R-07-518, R-08-576, and R16-1073. The duties of the LWCAC are; 1) discuss with the city the annual work program for the lake; 2) provide input and suggestions regarding implementation of the annual work program; 3) work with the City in preparation of educational materials relative to the lake and surrounding watershed; 4) provide input to the city on the preparation of an annual report to the City Council, City Manager, and the LWPA regarding the progress on the work program and health of the lake; 5) support a public meeting on the contents of the annual report.

Background on Eurasian milfoil in Lake Wilderness

Following the discovery of Eurasian milfoil in 1994, and the subsequent whole-lake Sonar treatment in 1998 that successfully eradicated it, the lake remained free of Eurasian milfoil for several years. However, it was found again in the fall of 2002 and was subsequently treated with aquatic herbicides in the summer of 2003. Small infestations of milfoil were found in the lake during the summers of 2005, 2006, and again in years 2008 through 2018. Typically these plants have been located in the shallow southwest bay and boat launch bay, along the western residential shoreline, in the swimming bay and on occasions up near the Lake Wilderness Lodge shoreline. Once established in the lake Eurasian milfoil propagates by plant fragments as well as rhizomes, and although it produces seeds, propagation by seed is considered less common.

King County reports that Eurasian milfoil is widespread throughout King County in lakes that closely follow the I-5 corridor. Eurasian milfoil can be spread from lake to lake by plant fragments on boats, boat trailers and fishing gear. With the public boat launch on Lake Wilderness the reintroduction of Eurasians milfoil is somewhat expected. Ongoing surveys are a critical element in identifying and controlling this invasive noxious weed and also important as a tool for early identification of new infestations of other invasive weeds or pests such as Brazilian elodea or New Zealand mud snails.

Two professional Eurasian milfoil surveys are conducted each year in Lake Wilderness. The LWPA also conducts two volunteer Eurasian milfoil patrols which are typically done over a two week period in advance of the professional surveys. The LWPA volunteers continue to play an active role in outreach and prevention. They provide and staff a booth at the annual fishing derby, over a 24 hour period, to inspect every boat and trailer for plant fragments before it enters the lake. Volunteers greet derby participants and discuss the importance of cleaning equipment and fishing gear. They also provide educational information and offer anglers free hot refreshments.

Background on Nuisance Native Aquatic Plants



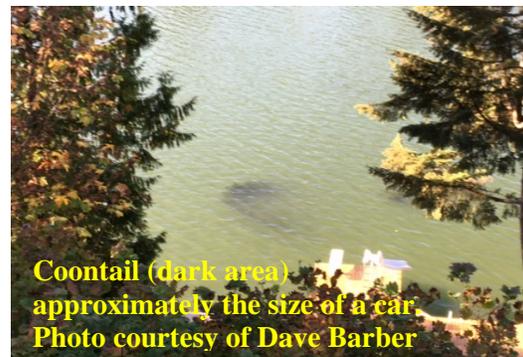
Under favorable conditions, some native pondweed has a tendency for robust growth in the lake's shallow coves and shorelines. It can reach nuisance levels forming dense mats on the lake's surface which can pose a hazard to swimmers and anglers. Herbicide treatments to address nuisance levels of pondweed have been implemented in years 2001, 2004, 2006, 2008, 2009, 2010, 2012 and 2014 through 2018.

The LWPA volunteer patrol has been tracking the growth of the Big leaf pondweed since it was identified in the boat launch bay about five years ago. Big leaf pondweed has established colonies along the western, southern, and eastern shoreline. Shoreline property owners have expressed concern that it will soon dominate the entire shoreline. Big leaf pondweed is a beneficial native plant providing excellent habitat for fish and insects; however, it can exhibit rapid early growth achieving nine feet in length as early as May and twenty feet in length during favorable seasonal conditions. It forms thick mats of floating leaves on the lake surface. Action to reduce the biomass of Big leaf pondweed is addressed below under *2018 Aquatic Plant Surveys*.



