Public Testimony in support of HB 3326 and HB 3340
addressing freshwater Harmful Algal Blooms (HABs)

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On behalf of Oregon Lakes Association

Oregon Lakes Association is a non-profit, volunteer-run organization dedicated to ensuring that Oregonians can enjoy clean and healthy lakes and freshwater bodies for uses such as recreation, provision of drinking water, and maintenance of a healthy ecosystem.

For some years, OLA has supported training and informational meetings on the subject of freshwater harmful algal blooms. These have been in the form of annual Stakeholder Meetings, hands-on training workshops to discuss and identify HABs, and sessions covering HABs at our annual conference. Our ranks include people with extensive experience in this topic: university researchers and lake managers who deal with HABs and their consequences on a regular basis. Our members have discussed HABs matters extensively with representatives of federal and State agencies tasked with managing the problems associated with HABs.

Oregon Lakes Association is very pleased to see the current amount of legislative attention on freshwater HABs.

We are strongly in favor of HB 3326 and HB 3340.

We see these bills as making important steps in the direction of establishing a comprehensive Oregon-wide HABs program to address the problems caused by these blooms. These bills are both consistent with the recommendations we have developed for such a program (see appended document), although we would like to see some additions either now or later (outlined below).

Please note that we prefer to use the term CyanoHABs or CHABs in referring to these blooms, distinguishing them as being caused by cyanobacteria and occurring in freshwater (or in low-salt estuaries) as opposed to the HABs that poison fish and shellfish along the coast. We recommend that a definition of this sort be added at the heads of these bills, as a strong HABs program addressing shellfish poisoning is already in place. Those HABs are very different in character from freshwater CyanoHABs, necessitating a distinct program.

Why does OLA support HB 3326 and HB 3340?

1. Recognition that CyanoHABs are a state-wide problem that needs attention. Oregon has recently experienced the Salem do-not-drink crisis, seen the death of 32 cattle in one episode on a ranch near Lakeview, and seen toxic CyanoHABs float down the Willamette River through downtown Portland. These have been visible occurrences added to the many CyanoHABs on lakes and reservoirs that regularly disrupt recreational plans, add to the concerns of utilities in providing clean drinking water, and likely cause many dog deaths.

2. Recognition that CyanoHABs are problematical in a varied ways that all need attention. Because some CyanoHABs are toxic, the health of people, pets and presumably wildlife are at risk from drinking water, recreational exposure, and bioaccumulation of toxins in animals such as shellfish. CyanoHABs

also represent large population expansions that are ecologically disruptive, decreasing the health of aquatic systems. Costs are associated with all of these problems. OLA is pleased that HB 3326 and 3340 take a broad view of the various problems caused by CyanoHABs and that these bills also look at the source of the problem.

3. Specifying OLA and DEQ as Oregon's agencies that will* collaboratively *address CyanoHAB problems. OHA and DEQ currently handle CyanoHAB responses in Oregon. Their expertise, and their ability to work together in addressing CyanoHABs issues, makes them the logical choice for managing a comprehensive CyanoHABs program. We applaud the language in the first lines of SECTION 2, Part 2 and of SECTION 4 in emphasizing coordination between OHA and DEQ. We further support the roles outlined in SECTIONS 2 and 4 in which one or the other of these agencies will take the lead role. Those roles are consistent with the strengths of these agencies.

4. Expecting that data related to CyanoHABs be expeditiously made available to the public. OLA strongly supports the rights of all Oregonians for access to data and information on natural resources. In this case, such data would also be available for managers of water bodies and for research purposes.

5. Recognition that nutrient pollution is a major driver of CyanoHABs and that long term abatement of CyanoHABs requires reducing such nutrient inflow to lakes and reservoirs. OLA applauds the fact that these bills make it clear that CyanoHABs are an environmental problem and that they will only diminish in the future if we attend to their environmental causes. Both bills appropriately focus on nutrient pollution as an important driver of CyanoHABS, alhtough this is not the only driver.

6. Provision in SECTION 5 of HB 3326 of funds to DEQ to enable the outlined work. We believe the intended funds are based on DEQ POP 123, which requests funds for monitoring and assaying cyanotoxins and other parameters relevant to understanding the distribution of CyanoHABs and identifying the hazards they represent. OHA supports the allocation of funds for those purposes. DEQ does not currently have the funding to be able to maintain a CyanoHABs program. Stable long-term funding is needed, so that expertise can be built and maintained within DEQ through continuity in personnel.

