# FOSL NEWS

## Friends of Spanaway Lake

## **SPRAYING 2020**

Attached to this newsletter is the info on spraying for vegetation. This helps in getting rid of plant life such as lily pads. Please help keep the lake healthy by removing as much dead/floating debris as possible. This debris harms the integrity of the lake.... we all need to be good stewards so we can continue to enjoy where we live. YARD WASTE should never be dumped in the lake...this contributes to the high phosphorus levels that lead to toxic algae blooms

#### **FACEBOOK**

Checkout and like FOSL on Facebook for info and timely pictures of things happening on the lake

https://www.facebook.com/Frien dsofSpanawayLake/

Amazon Smile

A donation will be made to

FOSL on purchases made on

Amazon, set it up 🍘

Sponsorship \$300



# **STATE FUNDING**

FOSL made and was granted, an operating funding request through our Representative Steve Kirby and Senator Steve Conway for \$150,00 per year. Unfortunately, it was vetoed due to Covid-19 expenditure cuts for this year.

Our lake quality is not looking good already for this year due to low water levels and water temperatures. We may have more algae blooms again this summer.

FOSL will continue with water quality monitoring this summer in hopes that when we have funding again next year we will have more data/info about possible treatments to problems causing the blooms.

We are testing and monitoring ground water vents/underwater springs and will be deploying rings with curtains to the bottom in the SE cove and maybe other locations as identified for testing different treatments (iron, alum, Phos-lock). The hope is that by monitoring the ground water vents we may be better able to tell where the phosphorus in the lake is coming from. If we are able to identify the vents as potential sources of pollution, we may be able to focus treatment efforts on the vents rather than the whole lake.



**SAFETY** Be safe when boating - abide by

the speed limits and No Wake Zones.

The wakes do a lot of damage to the shoreline. Watch out for smaller boats and drive counter clockwise when going FAST!

Be a good steward of the waters and put trash where it belongs PLEASE!

### **COLDWELL BANKER BAIN**

will donate 10% of their total commission to FOSL for all closed transactions with FOSL members and referred Friends & Family in need of Real Estate services. Just mention the FOSL donation prior to signing a purchase or sale contract with Kim Long as your agent. Year to date total donations \$1950 for 2 home sales.... Call or Text Kim Long @253-678-9907 for info ம A representative from UPS is working with students this summer and trying different treatments at the sites.

## Grant

FOSL received a \$2,500 grant from Clover Creek Council to help cover operating expenses. It will cover the cost of this newsletter. We are working on involving individuals, professional/community leaders, and volunteers, to restore the quality of our lake.

Everyone is encouraged to share their ideas and assist in making our lake a viable recreational resource.

# **SHORELINE MANAGEMENT**

FOSL encourages lakeside owners to use Bio-Armoring, which is a natural material to prevent erosion and is used to replace existing or deteriorating bulkheads. Other methods are trenching and planting appropriate, non-invasive plants to slow the force of the water's action and is good for wildlife.

# **SCIENCE REPORT**

Spanaway Lake, a natural 270 acre kettle lake located south of Tacoma, WA, is experiencing increasingly severe hazardous algae blooms (HAB) and nuisance aquatic plant growth problems. It has an average depth of 16 feet (maximum 28 feet) and is dominantly (60%) groundwater fed. The lake is Plimited and classified as mesotrophic with Total Phosphorus (TP) 20 ug/L. Upstream of the lake, TP surface water and groundwater ranges from 20-40 ug/L. The lake experiences thermal stratification in the spring and summer, but the hypolimnion develops little or no P enrichment, implying mineral nutrient flux (cont'd on page 3)

#### SCIENCE REPORT (cont'd)

from bottom sediment. In places, this organic- rich sediment is >4m thick and likely limits groundwater input. However, near the edges of the lake (<2m water depth) groundwater vents have been discovered and these appear to be a sign I vent source of P loading. These are recognized by low DO, 2-6C colder water, and elevated P (TP up to 74 ppl), and they are particularly vigorous (produce sand boils) after storms. Mitigation of HAB will require treating water issuing from these vents. We are using microcosm experiments to assess 3 P- sequestering treatment options: 1)zero valentine iron, 2)alum, and 3)Phos-lock). Several 6 ft diameter floating rings were deployed with poly curtains to the bottom of the lake over the two bottom types (organic mud vs gravel/cobbles) at active vents, in different depths and with different treatments. We are testing different ways to keep the treatment media in place despite storm effects increasing the groundwater flow rates.

# SPANAWAY LAKE AQUATIC PLANT MANAGEMENT PROGRAM

Aquatechnex biologists have been working with the Friends of Spanaway Lake to develop an option for aquatic weed management plan. Given the species present in the lake, the current approach would be the use of contact herbicides under permit from WA DOE.

The charge for this will be \$275.00 per 75 foot lot and treatment will go 150 feet off shore.

To apply, we would need you to sign up with address of your lot and billing address if different. We would need interested parties to be signed up by May 31st so we can build treatment list. Those interested should email: tmcnabb@aquatechnex.com & put "Spanaway Lake Sign Up" in the email subject line.

Thank you for your consideration. For more information on our firm, www.aquatechnex.com

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The boathouse at the park has a Display Board with lots of current information that FOSL has provided for the community.

Check it out!

## **JOIN US!**

FOSL monthly board meetings are open, Join us and find out about the lake via Zoom app or link 1st Thursday of the month <u>7-9pm</u> contact <u>FriendsofSpanawayLake@gmail.com</u> for details.

As you all know, our lake is in TROUBLE. Over the last several years the water quality has deteriorated steadily. Last summer this deterioration became toxic. If we do not mitigate this trend our lake will lose its value as a recreational resource and habitat for wildlife. The lake will not even maintain its aesthetic splendor. Who wants to look at that green muck we looked at this year? Property values will plummet. The good news is

that remediation is possible.

FOSL (a non-profit 501-3-c) is working very hard for the lake s restoration. We know that the root of the ultimate problem is the accumulation of phosphorous in the lake. The fix will depend on identifying the source of this excess phosphorous and how it gains access to the lake.

We know that several mechanisms are responsible so we will probably find that only a multipronged attack will provide maximal restoration of our lake s water quality.

We have achieved a measure of success in these efforts.

But we also know that such measures will not be sufficient to do all that needs to be done to diagnose the problem AND restore the lake to good health.

But you can help us (FOSL). Membership dues for FOSL are \$20/year. As a reminder, if you wish to participate in the voting for new board members you must be an active member of FOSL. Membership dues are \$20 a year and payable in cash or check at the annual board meeting, or by mail. You may also wish to consider a \$300 tax deductible donation to become a FOSL sponsor and receive 2 yard signs announcing your Sponsorship status-one for the street side of your property and one for your dock.

The \$300/year to become a Sponsor is about the same amount that most lakeside residents have paid to have the weeds sprayed which, in the long run, only aggravates the problem of excess phosphorous in the silt on the lake bottom.

## **Treasurer Report**

We currently have \$12,000 mostly from donations from sponsors.