

Friends of Spanaway Lake Board Meeting

Minutes

Thursday, May 7th, 2020- 7-9 PM

Location: Board meeting is via Zoom video call. The zoom instructions are:

Join FOSL Zoom Meeting

<https://us02web.zoom.us/j/83210939285?pwd=blZub1M5Q2kwT1Q3R2VicXp4UWxrdz09>

Meeting ID: 832 1093 9285 Password: fosl

You can also call in with a phone by either method below:

One tap mobile [+12532158782](tel:+12532158782), [83210939285#](tel:+12532158782), [1#](tel:+12532158782), [116021#](tel:+12532158782) US (Tacoma)

Or +1 253 215 8782 US (Tacoma) and type in meeting id

If you want to test Zoom on your phone or computer before then go to zoom.com or

<https://support.zoom.us/hc/en-us/articles/115002262083-Joining-a-test-meeting>

1) Call to Order& Roll Call -Sandy

Amy Cruver, Mel, Penny, Ed, Sandy, Jessie, Elizabeth, Kathy, Shem Zakem

2) Approval of the agenda & Prior Meeting Minutes –Sandy & board

3) Finance update. Balance, count of 2019, 2020 FOSL Sponsor Plates –

Finance budget as of 5-7-2020 is \$12,500.

4) Old Business

a. Annual Meeting Follow Up:

- a.i. ASAP progress Report to go to those that came to annual meeting and a request that they become ambassadors to their neighbors? Per Linda – Just the high-lights, and include a link to the presentations, that will all be uploaded on the website.

KIM will do this before the next board meeting. Jessie/Penny will proofread and approve.

Kim has not sent this out yet because the website was not yet updated Sandy forwarded this to Amy to put on the website.

- Kim will reach out to Amy – The web site is updated.
- This will become a newsletter at this point. Elizabeth, Penny will work on newsletter. Include some one paragraph articles on significant items from the last few meetings.
- Aquatechnics is going to do spraying. If you know of anyone that wants to be included, they should send us their email.

b. Meetings with Reps Kirby & Conway – Ed & Jim

- b.i. FOSL is making an an operating funding request, not a capital fund request through Representative Conway. FOSL asked for \$150,000 per year ongoing.

Governor vetoed as part of COVID-19 expenditure cuts.

- b.ii. Replacement of Shoreline Armoring – ESSB 6147 update – Jim
- b.iii. Should FOSL let lake neighbors know about restrictions coming? Jim

- b.iv. Send thanks to Kirby & Conway for their support. – Jim did this.
Mostly informational.

c. Spanaway Lake Science:

- c.i. See April 24th Meeting Recap at bottom of agenda.

- We asked the county if we could spend the 3-5K we had left to research for optical brighteners. It's a test on the end of a probe and it tests multiple things including optical brighteners. The indicators will let you know when you get near a deeper groundwater vent. The county has the meter and will do it for free on Tuesday.
- Justin and Sandy will go out with the county for this testing.
- Sandy is sharing lake maps
- Density of vegetation (blue
- Hardness of the bottom – orange. Mud is yellow, Rock is Red
There could likely be groundwater vents where red is hard bottom on one map and blue is density on the other map.
- Three ground water vents found in shallow part of lake. Kim, Carol, Across from Jim, by the boat house. See Sandy's email from this morning.
Jeff's students will deploy 6" diameter shower conditions, early Summer in June. They'll also be looking on the east side for another one mentioned by fishermen. (Dark Orange on mud map.)
At the end of the cove, end of Jim Utterback's neighbor, and north of that, there's another. The Kerns' location is difficult to keep the boat still enough. Can FOSL get permission to stand on and tie to his dock. **Shem will look into this.**
There's at least 4 ft of muck around the vent spots where the muck has been blown away by the vents.
Ask permission to use the dock of the home pending – once it closes. **Kim will look into this.**
- By Jim Overway's home and in the south, there is a lot of hard rocky ground. There might be thinner muck and some gravel below it.
- **Jim should find out if he has less muck in the dark orange versus in the lighter orange and then he'd need to identify exactly where on the map this test is being done.**

- c.ii. We have the 2 UPS students but not certain when UPS will allow any students on campus so not sure when they will be able to work on samples, etc. Any work or ideas for the students to do would be great. Raking of vegetation to test????

