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Submission in support of 2023 House Bill 2647, Rep. Holvey, sponsor

I submit these brief comments from the perspective of a university researcher who has conducted and published research on cyanobacterial harmful algal blooms in Oregon and the Pacific NW, and who was involved with discussions on potential HABS legislation, coordinated during and between recent legislative sessions by Rep. Helm

Oregon, like most of the world, is suffering from increasing cyanobacterial HABS (CyanoHABS). In recent years, we saw highly visible problems: (a) 31 steers killed on a ranch near Lakeview in 2017, (b) a partial do-not-drink water advisory in the City of Salem due to cyanotoxins in the drinking water, and (c) CyanoHABS in the Willamette River in downtown Portland, sourced from Ross Island Lagoon, during several recent summers. Projections that take into account our ever-increasing human footprint and climate change predict more and longer CyanoHABS episodes, and perhaps more toxic CyanoHABS.

Using emergency funding made available by the legislature after the events mentioned above, OHA, and particularly DEQ, have increased their ability to monitor and respond to CyanoHAB events. This has been great to see.

However, bills similar to HB 2647 aiming to set up more substantial capacity among Oregon governmental agencies for monitoring, responding to and ultimately preventing CyanoHABS were not adopted. Through OSU and Oregon Lakes Association, I advocated for such expanded programs and capabilities, and I do so here again.

I believe that HB 2647 has several excellent and needed elements. Monitoring of *drinking* water sources has been greatly improved over recent years, and we can be proud of the current program. ***However, monitoring of lakes where people risk recreational exposure to cyanotoxins remains an uncoordinated process.*** Clauses SECTION 2, 2(b)(B) and SECTION 4 (1) address this gap.

We have also seen progress in public data availability regarding CyanoHABS lakes, but this could be greatly improved. ***We should emulate the excellent Washington State toxic cyanobacteria database*** (<https://www.nwtoxicalgae.org/Data.aspx>). This could be done under Clause SECTION 2, 2(d); I applaud and support this clause.

Finally, I would like to applaud the intent of SECTION 4 to address the sources of CyanoHABS, which are principally excess nutrients (P and N), but can also involve water flow considerations. Only by addressing these factors will it be possible to mitigate and decrease CyanoHAB occurrences. It is a well documented fact (especially in connection with the massive HABS in Lake Erie) that agriculture is often responsible for the excess nutrients that drive CyanoHABS. In the earlier discussions I allude to above, I saw agricultural interests actively work to stymie even the beginning of any productive conversations. ***I hope that you can incorporate programmatic elements that assist farmers in reducing fertilizer waste and in preventing stock from having direct access to streams that feed into lakes.*** Such elements in the bill will hopefully promote collaboration rather than opposition from the agricultural sector.

Sincerely,

Theo Dreher, Emeritus Professor of Microbiology