



OREGON SHORES
CONSERVATION COALITION

To the OAH Council and Staff

July 9, 2019

The Oregon Shores Conservation Coalition applauds Gov. Brown and the Oregon Legislature for promoting the development of a state strategy for addressing the grave problem of ocean acidification and hypoxia, one of the many climate-related impacts looming over our coast and ocean, and one that is already evident in our waters. And we commend the members of the OAH Council for developing the State of Oregon Ocean Acidification and Hypoxia Action Plan.

The plan clearly lays out the nature and gravity of the concerns raised by OAH, and creates a solid general framework for addressing them. It calls appropriately for monitoring, research, coordination, and public education and awareness. It acknowledges the need to engage in abatement as well as promote resilience and adaptation. It provides a good framework for developing specific initiatives. There is little that we would criticize about what is in the plan.

We do wish to comment on what is **not** in the plan. While it is labeled an “Action Plan,” in too many areas the action called for is study. There is always need for more research—we never know all that we could know. There is nothing inappropriate about calls for study of this or that aspect of the problem. We understand that a call for research is often the position for which consensus can be achieved. However, the threats posed by OAH, and by climate change generally, are too serious and too immediate to allow for deferring to future studies the crucial questions of which actual actions to promote, in situations where action is needed now.

The plan as drafted ignores three very large elephants in the room—or, given the topic, perhaps the metaphor should be altered to three cetaceans beaching themselves on our shore.

First, there is the status of marine reserves. The plan mentions them in passing, as sites for needed research, and this is all to the good. However, there is no real reason to doubt that reserves are both important to the study of OAH impacts, and a key method of promoting the resilience of marine ecosystems. Oregon’s all-too-limited set of marine reserves should have a more prominent role in the plan. At the least, there should be a much more forceful call for increased research funding targeted toward marine reserves for the purpose of studying not just OAH impacts but the role of the reserves in supporting the resilience of nearshore ocean ecosystems. But we would argue that even this would be too timid. No one really doubts that intact habitats are more resilient, not even those who are dubious about or hostile toward marine

reserves based on short-term economic interests. We would suggest that a call for expanding our set of marine reserves so as to better preserve the full range of coastal and nearshore habitats as an obvious step toward promoting resilience is fully justified.

Second, while the plan mentions water quality as a factor to be addressed in dealing with OAH, there is only the slightest hint of a mention of a major cause of degraded water quality. Agriculture is one source of the chemicals and sedimentation that affect nearshore ocean water quality and acidification, and we see that the Department of Agriculture is represented on the panel. But we also note that the Department of Forestry is *not* represented (we wonder if they were invited to participate and declined, given that department's egregious denial of the impacts of forestry practices on the coast and ocean). Oregon's woefully inadequate forestry regulations allow for practices that severely degrade coastal water quality. The Department of Forestry's dereliction also has another consequence—our failure to meet water quality benchmarks due to the agency's negligence has led to federal penalties that deprive our Coastal Management Program of funds needed to plan for climate change adaptation (see comments below regarding blue carbon and marsh migration). While we appreciate that the language of the plan would be more diplomatic than the words we would be inclined to use in reference to the Department of Forestry and the Board of Forestry, nevertheless, the plan should vigorously address the need for improved forest practices, including dramatically wider protected riparian zones and severely curtailed if not eliminated herbicide and pesticide use, in order to reduce the acidity of Oregon's ocean waters. (Note: Yes, we see that these matters are very gently alluded to in Appendix D, but the issues should be brought front and center as key actions needed now, not timidly introduced in an appendix that the Department of Forestry will cheerfully ignore.)

Third, the White Whale that threatens to plow into any effort to reduce Oregon's contribution to the greenhouse gases that drive climate change and OAH is the proposed Jordan Cove LNG export terminal. If built, this facility would become Oregon's largest emitter of greenhouse gases. Aside from emissions at the site, it would facilitate the consumption of fossil fuels. Moreover, it would encourage extraction of natural gas through "fracking," which releases large amounts of methane, a potent greenhouse gas, into the environment. (As an aside, the plan is flawed in referring only to carbon dioxide as a greenhouse gas, when there are in fact other contributors to global warming, including methane.) No study whatever is needed to acknowledge the reality that Jordan Cove would be a significant contributor to climate change, overwhelming efforts the state might make to reduce its carbon footprint. The threat here is immediate. If this "Action Plan" is at all serious about countering the impacts of OAH, it should explicitly call for the state to do everything possible to block development of the Jordan Cove LNG terminal.

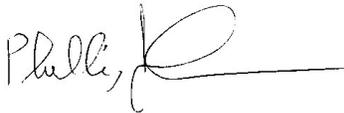
We would also point to another gap in the plan. There is discussion of blue carbon storage, which we are pleased to see, and discussion of submerged aquatic vegetation (SAV) in this connection, but no discussion of marshes, both salt and fresh, that we detect, although this might fall under the heading of estuary resilience. We certainly endorse the goals of mapping SAV and other estuarine and nearshore resources, and conducting research on estuarine resilience, but we would argue that marshes are important to estuarine water quality and resilience, and also have a potential for blue carbon storage. We would suggest that the plan address explicitly what we all know to be the case—that sea level rise threatens both marshes and SAV (particularly eelgrass), which could lose habitat as sea level rises unless marshes and mudflats are allowed to migrate upslope. We realize that this is a less immediate issue, and more complicated than blocking a development or changing regulations to require wider riparian

zones. The kind of adaptive planning that would allow for the migration of estuarine (and other intertidal) habitats with sea level rise would require an extensive effort at the state, county, and city level over many years. This would be an “action” that would roll out over a long period of time, but we would argue that the plan should point to this need and call for the fostering of such an effort. There is much in the plan concerning state agencies and other entities, and allusions to “communities,” but the need to educate and engage local jurisdictions in planning efforts leading to enhanced estuarine resilience isn’t clearly addressed. We recognize that this is addressed elsewhere in the state’s climate adaptation planning, but it should be brought forward under the rubric of OAH, which after all threatens resources on which many coastal cities and counties depend.

One other point we would like to make, which in one sense may seem tangential, but in another is a quite direct potential action promoting both resilience and blue carbon storage. The plan refers to the potential for kelp farming. Oregon Shores does not take a position on this—we simply don’t know enough. This is indeed an arena in which study is needed to determine whether an action is appropriate. Meanwhile, though, there exists the potential for natural expansion of kelp forests in Oregon’s nearshore waters. Oregon Shores is a founding member of the Elakha Alliance, which promotes study of the possibility of reintroducing sea otters to Oregon’s coast. Sea otters prey on sea urchins and other kelp consumers, keeping these populations in check and thus enabling the spread of kelp forests. We understand that it may seem like a leap from ocean water chemistry to charismatic megafauna, and actually calling for reintroduction would perhaps be a step too far for an OAH plan, but we would strongly suggest that this be included as an area for research into both marine ecosystem resilience and ocean carbon storage.

Thank you for your consideration of these views.

Sincerely,

A handwritten signature in black ink, appearing to read "Phillip Johnson", with a long horizontal flourish extending to the right.

Phillip Johnson, Executive Director

In Oregon, the beaches belong to the people

PO Box 33, Seal Rock, Oregon 97376 • (503) 754-9303 • oregonshores.org