Since 2014 LWPA volunteers have identified Coontail (*Ceratophyllum demersum*) as another aquatic plant they've put on their "watch" list. Coontail is a native underwater rootless perennial plant that forms dense colonies that freely float slightly below or on the surface. It can be confused with Eurasian milfoil and likewise can be very invasive. It can pose a risk to swimmers and can be a hindrance

to fishing and boating. The LWPA have observed that Coontail colonies have been rapidly expanding around the lake. They can grow into large floating masses as seen in the photo above which is approximately the size of a car as shown in the photo on the right.



2018 Aquatic Plant Surveys

AquaTechnex, LLC, the city's aquatic plant management vendor, conducted surveys on Lake Wilderness on May 22nd and September 24th in 2018. Aquatic biologists conducted a visual systematic survey, by boat and with the use of an underwater drone, of the aquatic plant community along the lake shorelines. They also take rake-toss samples at 5, 10, 15, and 20 foot contours along transects perpendicular to the shoreline at regular intervals

Lake Wilderness Survey 5-22-18



around the lake. The LWPA Volunteer Patrol surveyed over several week period preceding the professional surveys. The LWPA volunteer milfoil patrol participants were Bill Hatters, Charles Benedict, Pat Anderson, Dave Barber and Paul Wichelmann.

During the spring 2018 surveys, AquaTechnex and the LWPA found two areas with Eurasian milfoil plants as depicted by red stars on the map on the left. The Eurasian milfoil plants were located in

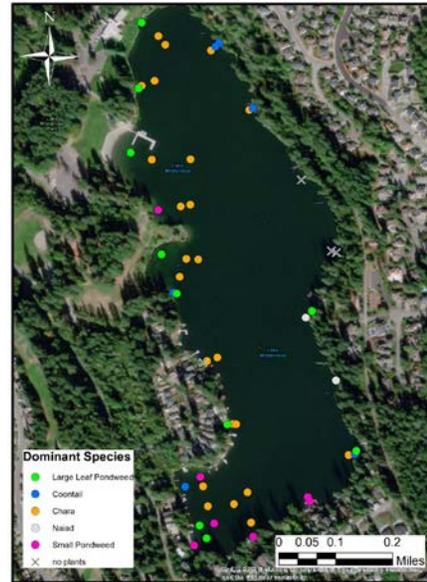
the bay north of the boat launch and on the south residential shoreline. Numerous areas were identified where native Big leaf pondweed and Elodea canadensis had reached nuisance levels by mid-May that adversely impacted beneficial use of the lake in designated high-use zones. The Eurasian milfoil plant in the bay by the boat launch has hand harvested by AquaTechnex and the plant on the southern shore was in the herbicide treatment zone.

The map on the right shows locations where certain native plants are dominate.

AquaTechnex 2018 Survey and Treatment Report can be viewed at

<http://www.maplevalleywa.gov/departments-services/public-works/about-our-lakes>

Lake Wilderness Survey 9-24-18



2018 Aquatic Plant Control Recommendation and Actions



Suggested Treatment Areas, June 2018

An herbicide treatment was recommended and supported by the LWCAC to knock back the nuisance Big leaf pondweed and Elodea. Treatment was done on June 4, 2018 in the tan areas shown on the map on the left. A mix of the contact herbicides Endothall and Diquat Dibromide, both effective on Eurasian milfoil and Big leaf pondweed and Elodea. Washington State Designated Swim Area Guidelines, recommend removal of underwater obstructions, including aquatic plants, in designated swimming areas as part of their state-wide effort to reduce drowning incidents. Public notices by mailing, and shoreline

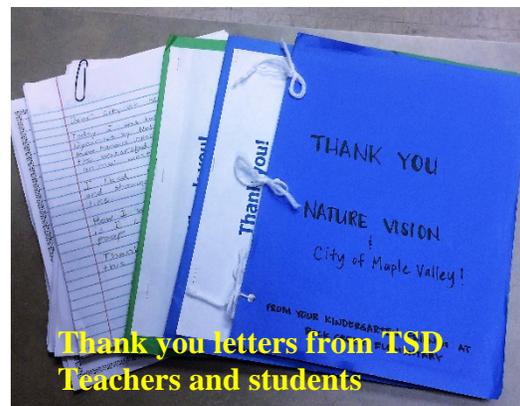
postings, as required under the Washington State Department of Ecology permit, were completed in advance of the treatment. Subsequent late season surveys by AquaTechnex and the LWPA Volunteer milfoil patrol found no Eurasian milfoil and a reduction in the pondweed biomass.

