

Friends of Spanaway Lake Board Meeting

Minutes

Thursday, October 3rd, 2019- 7-9PM

Location: Spanaway Elementary Library – Use Door on North of Building, go upstairs to Library or follow signs

Attendees: Sandy Williamson, Jim Overway, Ed Larson, Elizabeth Iselin, Kim Long. Excused: Scott Munson

Guests: Don Russell, Kurt Spingath, Amy Cruver, Linda Heade, Debbie Williamson, Kathy Creso, Mel Oleson.

1) Call to Order-Sandy

Meeting came to order at 7:00pm.

2) Roll Call-Sandy

3) Approval of the agenda-Sandy

4) Approval of Prior Meeting Minutes-Board

**5) Guest – Don Russell – overview of lake chemistry & Iron applications for 2020
20 min.**

Per Sandy, **DO NOT SHARE** the word document that was send out earlier in the week.

Don Russell shared a Spanaway Lake Power Point presentation. The presentation was very powerful and referenced studies done by the University of Puget Sound that are in conflict with the Brown & Caldwell study in that the Phosphorus located in the sediment in Spanaway Lake is mostly bound to Iron brought into the lake through Coffee Creek, and that potentially, the Phosphorus problem in the lake is caused by vents of groundwater carrying Phosphorus, and plants that create high PH, which results in the release of Phosphorus from the Iron.

Per Don, since Spanaway Lake is continuously loaded with Phosphorus based on the above conditions, it would have to be treated every year. It would cost FOSL about \$100,000 per year to manage Spanaway Lake. To start with, FOSL should find out if there's a significant amount of Phosphorus coming into lake from the vents.

Water can flow through underground veins that end up with higher flow and move water much quicker to the lake. Storm water basins are abundant and slow down storm runoff but it still ends up in the lake. The runoff might be better filtered if the storm water ran directly into the soil versus being collected in basins.

When Iron particles are placed over the vents, excess gets moved to the sediment around the vents to help remove Phosphorus from the sediment, but it needs to be applied every year and over time, moves further into the sediment, further out from the vents.

The process with the Iron particles has been validated. USGS had a pond with Phosphorus leaking into another pond without Phosphorus. They dug a trench and placed Iron particles in the trench so the water flowed through the iron and bound the Phosphorus so it wasn't leaking into the second pond. Additionally, when placing the iron particles on the surface of the water, it falls down into the sediment and binds with the Phosphorus.

What about the plants? What is the Return on Investment to try to eliminate excessive plant growth that leads to high PH which loosens the phosphorus into the water. Harvesters will do this, but they can be very expensive.

Per Sandy, Spanaway Lake volume is replaced about every 120 days.

Don believes that Lakeshore owners buy-in to correct the lake's problems if they're in a Lake District and that the district gave them the access to matching funds for their grant funds.

American Lake has been studied for about 30 years. American Lake residents formed a Lake Management District at \$0.65 per foot of lakefront along with Camp Murray, JBLM and City of Lakewood. It started 3 years ago and just finished May of this year. Budget is now at \$28,000 from district and double that from JBLM. Total about \$56,000 per year. They did treated milfoil this year using AquaTechnics.

Mason Lake has had a Lake Management District for 15 years, and the district is managing their lake. The Residents are very knowledgeable.

6) **Treasurer Report- Balance of Funds \$5,182 as of 8/28/19.** Budget Balance is \$5827.75 as of Monday, 9/30/19

7) **Committee Reports**

a) Aquatic Plant & Phosphorus Fractionization update (Cost \$20,000) – Ed/Scott
Aquatechnics were on the lake last Wednesday, took core samples. This work is in progress.

b) PCCD Green Grant Application – Sandy, Jim, Ed, Jessie, Elizabeth

1. A grant to work with Jeff Teppers, UPS students next year to test applications of Zero valent Iron [filings] on reducing the P concentration of incoming ground water [GW] by locking it up with iron [Fe].

Timeline:

-Feb. SCUBA divers locate 10+ gravel beds on the south and east sides of the lake and describe for each: size, GPS coordinates in decimal degrees of the center, temperature differences. photos as possible. Eliz will get estimates on diver costs assuming we [FOSL] provide the pontoon boat to dive from.

-Buy enough iron [filter pads] to apply/change monthly April to Aug. Medium Scale

-Jeff's student[s] will do control and replicates of numerous small scale maybe 5 ft diameter test plots isolated with pipe or drum showing effects of iron filter pads onsite in the small scale....

In Progress. Linda, Sandy, Jessie

- Preparation is underway to draft the data that will be loaded into the application.

- Two meetings have occurred with Jeff Tepper from UPS, who worked with the student that created the study contradicting some of B&C study.
- Scientist for Pierce County Surface Water Management are involved.
- Jeff Tepper's students will do a lot of the sampling work, before and after the iron is put out on the vents.
- Others are also assisting us in creating the grant, Shuhui Dun, Tom Kantz, Paula Langager.
Diving may cost \$3000-\$5000. Divers are \$50-\$80 per hour.
- The volunteers will be able to identify what needs to be done. Then divers will do the work. The target window for the divers is in January and February when the temperature difference is the largest and there's no boat traffic.