Some recommendations for amendments and additions, now or in the future

1. Distinguishing HB 3326 and HB 3340 as addressing freshwater CyanoHABs, separate from coastal HABs that poison shellfish. This was addressed above.

2. Oregon Health Authority is currently underfunded in dealing with CyanoHABs. While HB 3326 specifically addresses funding for DEQ, we note that OHA is also underfunded and lacks personnel solely dedicated to CyanoHABs. We thus recommend that consideration be given to augmenting OHA funding with the express purpose of supporting the objectives of SECTION 2 in HB 3326 and 3340.

3. Addition of Outreach and Education as an expectation for OHA. OHA already has expertise in these areas, in which they were active in the past. Funding is the limitation at present. Greater visibility in outreach and education could have avoided the City of Salem drinking water crisis. As people unfamiliar with CyanoHABs become confronted with poisonings or the occurrence of toxic blooms across the state, we have repeatedly heard that they are confused and frustrated in obtaining help from state agencies. Assistance ultimately is provided, but the response to panicked citizens is slow. This can be addressed with permanent CyanoHAB staff positions at OHA and DEQ.

4. Addition of a competitive grants program to learn about Oregon CyanoHABs and how to predict, monitor and abate them and their effects. Oregon Lakes Association strongly advocates for the

establishment of a competitive grants program to develop the basic knowledge and innovations needed to successfully reach the outcomes expressed in the latter parts of SECTION 4 of both HB 3326 and HB 3340. Based on such a program in Washington State, $200,000 to $250,000 would be an adequate per annum allocation. We recommend that DEQ administer the program, with awards open to applicants from inside and outside state agencies, but that funding decisions be made via independent peer review. Examples of research such funds could address: how to best interpret satellite data for remote monitoring of HAB development; genetic identification of CyanoHABs to allow early warning of blooms by sensitive genetic methods; the role of fish stocking in altering natural food webs that control CyanoHABs; establishing an inventory of the cyanotoxins that occur in Oregon waters.

5. Consultation with stakeholders, other states and the US-EPA in the detailed design of a comprehensive CyanoHABs Program. From hosting the annual Oregon CyanoHABs Stakeholder Meetings, we know that there are different concerns and expectations among people and lakes. We recommend that DEQ and OHA hold open meetings and consider using advisory groups in establishing the most effective CyanoHABS Program possible. There is much expertise and goodwill around, and there are excellent programs in other states that should be used as examples in considering the detailed design of a program for Oregon. US-EPA also has excellent CyanoHABs resources.

6. Provide sufficient funding to allow OHA and DEQ to employ experienced career scientists. In any program, the human resource component will have the biggest impact. In the past, OHA and DEQ have been resource-restricted, affecting hiring decisions. We encourage the legislature to let OHA and DEQ know that you expect the employment of career expert scientists to produce the best outcomes.

7. Recognition that progress in reducing CyanoHABs may be difficult. We applaud the goals of SECTION 4, Item 2, in HB3340, which expands on earlier points in both bills in addressing nutrient sources and working to reduce nutrient loading. However, for a lake such as Detroit Reservoir, which supported the CyanoHAB responsible for the Salem drinking water crisis and which sits almost entirely in natural forests, it may be very difficult to reduce CyanoHAB occurrence, intensity and toxicity. We would just here like to make legislators aware that impacts will be hard to achieve and probably slow, so that DEQ is not unfairly burdened with unrealistic expectations. Further, it may also be appropriate here to recognize that it can be productive to pay attention to factors other than nutrient inputs. For instance, introducing flow through Ross Island Lagoon may be the easiest way to dissipate the CyanoHABs from this location.

Summary recommendations

Oregon Lakes Association supports both HB 3326 and HB 3340. We applaud the allocation of funds to DEQ in HB 3326

We do not support HB 2944, because it is restricted to drinking water issues. However, we thank Rep. Evans for bringing attention to the CyanoHABs problem.

- Our testimony has explained our view that the CyanoHABs problem has important consequences beyond drinking water pollution.
- We question the value of spending funds on a Task Force. It is pretty obvious that tasking OHA and DEQ with running a CyanoHABs program is most suitable for Oregon. There are certainly design details that a Task Force could advise on, but we believe that such details would best emerge through stakeholder input managed by OHA and DEQ.

Oregon Lakes Association thanks the House Committee on Energy and Environment for the opportunity to provide input.

Oregon Lakes Association Subcomittee on CyanoHABs/ Theo Dreher, Wayne Carmichael