

Winter 2009

## Blue-Green Algae In Lake Lawrence

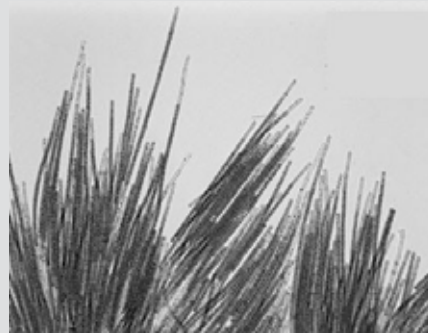
You may have noticed bright green or blue speckles in the lake this fall, or thick scum along the shore. These are algae, primitive plant forms that grow in lakes and streams. With ample sunlight, temperature, and nutrients, algae can multiply dramatically, creating a "bloom," which may contain several different kinds of algae. Lakes in Thurston County are nutrient-rich and normally experience blooms in the summer or fall. Our mild weather this fall, however, allowed these blooms to develop and persist through December.

### What Is a Blue-Green Algae Bloom?

Of the algae that cause blooms, only some are classified as blue-green algae. These are extremely small organisms that often float near the surface and can become several inches thick near the shoreline. They can look like bright green, red, brown or turquoise paint spills, but are hard to scoop up or hold.

### To Report a Bloom...

To report a blue-green algae bloom, call Sue Davis at Thurston County Environmental Health, 754-4111. Information is also available on the "Lakes" link of [www.co.thurston.wa.us/wwm](http://www.co.thurston.wa.us/wwm). (From the lakes page, select "General Lake Information.")



## Help Prevent Toxic Runoff

This winter, be sure to store your hazardous products under cover and off the ground. Examples include old paints, rust-removers, motor oil and pesticides. Also, place the containers in a waterproof plastic bin in case they leak.

Keeping dangerous chemicals out of the weather will help prevent containers from rusting, freezing, and cracking, and reduce the likelihood that poisons will end up on the ground or in our lake.

### What Is a Toxic Bloom?

Some types of blue-green algae can produce toxins or poisons. Eventually the toxins break down and decompose naturally. Ingesting the algae while they are toxic can cause serious illness. They can kill pets, fish, waterfowl, and other animals. Residential drinking water taken from a lake may also be affected.

### How Can I Tell Whether a Bloom is Toxic?

You can't tell whether a bloom is toxic just by looking at it. Toxicity is only determined by special laboratory testing that takes more than a week to get results. The results only provide information on that one sample, at the time it was collected. So at best, we can only know if the bloom was toxic a week after we sample. Even though a blue-green algae type is capable of producing toxins, there's no certainty that it will.

There may be a toxic bloom near one beach, while other blooms on a lake are safe.

Research is underway to try to understand what triggers toxin production, but in the meantime, it is safest to avoid contact with the water during a bloom.

### What If I See a Bloom?

Please take these simple precautions:

- ◆ If there are bright colors and scum on the water or the water looks bad, don't go in!
- ◆ Keep children and pets away from the water. Children can become ill after accidentally swallowing blue-green algae in water. Pets can become sick or even perish after drinking the water or licking algae-covered paws. Don't throw sticks into the lake for your dogs to fetch during a bloom. If your dogs jump in anyway, hose them off.
- ◆ If you decide to enter the water, or get wet while out in a boat, towel-dry, then shower afterward. Some blue-green algae can cause a skin rash for people with sensitive skin.

## Our New Liaison

The LMD Advisory Committee welcomes Janie Civile as our new county staff liaison. Janie comes to us with an extensive background in aquatic ecosystems, noxious plant mapping, control and management. She looks forward to working directly with lake management districts in Thurston County, and bringing her experience with Spartina in Willapa Bay and Puget Sound to the Lake Lawrence discussions.

Janie's contact information is:  
[civillj@co.thurston.wa.us](mailto:civillj@co.thurston.wa.us),  
(360) 357-2491.

# 2008 Management Year in Review

Lawrence Lake had a busy year in 2008, with multiple projects undertaken by the LMD Advisory Committee and other residents. The 2008 work plan focused on reducing white water lilies and other aquatic nuisance weeds with both herbicides and a mechanical harvester, and restarting the fish net pen program.

## White Water Lily

This beautiful invasive plant, also called fragrant water lily (*Nymphaea odorata*), rapidly crowds out native marsh plants, and our native yellow water lily. It's on the county's noxious plant list, and its removal is a primary component of the lake's management plan.

In the summer of 2004, much of the white water lily was treated with glyphosate; this summer, fewer than two acres with scattered plants were spot-treated again with glyphosate. The plants were growing in areas that had been hard to reach in the past. Small follow-up treatments will likely continue in 2009.

## Aquatic Nuisance Weeds

After securing permission to use the herbicide Sonar in 2007, nearly 45 acres of submerged aquatic nuisance weeds, mainly Pondweed (*Potamogeton*) and Water Celery (*Vallisneria*), were treated three times this June and July. Our approved strategy maintains a constant, but very low level for 60 days, allowing plants within the treatment area enough time to take up the herbicide, while greatly reducing the risks to fish and animals. Follow up monitoring in the fall showed that at least 90 percent of the target vegetation had been successfully treated, but final results will not be known until spring regrowth can be assessed.

In keeping with an integrated approach to managing the lake, a harvester was used to remove submerged aquatic nuisance weeds from selected areas around the lake. A total of 11.2 acres were harvested (mown). These same sections will be scheduled for Sonar treatment in 2009.

## Net Pen Program

Special thanks are due to LMD committee members Paul Hoseth and Nic Loch for working with the state's fish hatcheries to resume a net pen program. The unusually warm and dry weather we experienced this fall contributed to low water and oxygen levels in the lake, and may postpone the program to the fall of 2009.

The net pen program takes a great deal of time and effort on the part of lake residents to daily feed and care for the fish while they are confined to the pen. Adult fish will still be transplanted in the spring, whether the pens are used or not.

## Join Us!

The Advisory Committee will begin working on the 2009 budget and plant-control plan at the Lawrence Lake Community Center. Meetings start at 6:30 p.m. on the second Tuesday of each month. Come join us!

## Lake Lawrence Newsletter

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For more information on blue-green algae, visit:

[www.co.thurston.wa.us/stormwater/Lakes/General\\_Lake/Algae\\_Blooms.htm](http://www.co.thurston.wa.us/stormwater/Lakes/General_Lake/Algae_Blooms.htm)

[www.ecy.wa.gov/programs/wq/plants/algae/publichealth/GeneralCyanobacteria.html](http://www.ecy.wa.gov/programs/wq/plants/algae/publichealth/GeneralCyanobacteria.html)  
[www.doh.wa.gov/ehp/algae/default.htm](http://www.doh.wa.gov/ehp/algae/default.htm)

The Lake Lawrence Newsletter is published by Thurston County Water and Waste Management to provide information to members of the Lake Lawrence Lake Management District.