Lake Wilderness CAC 2018 Work Plan

In 2018 the LWCAC approved agendas and meeting minutes at four meetings. They also took action to approve the aquatic plant management control recommendations for Lake Wilderness in 2018. Education outreach activities in 2018 included the following:

- Staffing the booth with LWPA volunteers at the boat launch at the Annual Fishing Derby to hand out education material and inspect boats, trailers and equipment for plant fragments.
- LWPA volunteers performed two shoreline litter clean-ups.
- Between September 2017 and June 2018,

Nature Vision, an award winning non-profit environmental education firm provided classroom workshops on watershed education to 1,057 Tahoma School District (TSD) Elementary School children. The LWCAC took action to use the annual education budget to ramp up watershed education efforts. By the City contracting with Nature Vision these programs can be offered to TSD at no charge. The photo to the right shows a



large stack of thank you letters that students and teachers provided to express their appreciation to Nature Vision and the City of Maple Valley for providing these valuable programs. Many teachers expressed interest in seeing these programs continue.

Other Lake Wilderness Programs



Paul Wichelmann preparing to sample

Volunteer Water Monitoring

The volunteer water quality monitoring program for Lake Wilderness dates back to 1974 when volunteers from the community were trained to collect water samples and coordinate data collection and evaluation with staff from the Metropolitan Municipality of Seattle (METRO) Small Lakes Program. In 1995, following METRO's merge with King County, data collection and evaluation responsibilities transferred to the King County Lake Stewardship program (now the Department of Natural Resources and Parks). The program was then funded by the Wastewater Treatment Fund. In 2004 budgetary constraints resulted in those funds being diverted to another priority and King County notified cities that they could no longer fund the volunteer water quality monitoring program for lakes. The City of Maple Valley through Interlocal Agreements with King County began funding the program in 2005.

Volunteer water monitors receive training and equipment from King County. Volunteers measure daily precipitation and lake water levels, surface water temperatures, Secchi transparency, and depth profiles. The program covers a total of twelve sampling events throughout the growing season with routine measurements for concentrations of total phosphorus, total nitrogen, chlorophyll-*a*, soluble reactive phosphorus, nitrate, pH, alkalinity and water color. Volunteers collect samples and coordinate with King County staff for the laboratory analysis.



The Trophic State Index (TSI) is an index that classifies waterbodies based on the total weight of biomass at the time of measurement. The index applies a scale of zero to one hundred based on the summer mean values of three commonly measured lake parameters; Secchi depth, total phosphorus, and chlorophyll-*a*, as indicators of a lake’s biomass. Lake Wilderness is considered moderate (mesotrophic) in primary productivity and low (oligotrophic) in Secchi transparency which means that the lake water is very clear. The Volunteer Monitoring Program results indicate water quality in Lake Wilderness is good and phosphorus levels appear to be trending downward.

In 2018 volunteer water monitors were Paul Wichelmann, Dan Tift, and Renato Santos which Charles Benedict as backup. The final 2018 report water monitoring reports from King County, which are anticipated in early 2019, will be posted on the City website once received.

Swimming Beach Monitoring



Lake Wilderness swimming beach bacteria monitoring program began in 2008. The program monitors for fecal coliform, a bacteria indicator of human health risk which can be an indicator of sewage pollution. In 2018, nineteen samples were drawn from Lake Wilderness swimming beach mid-May through mid-September by King County Lake Stewardship scientific staff.

The swimming beach program follows the Low levels of fecal coliform of 50 CFU/100ml (colony forming units per 100 milliliter) are commonly found in water with high quality water. Under the swimming beach program when a single sample exceeds 1000 CFU/100ml, or a geometric mean of five consecutive samples exceeding 200 CFU/100ml, triplicate resampling is done to rule out error. If resampling confirms no error, beach closure would be recommended to the city by the Department of Public Health.