- Students will deploy rings with curtain that goes to bottom, starting in SE cove and maybe others, and as deeper vents are identified.
- Rings will be tested as follows: Iron, Alum, Foslock, not treated.
- Some of the same testing will occur in the deeper spots.
Sandy and Greg got samples on March 20th, April 9, 20 near Kim's and her neighbor's dock gw vents and mid lake trying to sample every month. Now requires 2 people. Our samples have been 15-20 PPB P in the lake and 35 in ground water vents. Have done more split samples with Don Russel's. The flow is most noticeable right after a storm, but is more dilute in P. After rain easier to see the sand volcanoes
Adding lysimeter to sample GW coming in in the canal. Put Jeff's sediment traps in 2 locations April 9. There are 2 deep points at 5 mile buoys, one near Scott's house and one off the island closest to park.

USGS, will give us some tools to put monitoring wells at the bottom of the lake. – Eds home and Sandy's home.

Science team met March 30 . Minutes already sent.

- Sandy got the Secchi disk today and has two monthly measurements. Lake clarity improved last month and AGAIN THIS BODES BADLY FOR LAKE THIS SUMMER TO BE WORSE.
- Recently, the Secchi disk could be seen at 20 feet. Last summer, many people noticed the clear water in July just before the large algae bloom. The deeper the visibility, the lower the sun can go and quicker the plants grow.
- This year, seems like more plant growth, hotter, clearer and we could have a bad algae year.
- Everything seems to be blooming earlier this year. Lily Pads thick by Eds, Little Spanaway and by Kathy's. For the invasive lily pads, they're legal to cut off, just drag them out of the lake so they don't drift!
- Looking at possibly getting some rings to put in the coves to isolate the lake and treat some areas, while keeping some control areas.
- Looking for more vents, fishing holes, cleared gravel, etc.

c.iii. Sandy's 2-20-2020 email on measuring other chemicals in the GW vents.

- Optical Brighteners PROBE – WILL be used 5/12 to confirm the ones we have and locate deeper GW vents

Meeting with county folks to discuss using funding from 5k remains of 25k\$.

County wanted to try their equipment first.

d. Herbicide Treatment – Herbicide on Spanaway Lake – 2-12-2020 email

d.i. Acquire permit from Doug Dorling xfer to Terry/Aquatechnics

d.ii. Aquatechnics has been invited to be the lake sprayer for 2020 and giving lake names to company. 275/lot

d.iii. Need someone to work with Terry

d.iv. Need to have them spray end of June or beginning of July. We can let FOSL members know ahead of time and that may help get a better response. Only 50 lots can be sprayed in the permit.

- Aquatechniques will do the spraying. They'll give us a draft email to send to our email recipients. Need someone to coordinate at a\$275 per property. Jim Overway will oversee this. Email was sent to residents on 5-12-2020
- Limit was 25% of shoreline. Aquatic Plant Management study, might allow them to treat more properties. Will need to coordinate with Aquatechnex.
- Are we far enough in plant study to be above the 25% limit?
- Can spraying happen while rings are deployed. FOSL would prefer to not spray that section with the rings. Talk to Jeff about if this is part of the control.
- FOSL decided not to buy the permit, but Aquatechnex agreed to buy the permit.
- Penny received a letter from NW Aquatics about contracting the spraying. Penny got an email. Jessie didn't get an email. Penny will check with Merle and find out how many people are on this email list. Penny and Jim O will coordinate.
- Date for Spraying – as early as possible. – Third week of June.
- The Herbicides treat lily pads and **allodia (fir tree like weeds – Could someone please tell me what the spelling of this plant is – Thank you! Kim).**

