

Liberty Lake Aquatic Invasive Control – 2020 Update

Jeremy Jenkins, Environmental Manager, Liberty Lake Sewer and Water District

In 2018 LLSWD identified a new invasive plant in Liberty Lake called Curly Leaf Pondweed (CLP) (*Potamogeton crispus*). In 2019, we treated the lake for this plant, as well as the typical control effort on Eurasian watermilfoil (milfoil). The 2019 effort was a test for what might be the best approach for controlling CLP in Liberty Lake. As with most efforts to control new invasive species in a waterbody, the first attempt is never as successful as one would hope. Since the summer of 2019, CLP has spread to most shallow shoreline areas on the lake in low densities. This is positive, as it shows that the existing native plant population is keeping CLP's growth/spread in check.



This summer, we are going to be testing 2 different chemical mixes in the lake to further inform our treatment strategies moving forward. On the West side of the lake, we are using a product that should be long-lasting, and negatively impact CLP growth in 2021 and beyond. Contrasting that, on the North and East side of the lake, we will be using a more widely used chemical mixture that we know works in Liberty for milfoil control, and is listed to control CLP as well. By comparing these different treatment scenarios in 2020, we will be able to chart our path forward in holding the line on CLP, with the end goal of eradication of CLP and milfoil from Liberty Lake.

For more info on Curly Leaf Pondweed:

Washington State Noxious Weed Control Board: <https://www.nwcb.wa.gov/weeds/curlyleaf-pondweed>

There are plenty of chemical options to control these invasive plants, but a lot of the fast-acting strategies have negative impacts to the native plant population. If we eliminate significant portions of our native plants, 2 impacts are likely to occur in short order:

1. Less plants = more available nutrients in the water for algae to grow. As native plants grow, they pull nutrients out of the water, use them for growth, then when they die during the Fall, the nutrients are "spit" back out into the water available for next year's plant growth.
2. Less plants = more available real estate on the lake bottom for invasive species to take root and spread unimpeded. I like to think of this like removal of turf grass, but leaving bare soil behind. What are the first things to grow....weeds! When the key elements are available (sun, nutrients, space, water), weeds take advantage.

LLSWD's management plan for aquatic weeds in Liberty Lake is driven by the goal of maintaining a healthy and robust native plant population. This dampens the rate of spread and growth of invasives, while also keeping the internal nutrient cycle of the lake as balanced as possible. If that nutrient cycle is upended in any way, the potential for algae blooms to be more numerous is real.

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I hope this info helps to explain our approach this year. We plan on circulating more information on the interesting year we have been experiencing on Liberty Lake in the next couple of months. So keep your eyes open for that

I am always available to answer questions you all may have about our lake, what LLSWD does in terms of lake management, but also need your eyes. If you see something odd in/around the lake, questionable construction activities, etc., please get in touch.

1 more thing:

If you have suggestions on how I may better communicate information about Liberty Lake, be that via an email list, regular newsletters, Facebook group....I would love to hear those ideas as well!

In the meantime, if you are on Facebook, head on over to <https://www.facebook.com/LLSWD1>, give us a Like or Follow. And/or head over to our newly revamped website <https://libertylake.org>. At the bottom of the homepage there is a newsletter sign-up box that we are starting to use for outreach and updates.

Sincerely,

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