2. A grant to work with Paula Language at SPLHS students have not been laid out yet.

b.i) Clover Creek watershed Grant January 2020 – who will lead

We missed this last year. **Mel wrote the last grant application and will assist Elizabeth and Kim to write up the grant. Elizabeth will email Janet Spingath to gather dates and information.**

b.ii) Other grant opportunities?

Amy will check and see if there are any others.

Sandy will ask Barbara Ann.

Ecology?

Birdee Davenport – DNR. **Sandy will reach out to Birdee.**

Amy brought up the Russell Foundation as a potential high dollar environmental grant resource.

Kim will find out a contact for the Environmental Grants from the Russell Foundation.

b.iii) Legislator Grant Opportunities

Usually want to talk with legislators 2-3 months prior to the start of the session.

There's a supplemental budget with potential for some funding.

Morgan - Meet with her by October

Conway – Meet with him by October as Conway would be the most likely to assist FOSL

Kirby – Probably won't meet with Kirby

- Need to reach out now. **Ed, Jim and Sandy will do this.**
- Jessie and Linda composed letters to the reps in the last session.
- **Linda will update the letters based on progress to date and send them to Sandy.**

8. Old Business

- a. Park Display Board – Anyone take this on? **Ed will work on this** using Amazon Smile, Toxic Algae, Silent Drowning. Build it with stuff we already have.
- b. FOSL Sponsor plate update – Sandy

- c. Other updates: Study by William Hobbs – Jessie
- d. Planning for annual meeting and election – room reserved, etc.
Annual Meeting – **Reserve Room – Amy Cruver or Jessie?**
Pierce County Person would be Amy Cruver – January 14th, 2020. Doors open at 6:30, meeting from 7:00 – 8:30pm. Alder Room.
Notices need to be out 60 to 90 days in advance.
- e. Business Cards Update – FOSL phone no. working and will be Kim’s mailing address. Need to have Jim change the Secretary of State and Insurance – All State – Kim/Jim Utterback. Elizabeth will help produce the artwork for the business cards. Per Sandy, we need them as soon as possible. **Elizabeth will target later this month.** FOSL must have them before the Annual Meeting.
- f. Paula Langager, Science Teacher, Spanaway Lake HS Water Quality Study 2019 – Paula to provide slides to FOSL.

9. New Business

- a. Phosphorus testing on identified spring in south cove by Kim’s dock \$ approval – Sandy Nutrient Sample to be taken in the vents this week and send it to the lab and get a sample. Ed made a motion to the board to spend up to \$500 to collect up to 2 nutrient samples by Kim’s dock to have them analyzed, not to exceed \$500. Motion Approved and Carried. **Mel will take and submit the sample(s) prior to October 8th.**
- b. Lake outlet blockage with debris - now may be the best time to address any that could hamper water flowing in the winter. Dealing with it in the winter is much more difficult, but if not dealt with, it could lead to higher water and property flooding. Do we need permission to address/remove blockage. Who/how /when **Kim will reach out to Owen** and find out where the concern is and take photos for the board. Per Mel, there’s nothing blocking, but there has been an island that has raised up. Rock dams built by children may be the concern. When the lake rises and the flow increases, it should remove them.
- c. FOSL consideration of coordinating spraying Spanaway Lake in 2020 – Sandy Table to future meeting.
- d. Sprinkler Recreation Center improvements stakeholder representative
Cindy Haverkamp, Parks Planner 1
PIERCE COUNTY PARKS | EVERYDAY ADVENTURES
P: 253-798-4078
Mel will be FOSL representative.
October 8, 2019 – **Kim** to attend meeting for Mel.

10. FOSL Member Open Forum-Sandy

- a. Mel: FOSL is bound by the By-Laws to implement an Engagement committee and a Project committee. This topic will be **added to next month’s agenda. Kim to identify list of names of residents interested in FOSL and send to the board.** – Done on 10/4/19.

- b. Amy: Saturday Clean up is this week-end in Spanaway Park. Lemay has large garbage disposal bins for residents. This is a Bring Your Junk day and get rid of it – Oct. 5th and 10th.
- c. Mel – Thank you to the volunteers who are taking water samples, you’ve saved PCHD lots of \$\$\$\$
Thank you Mel, Jessie, Elizabeth, Jim O, Linda
- d. Can FOSL create a map of all of the areas where springs are believed to be in the lake?
Elizabeth to create and Kim to send out.

Opportunities:

- Annual Meeting: Show a map of the springs.
- Send out a map to everyone around the lake. Members bring back the papers to the next meeting.
- Evidence is temperature differences, particularly where ice doesn’t form. Also where fisherman are out and fish.
- Google maps, share the Longitude, Latitude.

11. Good of The Order-Sandy

12. Adjournment-Sandy

Meeting Adjourned at 9:00pm.

13. FYI - Upcoming Park Clean-Up Day sponsored by Safe Streets –by Amy Cruver – Jim

- a.i. 10/5/2019 Spanaway Lake Park, 14905 Bresemann Blvd S,
- a.ii. 9/21/2019 Graham Kapowsin High School, 22100 108th Ave E,
- a.iii. Will be added to Facebook.

14. Next Meeting: Thursday, November 7th @ Spanaway Elementary School Library. Please use the entrance on the north side of the building. Library is located up the stairs.