Ten State Standard for fecal coliform bacteria.

Fecal Coliform Value	Concern Level
Individual value < 200 CFU/100 ml	Low Concern - safe for swimming
Individual value \geq 200 & < 1000 CFU/100 ml	Moderate Concern – still safe for swimming
Individual value \geq 1000 CFU/100 ml or geometric mean \geq 200 CFU/100 ml	High Concern – flagged for resample and closure recommended if substantiated

In 2018, two high fecal counts on August 6th and August 27th, of 960 CFU/100 ml and 1,000 CFU/100 ml respectively, resulted in a triplicate resample, however, results came back considerably lower in the moderate range where it was safe to swim. Five other sampling events were also of moderate concern, however, still safe for swimming. Online data can be viewed at <https://green2.kingcounty.gov/swimbeach/default.aspx>

Cyanobacteria Blooms

No visible scum formations have been observed in Lake Wilderness and visually the water column appears clear as of this report date; October 16, 2018, however, the fall lake turnover has been associated with Cyanobacteria blooms in Lake Wilderness on some occasions over the years. The Parks and Recreation maintenance staff will be watchful for bloom scum formations and will be prepared to sample and post as needed.

Cyanobacteria, formerly known as blue-green algae, are naturally occurring in nature and under certain conditions can bloom causing clear water to appear cloudy and green, blue-green, brown or red. Cyanobacteria can produce toxins that pose health risks to humans and animals. Not all blooms product toxins, however, the only way to tell whether toxins are present is to have samples pulled and analyzed for toxicity by a laboratory. Cyanobacteria can be suspended in the water column giving the lake a green pea-soup appearance. However, as it floats to the lake surface it can form ribbons of scum that can be blown about the lake from shoreline to shoreline. Washington State Department of Ecology Freshwater Algae Control Program provides for free cyanobacteria toxicity testing for Washington's freshwater lakes when visible scum formations are detected. The funds are finite and can be depleted depending on state-wide bloom activity, at which time Maple Valley would fund the toxicity testing.

Historical toxic bloom data for Lake Wilderness and other area lakes can be found at the Northwest Toxic Algae website at <https://www.nwtoxicalgae.org/>



End of Report

New “reduced risk” herbicide shows promise for controlling milfoil

walpa.org/waterline/september-2018/new-reduced-risk-herbicide-shows-promise-for-controlling-milfoil/

By Terry McNabb, Aquatechnex

Having worked in invasive aquatic plant management since the late 1960’s, I’ve watched Eurasian milfoil devastate aquatic systems across the Northern Tier states over the years. It is not often we see a new tool come along that has promise to help restore to lakes and river systems the native aquatic plant communities that used to thrive in them.

The first game-changing technology I have seen in these five decades was registered by the U.S. EPA in 1986. Sonar aquatic herbicide, when used correctly, became a tool you could use to eradicate Eurasian milfoil

from a lake system. One example is Lake McMurray in Skagit County. We treated that system 18 years ago with Sonar in a program to keep the herbicide around the target plants at low levels for 6-8 weeks. Lake McMurray has remained milfoil-free all the years since. Comparable results were achieved in several similar lakes. Some of these have since had a reintroduction, but, for the most part, those have been dealt with rapidly.

The primary problem with Sonar is the very long contact time required for it to be effective. This rules out its use to spot treat in very large lakes, or in river systems where dilution and current don’t allow it to remain in contact with the target vegetation.

Last February, what may be the next game-changer was registered for use by the U.S. EPA. ProcellaCOR was approved by the EPA in a newer category as a reduced risk herbicide. This classification is provided for products that are viable alternatives to older herbicide technologies and pose a significantly reduced risk to the environment and human health.

Groups like the University of Florida Center for Aquatic Plants began working with this technology about five years ago. Dr. Mike Netherland, a researcher there who has spent his career focused on chemical control technologies for invasive aquatic weeds, noted that he has never worked with a technology as effective as this for hydrilla and Eurasian milfoil (per his paper presented at the North American Lake Management Society meeting in Banff, Alberta, November 2016).



