

Surprise Lake News

Water Quality Information and More for Surprise Lake Residents

June 2016

Volunteer Lake Monitoring

May 2016 was the start of the sixth year of volunteer lake monitoring on Surprise Lake. The goals of this program are to involve Surprise Lake homeowners in monitoring, recording, and reporting on lake conditions; promote public awareness of lake processes and how our daily activities affect lake water quality; and to provide water quality data that will increase our understanding of the lake. The 2015 monitoring went as planned and the results continue to show a fairly healthy lake. Volunteers record environmental conditions, measure temperature and dissolved oxygen, and collect water samples on a monthly basis from May through October. The water samples are used to monitor phosphorous, chlorophyll a, and fecal coliform bacteria. The full report is available at: cityofmilton.net/wp-content/uploads/2016/03/2015-Monitoring-Surprise-Lake.pdf



Volunteers Monitor Surprise Lake

The requirements for becoming a volunteer lake monitor are: access to a boat with an anchor, 1-2 hours a month, and a desire to learn more about your lake. We provide training and equipment. If interested, contact Isabel Ragland at 253-845-9770 Ext. 103 or isabelr@piersecountycd.org



City of Milton



Healthy Lake Reminders

Here are some great reminders of things all lake residents should keep in mind. Even if we can't achieve all of these goals all of the time, it all starts with education. Here are some tried and true tips for promoting the health of lakes:

- Maintain a buffer zone of natural vegetation along the shore. Use native plantings to revegetate bare areas. All roads and paths leading to the lake should be curved to reduce erosion.
- Please do not bathe, shampoo, or wash boats, pets or other objects in the lake. Try to use phosphate free cleansing products. Home cleaning products that contain phosphate have been banned in some states.
- Please do not use chemical fertilizers within 30 feet of the lake. From 30 to 250 feet, low-phosphate slow release nitrogen fertilizer is recommended. Please use care when applying to only treat vegetated areas.
- Please do not dump leaves or grass clippings in or near the lake. They add nutrients and sometimes chemicals to the water and sediment.
- Please do not feed ducks, geese or other aquatic organisms; there is plenty of natural food available. Nutrients produced from unnatural food can be added to the lake through the organism's feces. Discouraging water fowl populations can also reduce the amount of fecal coliform in the lake.



Surprise Lake

What is LID?

Employing LID, or Low Impact Development, into our plans and our lives can have a significant impact on the health of receiving waters.

What is LID? The standard definition is: Low Impact Development is a stormwater and land use management strategy that strives to mimic pre-disturbance hydrologic processes of infiltration, filtration, storage, evaporation, and transpiration by emphasizing conservation, use of on-site natural features, site planning, and distributed stormwater management practices that are integrated into a projects design.

All lake residents should strive to implement LID techniques. LID can be employed by everyone, everywhere. The techniques work by slowing runoff flow, spreading it out, and allowing it to soak into the ground. LID techniques include planting native vegetation, installing rain gardens, using rain barrels, vegetated rooftops, tree retention, and the use of permeable pavement or pavers in lieu of asphalt or concrete.

The Department of Ecology has already mandated that municipalities that discharge stormwater to lakes and streams go beyond just recommending LID techniques, and actually require them in their code. By December 31st, 2016 all municipalities, including Milton, must revise it's code to meet this requirement.

More Information

Resources for protecting Surprise Lake:

The Washington Lake Book:

www.ecy.wa.gov/programs/wq/plants/lakes/bookcontents.html

Blueprint for a Lake Friendly Landscape:

www.ecy.wa.gov/programs/wq/plants/lakes/landscaping.html

Natural Yard Care:

www.tpchd.org/environment/healthy-environment/natural-yard-care/

City of Milton

www.cityofmilton.net

Only Rain Down the Drain!

Report Pollution and Spills
City of Milton—Public Works
253-922-8738



Is That a New Dock?

You probably noticed if you live on the lake, but Surprise Lake Village Apartments had a new dock installed since our last issue. It is a state of the art dock that uses recycled plastic lumber and allows for natural light penetration into the lake. It provides lighting and potable water out on the dock itself.



Harmful Algae Blooms

HABs, or Harmful Algae Blooms, are formed when cyanobacteria (blue-green algae) becomes overgrown. Sometimes these blooms can be toxic, but even when they are not, they cause problems for lakes. HABs can grow too big when the algae is overfed by nutrients. The food that fuels the algae comes from many sources, most of them human. Many seemingly routine activities and choices can have dramatic effects on lake production, especially when considered cumulatively. Things like proper storage and disposal of household cleaners and automotive fluids, picking up pet waste, and natural yard care all make a difference. Other problems caused by algae blooms include loss of water clarity and quality and competition with native species.

In extreme situations large algae blooms that die and sink can, through decomposition, use up the available oxygen in the water which can in turn lead to red tides and fish kills.



Fortunately, we are not currently having serious problems with algae blooms in Surprise Lake. However, cyanobacteria levels in 2015 were higher than previous years and, as we have seen in other lakes and bays, the problem can develop over time if nutrients are allowed to drain to the lake unfettered.