

Friends of Green Lake Meeting Notes March 18, 2008

Attending

Tricia Shoblom (Washington Dept of Ecology), Sally Abella (King County DNR), Karen Schurr, Richard Fleming, Gayle Garman, Kris Fuller, Ellen Hewitt, Susie Oversbee, Steve Quarterman, Rob Zisette, Ingrid Wertz (SPU), Kevin Stoops (Seattle Parks), Doug Martin, Marcia Norman, Mary Lou Knox, Mike Cornell

A. Five years of Green Lake Monitoring – What can it tell us?

Sally Abella (King County Small Lakes Stewardship Program)

1. FOGL volunteers began sampling as part of King County Small Lakes Program in 2003 taking water level, Secchi depth and temperature weekly at the end of the dock by paddleboat rental (Level 1 sampling). These data have been collected by Billings Middle School students and their teacher, Rebecca Timson, for the past year. In 2005 FOGL added Level 2 sampling, water samples are collected at two mid-lake stations (by Richard and Gayle using kayaks) and the samples are analyzed at the Metro water quality laboratory. These samples are collected 12 times each summer, about every other week from May through Oct. Seattle Public Utilities (SPU) funds Green Lake's participation in the program.
2. There are two stations at Green Lake: #1 in NE quadrant at the deepest part of the lake, in front of the Hearthstone, and #2 about midway between the island and the Aqua Theater, where the weed-harvester was moored.
3. Phosphorus is the key nutrient for controlling blue-green algae (cyanobacteria) - goal is to keep it less than 20ug/liter. Except for 1 sample, the phosphorus concentrations from 2005-2007 have been under 20 ug/L. No trend in average concentration over the 3 summers.
4. Green Lake chlorophyll-A after alum treatment has been below 5ug/L=low algae.
5. Water clarity has greatly improved since the alum treatment in 2004. The goal is to be able to see the Secchi disc when it is down 2M (6 ft) or deeper.
6. Water temperature measurements have a similar pattern each year: max of 22Deg C-23deg C (73 F) and min of 4-5deg C (43 F).
7. Water level at the dock doesn't fluctuate much except if stop logs are added or removed in the outlet weir.
8. A shoreline accumulation of blue-green algae was noted in Oct 07 and sampled by Gene Williams. The King County lab measured microcystin at below the detection level of 5 micrograms/liter; W.H.O. – recreational level is 6 micrograms/liter

- a. Cyanobacteria species in that sample:

Anabaena flos-aquae – the dominant organism, a blue-green that can be toxic

Gloeotrichia – another blue-green, generally non-toxic

Asterionella – not a blue-green algae, a diatom

- b. Sewage spill estimate – worst case scenario for December 07, 2007 sewage spill was less than 1 microgram/liter phosphorus added to the lake (average through entire lake volume).

B. Algae blooms -- What can citizens do?

Tricia Shoblom (Department of Ecology)

1. Ecology will post all toxicity levels in lakes online.
2. People should look for scum or foam on water surface, or cloudy green water
3. Call if you see scum or foam of any color floating in the water – report to Gayle Garman/Richard Fleming (525-1974), contact Sally Abella by phone at 296-8382, or email sally.abella@Kingcounty.gov, or call Tricia Shoblom at (425) 649-7288. Ecology has a program to pay for testing samples for toxicity. King County lab does the testing.

C. Discussion and Planning for 2008 Monitoring

1. Gayle is worried about what appears to be an up-tick in blue-green algae blooms since the last alum treatment. Shoreline blooms were observed in October and December 2007 and in January and February 2008. FOGL is interested in analyzing phytoplankton population throughout the summer to chart rises and falls in blue-green populations, so that we can prepare for when another alum treatment will be needed. We need to be ahead of the triggering events to get funding for treatment before there are lake closures. A phytoplankton analyst who is highly regarded is available and will do phytoplankton counts for us at \$85.00/analysis plus about \$10.00 shipping. We will need about \$1,000.00 to this which is expensive for us.
2. We can apply for a SPU grant, or a King County grant to help with the cost of adding the phytoplankton sampling to the Level 2 sampling FOGL volunteers already do with King County Small Lakes program. The phytoplankton samples will be collected at a depth of 1 meter, the same as the nutrient and chlorophyll-A samples; and at the same time.
3. Ellen Hewitt moved that we contribute \$150.00 to establish a cyanobacteria analysis of Green Lake water samples. Mary Lou Knox seconded and the motion passed unanimously. We will apply to SPU for a quick grant and, if we don't get

that, to the King County Department of Natural Resources. The county has a more complicated application process.

D. Old business and Miscellaneous

1. Treasurer report:

Savings	\$1,633.90	+40.00	+2.29 int	\$1,676.25
Checking	\$ 996.80	-10.00 (for Domain Name)		\$ 986.70
Obligated	\$ 300.00 for the 501c3 filing and \$ 150.00 to begin phytoplankton monitoring.			

2. Webmaster report – Ellen Hewitt

- a. The menu is down the side as well as across the top – including Birds of Green Lake which varies by season.
 - b. We have pictures of the blue-green algae blooms.
 - c. The Green Lake Community Council has a new calendar of events. FOGL also links to it. It is located under the Links tab on both web pages.
3. T-shirt Report – Linda Noble has resigned. We have 37 blue shirts; 10 alligator shirts.
4. Progress on the 501c3 – The background work is done, but we need bylaws acceptable to the IRS. We also need a legal person to check it all over before we submit it.
5. Kevin Stoops said the Parks Strategic Business Plan meetings will run from mid to late April and the Draft will also be available on line.
6. Nancy Malmgren of Carkeek wants us to coordinate with Haller and Bitter Lakes, and asked us to participate in the May 3 Environmental Idea Fair at Carkeek Park.
7. Mike Cornell of GLCC moved that we obligate \$50.00 to print more brochures. Ellen seconded and the vote was unanimous for doing so.
8. Election of Officers – Chairman and Recording Secretary are up for election in 2008. Mary Lou Knox moved to elect Gayle Garman Chair. It was seconded and all voted yes. Ellen Hewitt moved to elect Kris Fuller recording secretary. It was seconded and all voted yes.
9. Karen Schurr will host a Five Year Celebration Potluck at her home on April 26th beginning at 6:00 in the evening.

10. Miscellaneous notes –

Green Lake has three drainage basins – Densmore Drain (4/5 of all drainage), the immediate area around the lake, and Lower Woodland Park.

Sally Abella stated that healthy lakes in western Washington tend to have high nitrogen and low phosphorus. When asked how this is achieved, she said planting Alders might help. With high nitrogen and low phosphorus, green algae can out-compete the blue-green algae.

The meeting adjourned at 9:07pm.