Milfoil chokes Riley Creek just upstream from Newport on the Pend Oreille River.

ProcellaCOR has an extremely short contact exposure time requirement, has an affinity for target species like Eurasian milfoil, and moves into the plant rapidly. It should perform very well even in high water exchange environments like the Columbia River. It has shown excellent control of Eurasian milfoil even when applied in the very low parts per billion range. We have been testing it against more resistant forms of hybrid milfoil that are popping up in Eastern Washington with excellent results as well.

ProcellaCOR has very minimal water use restrictions; it can be applied to potable water supplies with no restriction on the use of treated water for that purpose. It has no swimming or fishing restriction. Water from the treatment area can be used to irrigate turf without restriction, and there are currently only short restrictions for some other plant species. This significantly reduces the impact that this herbicide treatment might have on lake residents and those recreating on the water. In most cases it is also more cost-effective than many of the systemic herbicides currently being used to combat milfoils. The manufacturer of ProcellaCOR is confident enough to offer a three-season warranty on control of milfoil in many cases.

We have begun to work with this product in north Idaho and a few other locations. In Washington State, the Department of Ecology must go through a process to add ProcellaCOR to the NPDES permit for this type of control work. They plan to release a draft permit for new products this October with a public hearing in November. The permit should be issued in time for use in 2019. We are excited to bring this tool to the fight against Eurasian milfoil, yellow floating heart, parrotfeather and hydrilla, should it ever show up in our state again.



City of Maple Valley

Income Statement Account Summary

For Fiscal: 2018 Period Ending: 10/31/2018

	Original Total Budget	Current Total Budget	MTD Activity	YTD Activity	Budget Remaining
Fund: 001 - GENERAL FUND					
Expense					
001-5501000-55360-110100 Salaries & Wages	13,990.00	16,770.00	520.02	5,896.60	10,873.40
001-5501000-55360-210100 Benefits	4,480.00	5,270.00	104.61	1,848.51	3,421.49
001-5501000-55360-410100 Advertising	100.00	100.00	0.00	0.00	100.00
001-5501000-55360-412331 Aquatic Plant Education Services	5,000.00	9,391.00	0.00	4,273.18	5,117.82
001-5501000-55360-412332 Aquatic Plant Evaluation Services	2,790.00	2,790.00	0.00	1,514.97	1,275.03
001-5501000-55360-412333 Aquatic Plant Treatment Services	8,100.00	14,100.00	0.00	5,375.70	8,724.30
001-5501000-55360-499900 Other Miscellaneous	200.00	200.00	0.00	0.00	200.00
001-5501000-55360-512170 KC-Beach Monitoring	7,750.00	7,750.00	0.00	0.00	7,750.00
001-5501000-55360-512171 KC-Lake Wilderness Technical Services	6,000.00	6,000.00	0.00	0.00	6,000.00
001-5501000-55360-512172 KC-Lake Stewardship-Lake Wilderness	10,000.00	10,000.00	0.00	0.00	10,000.00
001-5501000-55360-512173 KC-Lake Stewardship-Pipe Lake & Lake Luc	14,430.00	14,430.00	0.00	0.00	14,430.00
001-5501000-55360-512174 KC-Hydrilla Project-Pipe Lake & Lake Lucer	2,040.00	2,040.00	0.00	0.00	2,040.00
001-5501000-55360-516120 Intergovernmental License & Permits	550.00	550.00	0.00	0.00	550.00
Expense Total:	75,430.00	89,391.00	624.63	18,908.96	70,482.04
Fund: 001 - GENERAL FUND Total:	75,430.00	89,391.00	624.63	18,908.96	70,482.04
Total Surplus (Deficit):	-75,430.00	-89,391.00	-624.63	-18,908.96	-70,482.04

**Nature Vision
Schools by Agency**

Schedule Date: From Sep 1, 2018 to Jun 30, 2019;

