

August 11, 2020

To Thurston County Commissioners.

We write as citizens concerned about the water quality and continued viability of the Black Lake Basin and ecosystem. We are prompted by a recent notification to residents of the Lake of herbicide spraying to control aquatic weeds as well as the Black Lake Special District's request to the Commissioners for a bond to finance an alum treatment to control algae.

The problems these most recent requests wish to address are long standing and persistent. The short-term strategies proposed have not, and will not solve the long-term continued degradation of Black Lake. We ask the Commissioners to pause in its consideration and consider a more permanent solution based on Best Available Science as prescribed by federal law. Thankfully, much of that science already exists and needs only to be revisited and implemented.

An extensive study of the Black Lake Basin was published in June 2015. The "Guiding Growth - Healthy Watersheds: Black Lake Basin Water Resource Protection Study," was a joint project of the Thurston County Resource Stewardship Department, Thurston Regional Planning Council, and the United States EPA. Contributors also included Northwest Hydraulic Consultants, public works and planning staff from Olympia, Tumwater and Lacey, the Squaxin Island Tribe, the Municipal Stormwater Technical Advisory Committee for Thurston County (StormTAC), and the WRIA 13 Salmon Habitat Workgroup. In addition, a Scientific Advisory Team reviewed technical decisions, data and modeling results.

(<https://www.thurstoncountywa.gov/planning/planningdocuments/black-lake-basin-water-resource-protection-study-final-report-june-2015.pdf>)

The aim of the study was to investigate ways to accommodate projected population growth while preserving water resources in areas impacted by that growth, knowing that preventing degradation of the watershed is far less expensive and more effective than trying to restore it once it has been impaired. The study adopted targets for land use and water quality that were identified by the Puget Sound Partnership and by Sustainable Thurston, which included minimizing downstream pollutants from new growth and improving water quality by lowering existing pollutant levels, among others.

Another study done by the Department of Ecology's Puget Sound Watershed Characterization Project in 2010 also suggested restoring storage of water in urban areas, agricultural lands and open space, minimizing impervious cover and increasing forest cover, controlling existing sources of phosphorus and limiting new sources of pathogens.

The Black Lake Special District hired Herrera Consultants of Seattle to prepare a Water Quality Data Report -Phase 1 of Black Lake Watershed Pollutant Monitoring. They monitored flow and selected pollutants of concern at 15 drainage sites in the Black Lake watershed in the spring of

2019. Their report of September 2019 concluded that “stormwater runoff is the primary source of total phosphorus and E.coli input to Black Lake.” They suggested,

“The District should share this report with Thurston County Environmental Health and work cooperatively with them to educate watershed residents on proper maintenance of septic systems and best management practices to reduce phosphorus loading to Black Lake. It is also recommended that septic system maintenance records be compiled and reviewed to identify specific locations for taking corrective actions.” (See Attachment #1, page 28)

The Black Lake Special District commissioned HAB Aquatic Solutions to come up with a solution to the overabundance of phosphorus in the Lake that is causing the algae blooms. Both these options would cost over \$2 million and make no assurance of how lasting the effects would be. In a letter dated January 1, 2018, Harry Gibbons, PhD who reviewed HAB’s draft report for the alum dose stated “that regardless of option 1 or 2 the lake will need another alum treatment due to external watershed loading of phosphorus” and predicted the longevity of effectiveness in preventing harmful algal blooms as between 5 to 20 years after the last treatment. (See Attachment #2 HAB Aquatic Solutions, page19)

Clearly, all the scientific evidence demonstrates that alum is a temporary fix and that this problem will continue if the causes of the phosphorus load in the lake is not addressed. We can spend millions on band-aid solutions, or we can address the root cause of these problems and spend our energy and resources to restore and preserve our ecosystems for present and future generations.

The Black Lake Special District, well-meaning as it is, does not have the authority or the expertise to suggest actions to address what is clearly an endemic County-wide problem. That responsibility lies with the County which is bound by federal laws, including the Clean Water Act and the Safe Drinking Water Act, which prohibit contamination into water bodies of the United States. Black Lake empties both into the Chehalis River and from there into Grays Harbor, as well as into Capitol Lake and Budd Inlet, so outflows from this Lake flow into tidal waters subject to federal law. If the County is in violation of federal law, it risks losing federal funding.

The Black Lake Basin also contains or overlaps 16 wellhead protection areas, which are Critical Aquifer Recharge Areas particularly susceptible to groundwater contamination, and numerous individual wells. Further, it is part of the groundwater reservation area established in 1986 through WAC 173-591 meant to protect the groundwater of our State Capitol. The WAC stipulates that “local governments with land use authority...exercise their authorities in such a manner as to protect the quality of the public groundwaters reserved for future water supply by this chapter.”

Clearly, the County has a role in protecting Black Lake from poisoning, especially as it is an exposed section of the water table of this strategic reserve which reaches out to the western part of the County. It is well known Black Lake is in hydraulic continuity with all the wells of the

surrounding area, including the city wells for the City of Olympia and Tumwater, and so what happens to Black Lake affects the groundwater reserves of the County.

Further, the County Commissioners cannot commit public funds and resources to a project with potentially serious environmental impacts, such as poisoning the area's groundwater, without doing a proper environmental determination. Since there are many unknown chemicals leaching into the Lake from runoff and from the spraying of herbicides in the lake, it is unknown what the reactions of these chemicals are and what effect they are having on the lake ecology and its wildlife.

A general permit issued by the Department of Ecology does not account for site specific impacts, nor does it take into account statutory requirements for protecting this water preserve area and other environmentally sensitive areas that have been designated by law. Neither does it usurp the County's responsibility in approving a specific project requesting the use of public funds and resources. The County has no discretion to not follow the law. Consequently, there needs to be a site specific environmental review of this project to protect County residents, as well as the citizens of Olympia and Tumwater, where the County or the State acts as SEPA "lead agency" to conduct an environmental review.

In light of the above, we request the County to fulfill its proper and legal function by performing an environmental review to consider the broader picture of water quality in the Black Lake Basin and the various options available to protect and enhance it. One such proposal in the 2015 Healthy Watershed report recommended instituting a program similar to the one undertaken in Henderson Inlet, which has been largely successful. Another alternative could include temporarily suspending the use of motorboats to stop the disturbance of sediment that is helping to fuel algae growth by increasing the loading of phosphorus in the water column and accelerating the loss of dissolved oxygen.

<https://dnr.wi.gov/lakes/publications/documents/lakes.pdf>

The review could include all sources of phosphorus loading and pollutants, a review of critical areas, habitats and land use, alternatives to the current use of herbicides and alum at the lake, as well as the extra jurisdictional impact outside the boundaries of the Black Lake Special District to County groundwater supplies and to the strategic groundwater reserve under WAC 173-591.

The County should consider forming an advisory committee that provides the equitable representation of stakeholders plus county staff and outside experts as needed to guide and monitor the environmental process and all related matters.

We stand ready to assist the County in protecting Black Lake and the strategic water resources of the State Capitol. Thank you.

Citizens for a Clean Black Lake, Chris Stegman, Chairman Pro-tem
Gary and Suzanne Kline Esther and Warren Kronenberg Jerry Dierker Arthur West

Bob Jacobs JJ Lindsey Miranda Mellis Jeff Sower Jenny James Prita Lal
Dirik Steinhoff Jeff and Phyllis Booth Lisa Ornstein Ginger Stein Zahid and Ann Chaudry
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