- Elizabeth will include the spraying in the newsletter – will sync up with Jim O.
- e. JARPA application for permit on DNR property (Joint Aquatic Resources Permit Application). Mel suggested we discuss finding a person to write up the JARPA application for projects that we may want to do. This would then enable us to receive permission to do multiple projects with one JARPA application. Ed: recommend that we hold off until next month to be able to see better what we are doing.
 - Mel - Once FOSL has this permit, then it can be used when needed for a plant harvester, plant removal and other tools. It makes the process go much quicker later on.
 - A couple of months to pull this together, make it lake wide, start with something simple, build a boat ramp or lake wall. \$250 roughly. We only need to identify one thing for the first application, then subsequent permitting is based on the first one that's approved.
 - Mel will work with Shem, Jessie, Elizabeth to do this, this year prior to this fall's grant application deadlines. They will probably need a small budget to get all the data for the JARPA application.
 - On the large grant that FOSL didn't get, this was one thing that we were asked if we had it in place, and we didn't. Some Grants start in October, November. Green Grant was late fall/winter.
- f. Boat House Display – Jessie
Yes it's in place. **Jessie will send a picture to Kim.**
- g. Coffee Creek Board Meeting – Third Thursday of each month at 5:30pm. Elizabeth Cancelled the last couple of meetings. **Elizabeth will get on the mailing list** to learn what their agenda items are.
- h. Kikaha O Ke Kai canoe races – canceled May 16, 2020 race
Jessie will call her son and find out if this is confirmed as cancelled.

5) Committee Reports

- a) Aquatic Plant & Phosphorus Fractionization update (Cost \$20,000) – Ed
Still waiting on a draft of the report and Ed's working on quarterly report for the county.
- b) Grant updates – Sandy
FOSL WIN: FOSL has been awarded an Operating Expense Grant for \$2500.
Need volunteer to send thank you to Clover Creek council.
Celebrate!! We might be able to apply for multiple grants next year as they barely had enough applicants to use all their funds.
Rene Buck – **Elizabeth will send out thank you.**
- c) Facebook Stats – Are there opportunities with the Facebook site to engage the community?
Sandy's 2-3-2020 email.
We felt it would be good to keep Facebook going for FOSL. Sandy does it with a bit of help from Karen Margeson. NEED HELP HERE ALSO

6) New Business

- a. Fund raising for summer treatment.

- Discuss with local donors that might have capacity and be willing to match donation funds.
 - Kathy talked to Nancy Lemay. Sandy talked to Nancy and Doug Lemay about a match for a go fund me campaign. Doug listened to how he could limit funds and type of match. He's pondering.
 - Anyone else we could approach?
 - Fees have been lowered from 8% for non-profits.
- b. Septic owner fee push towards legal action.
- Don wants county government to consider some sort of fees for septic owners to pay for treatment in downstream lakes.
 - CPLE was copied, lobbyist for Audubon Society. Legal action is always more difficult that talking the county into do it. He thought it would be a very low chance of getting anything here – slim to none.
 - Shem - Residents that live near the water pay higher taxes.
 - The Park covers 15% of shoreline with paying customers, so both arguments are relevant. Also the golf course, using the water and runoff filtered back into the lake.
 - The state has confirmed that the county is not the deep pocket. FOSL should get the money from the state.
 - Mel – Maui court battle will end up in the US Supreme Court eventually on if the County is able to provide a septic system as a treatment in the Clean water act and it's something FOSL doesn't want to get into.
 - FOSL will table this topic, regardless of the good discussion.
- c. Summer 2020 watch to predict algae bloom? Clarity plant growth. Temp.
- d. Future of FOSL and lake treatment.
- Placeholder. It might be that the lake needs \$150,000 - \$200,000 annual to treat the lake. FOSL almost won \$150,000 from the state this year.
 - Can phosphorus be Harvested? When you treat phosphorus with nano metals, then can the phosphorus be harvested because it's a rare material?
 - o Alum is toxic and changes the PH – No such thing as reharvesting it.
 - o FOSLOCK – No Toxicity but also no reharvesting.
 - o Iron – Already abundant in the lake. It's the most natural treatment. – No reharvesting.
 - o Products fall to the bottom and they become a coating for the bottom. They strip the phosphorus as its falling down or treat the phosphorus out of the bottom sediment.
 - Contrary Research: In the B&C study, it states when algae dies, it takes the phosphorus to the lake bottom. All FOSL work is showing that most phosphorus is coming in through ground water.
- e. Coldwell Banker Bain Real Estate Donation year-to-date total of \$1,950 for 2 transactions including \$1,080 donation in April. Thanks to Ed & Tamara

