



Date: January 6th, 2019

To: Oregon Department of Environmental Quality, Water Quality Division
700 NE Multnomah
Portland, OR 97232-4100

Re: Oregon's 2018/2020 Integrated Report

Good afternoon,

As the Co-Chairs of the legislatively created Oregon Coordinating Council on Ocean Acidification and Hypoxia (or "OAH Council"), we appreciate the opportunity to offer public comment on Oregon's 2018/2020 Integrated Report, as part of the State's Clean Water Act reporting. We first want to recognize and show appreciation for the work that the Oregon Department of Environmental Quality (ODEQ) staff and managers have done in the development of Oregon's 2018/2020 Integrated Report 303(d) list. With this letter, we provide ODEQ with comments and suggestions on how to improve Oregon's water quality standards so that we can better protect our state's coastal communities and ecosystems in light of changing ocean conditions. Below are four key areas of the Integrated Report on which we will focus.

- We commend ODEQ for listing Oregon coastal waters as being impaired for ocean acidification (3B categorization – likely impaired but lacking data) through the use of a biocriteria for pteropods. However, we encourage ODEQ to also review methodology for pH narrative criteria to consider including a "0.2 unit excursions from natural conditions" clause similar to as was done in California and Washington. Also we encourage ODEQ to work with regional academics and resource managers to reconsider developing other criteria for ocean acidification such as aragonite saturation state.
- We would also like to commend ODEQ for listing of marine waters as being impaired (category 5 listing) for Harmful Algal Blooms (HABs) through the application of shellfish harvest use impairment. HABs affect not only Oregonians' ability to harvest marine resources (e.g., clams and crab), but can also have detrimental cascading effects throughout the whole marine ecosystem. As ocean conditions continue to change with changing climate, it will be important for the State to continue to consider the compounding effects of water quality criteria of HABs, ocean acidification, and hypoxia. Several research studies suggest that as ocean OAH conditions increase in intensity and duration, this could have a direct effect on the concentration and toxicity of HABs within our coastal waters.
- We strongly encourage ODEQ to list Oregon coastal waters as impaired for dissolved oxygen. The Oregon coast has been experiencing ocean hypoxia since the early 2000s, which has impacted our coastal fisheries and marine ecosystems. There are data currently available to support listing our State's coastal waters as a Category 5 impairment, and we would like to offer

our ongoing assistance to ODEQ in accessing these publically available data sets so that dissolved oxygen could be include in the 2018/2020 Integrated Report, as well as in future Integrated Reports.

- We would once again like to acknowledge ODEQ on the great strides forward in the data collecting and consideration of some marine water quality standards in the 2018/2020 Integrated Report. While we support ODEQ for the modernization of their reporting system with new story maps and data portals, we encourage ODEQ to provide some supplemental summary tables to make it clear which marine water bodies have been listed and for what. This information is difficult to access through the current online interfaces. We offer our assistance to ODEQ in future calls for data to help facilitate better access to the wider marine community and increase regional participation in this important process of setting and amending State water quality standards.

Background

Oregon's coastal economies rely on our vibrant marine ecosystem. Our nearshore waters are home to sport and commercial fisheries, all of the State's mariculture operations, and contain critical nursery grounds for economically important species including rockfish, oysters, salmon, pink shrimp, Dungeness crab, and others. Oregon is also among the first places in the world to observe direct impacts of OAH, due to our unique geographic and oceanographic context, putting our fragile marine ecosystem at risk. Addressing intensifying OAH conditions here in Oregon is critical to our understanding of larger regional climate change impacts through management strategies. The OAH Council's September 2018 report as well as the Oregon OAH Action Plan (2019 -2025) identifies water quality as an important consideration in reducing the causes of OAH (Theme 2). In these documents, the OAH Council encourages the State to make improvements to water quality by not only identifying pollutants that amplify or exacerbate OAH impacts, but also ensure that existing regulations are achieving their expected outcomes.

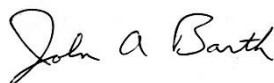
Concluding Remarks

As Co-Chairs of Oregon's OAH Council, we have taken on the charges set forth by the Oregon Legislature with a sense of urgency and importance, knowing that the State has a remarkable opportunity to help prepare our coastal communities and marine ecosystems for current and future OAH and HAB conditions. We once again want to commend ODEQ staff and managers for their dedication to protecting our States water resources, and offer our ongoing support in developing and improving the State water quality standards and Integrated Reports.

Thank you for your consideration of these public comments and we welcome any questions.

Sincerely,

John Barth, PhD



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Marine Studies Initiative
Oregon State University

Caren Braby, PhD



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