Sponsor = City of Maple Valley

Rock Creek Elementary

Sponsored by: City of Maple Valley

<i>Teacher</i>	<i>Grade</i>	<i>Program</i>	<i># Class</i>	<i>Date</i>	<i>Invoice#</i>
Jamie Miranda	4	Healthy Water Healthy Soil 4-5	25	26-Nov-18	
Eddie Martinez	4	Healthy Water Healthy Soil 4-5	25	26-Nov-18	
Kate Cross	4	Healthy Water Healthy Soil 4-5	24	26-Nov-18	
Alynne Durkan	4	Healthy Water Healthy Soil 4-5	25	17-Dec-18	
Stephanie Clement	4	Healthy Water Healthy Soil 4-5	25	17-Dec-18	

Total # of Programs for School = 5

Total # of Students = 124

Shadow Lake Elementary

Sponsored by: City of Maple Valley

<i>Teacher</i>	<i>Grade</i>	<i>Program</i>	<i># Class</i>	<i>Date</i>	<i>Invoice#</i>
Kathleen Eisele	5	Watershed Dynamics	30	01-Oct-18	
Cailan McCutchan	5	Watershed Dynamics	30	01-Oct-18	
Clark Kostohris	5	Watershed Dynamics	31	01-Oct-18	

Total # of Programs for School = 3

Total # of Students = 91

Total # of Sponsored Programs = 8

Total # of Students = 215

HOW TO TAKE ONLINE OPEN GOVERNMENT TRAINING THROUGH THE WASHINGTON STATE ATTORNEY GENERAL'S OFFICE WEB PAGE



STEPS

1. Click [here](#) to access the “Washington State Attorney General’s Office Open Government Training Web Page.”
2. Scroll down to the “Open Government Training Curriculum.”
3. Select the training lesson(s) you need to take. In sum, effective July 1, 2014, within 90 days of appointment/taking office and at intervals of no more than 4 years thereafter:

- Members of multimember **governing bodies** need to take open public meetings training. (Lesson 3). The members who are **elected** local or statewide officials must also take records training. (Lessons 2 and 4).
- Other **elected local and elected statewide officials** must take records training. (Lessons 2 and 4).
- **Records officers** must take records training. (Lessons 2 and 4).
- Although not required, **other public officials and public employees** can take the trainings as well. For example, incumbents in their office/position as of July 1, 2014 are strongly recommended to take the training in 2014 relevant to their position, as described above.

See [RCW 42.30.205](#), [RCW 42.56.150](#), and [RCW 42.56.152](#); and [O & A](#).

4. View the online training lesson(s).
5. When you are done, it is recommended you document the training you received.

More details are below.



- If you need **open meetings training** (see RCW 42.30.205):

Watch the **Open Public Meetings Act** (RCW 42.30) **video*** (16 minutes) **or** review the **PowerPoint**. They are in **Lesson 3**. Lesson 3 is for state and local agencies.



- If you need **records training** (see RCW 42.56.150 and RCW 42.56.152):

Watch the **Public Records Act** (RCW 42.56) **video*** (22 minutes) **or** review the **PowerPoint**. They are in **Lesson 2**. Lesson 2 is for state and local agencies.

+ and

Review the **Records Retention and Management** (RCW 40.14) online tutorial for your position linked in **Lesson 4**. Those tutorials are provided by the [State Archives](#). You can also go directly to those tutorials here:

Local Agencies

- If you are a **local official**, click [here](#) to review the online tutorial.
- If you are a **local employee**, click [here](#) to review the online tutorial.

State Agencies

- If you are a **state official**, click [here](#) to review the online tutorial.
- If you are a **state employee**, click [here](#) to review the online tutorial.



- Last step: If you want to **document the training** (recommended):

- You can use the sample certificate under “**Last Step**” at the bottom of the AGO Open Government Training Web Page.
- **Or**, your agency may have other methods to document training.

If you want more information on the topics covered in these lessons, see the “Other Resources” and other materials linked on the Open Government Training Web Page.

* Note: The videos are accessible through YouTube. State employees are also able to view the videos through the Washington State Department of Enterprise Services online [Learning Management System](#).