7) FOSL Member Open Forum-Sandy

- Mel – Algae watch committee member needed north of island. Volunteers will be Penny, Jessie, Jim O, Elizabeth
- Testing Rings – Jet skis, boats, fishing lines – Communication?

- These sediment traps have been attached to 5 mile hour bouys, the only thing visible is gallon jug of air. Up to 250 feet out, you can put out whatever you want, but at 300 feet out, the speed limit increases from the 5 mph limit.
- Volunteer needed to help spell Sandy as a sampler to work with Greg. Ed can do this as long as it can be later in the evening. 2-4 hours every 2 weeks. Sandy's boat can be used. Best to have a driver and someone to fill bottles. Ed and Elizabeth with trade off. Greg or Sandy will work with Elizabeth.
- The lake was stocked really well this year.
- Beaver is still there. Ate Ed's willow.
- More mink and otter sightings.
- Jim O found a yellow flashy light goose repellent. **Jim will send information out.**
- Big bang sound happened at Sandy's early in the morning. About noon in the driveway, there was a dead female duck, had flown into the window. So sad. 😞

8) Adjournment-Sandy

Meet was adjourned at 8:45pm.

Next Meeting: Date: Thursday, June 4th, 2020. Time: 7-9pm. Location: Zoom or TBD

April 24th, 2020 Spanaway Lake Science Meeting Recap:

- The purpose of the meeting was to discuss options for using funds remaining in the State budget proviso Pierce County received from Department of Commerce to implement elements of the Spanaway Lake Management Plan. About \$5,000 remain.
- There has been a lot of discussion and interest in identifying the groundwater vents coming into Spanaway Lake. The hope is that sampling the water quality of the vents may better define where the phosphorous in the lake is coming from.
- If we're able to identify the vents as potential sources of pollution, we may be able to focus treatment efforts on the vents rather than on the lake as a whole. Jeff Tepper (UPS) is working with his students on a project placing curtains around some of the known vents and trying different treatments. If this works, then we need a more consistent system for identifying vents, especially in deeper parts of the lake.
- Currently, vents are identified using visual indicators and temperature changes. Phosphorous sampling has already been done on some known vents and seems to indicate that the vents have higher phosphorous levels.
- Sandy has been communicating with Herrera, a consulting firm, about the possibility of sampling the lake for optical brighteners. The hope is that the optical brightener sampling might provide a more consistent identification of groundwater vents since there are so many septic systems contributing to the groundwater.
- We discussed optical brightener sampling and whether it would be a reliable parameter for identifying groundwater vents.
- We developed a plan to do a trial run using our existing resources (see below under Next Steps).
- Shuhui shared that Spectra lab results of phosphorous levels from wells on both sides of the lake are similar to in-lake levels.
- In addition to the optical brightener trial, we discussed adding piezometer purchases and lab processing to the grant. Piezometer purchases look reasonable, but lab processing may trigger the need to prepare and submit a QAPP so that may not be the best use of limited time and money.

Next Steps:

1. Get authorization for Pierce County SWM to participate in a test optical brightener sampling run on Spanaway Lake using their equipment and staff. (Barbara Ann)
2. SWM would use their Sonde and optical brightener meters jointly to test known vents and areas without vents.
3. Sandy would provide a boat.
4. Jeff Tepper would provide a camera to help with proper placing of the meters.
5. Try to complete the test within 2 weeks of the meeting.
6. If the test looks promising, Barbara Ann would submit an agreement amendment to Dept of Commerce following the proposal Herrera sent to Sandy. If the test does not look promising, the Spanaway Lake science team will research alternative parameters.