



Research Needs

The **Oregon Ocean Acidification and Hypoxia (OAH) Action Plan** identifies ways that Oregonians can make a difference to slow OAH impacts and adapt to the changes we are already seeing. This abbreviated list of research actions from the OAH Action Plan was prioritized by the OAH Council. This list is meant to be a starting place to help guide researchers and funding groups on what the OAH Council thinks are top priorities for the state of Oregon. Additional research needs and priorities will be developed as needed.

Here are the top **RESEARCH ACTIONS** that can make a difference

Advance Scientific Understanding

- Re-establish OAH monitoring in Yaquina Bay
- Co-locate existing Marine Reserves sampling with new OAH intertidal and subtidal OAH monitoring
- Add biological and chemical OAH monitoring to the Newport Hydrographic Line
- Sustain OAH monitoring in Tillamook Bay
- Maintain and support new OAH instruments within communities and alongside at-risk industries
- Provide a workshop to prioritize biological monitoring metrics for OAH
- Conduct a socio-economic vulnerability assessments of Oregon's vulnerabilities to OAH

Reduce Causes

- Develop effective and efficient ways to reduce excess CO₂ and OAH stressors

Create Resilience

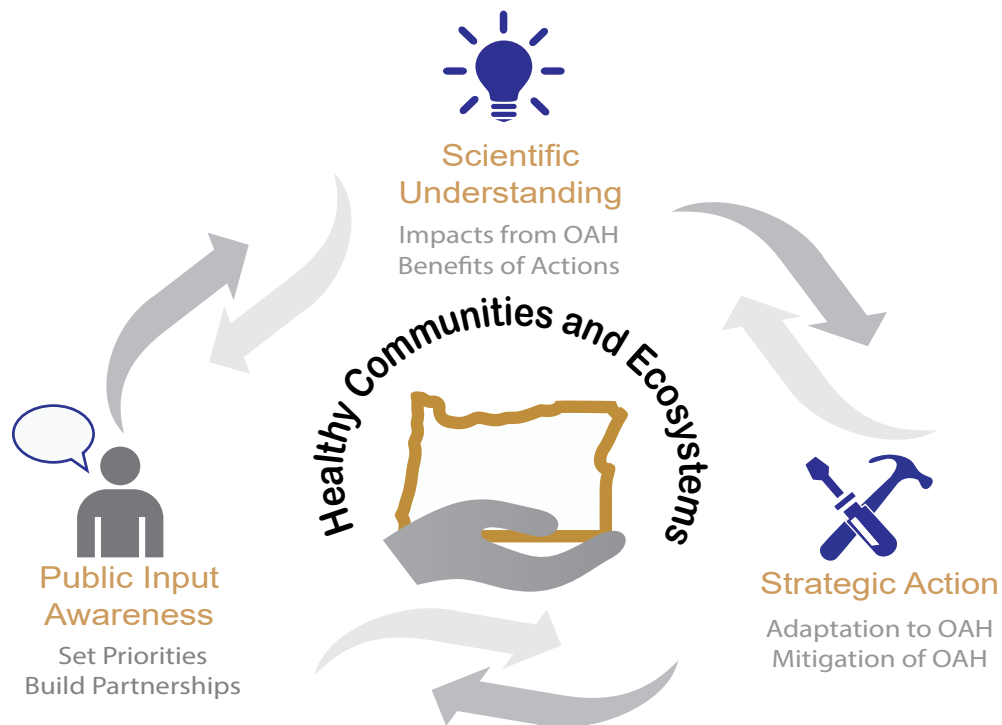
- Identify strategies to restore, protect, and sustain: (1) Nursery habitat for valuable shellfish, (2) Submerged Aquatic Vegetation (SAV) and native shellfish, (3) Oregon's water quality, (4) Life history stages of OAH vulnerable marine species, (5) Economic resilience in coastal communities and marine industries
- Research of resilient shellfish aquaculture strains
- Develop maps to that promote resilience in: (1) SAV and native oyster core distribution areas, (2) Priority areas for habitat restoration and protection
- Conduct an ecosystem modeling of SAV, and hydrodynamic and biogeochemical processes to inform: (1) Regions considered for blue carbon and/or carbon mitigation offsets, (2) Aquaculture practices in Oregon's bays and estuaries



Why is the Oregon OAH Action Plan Needed?

Oregon's commitment to understand, actively adapt to, and mitigate OAH requires us to invest funding and time to build a more predictable future. Oregon's approach to solving these problems requires addressing excess CO₂ and OAH stressors simultaneously recommends will take time to implement. To build the brightest future for the ocean and its species and the communities that depend on them, and despite uncertainty, we can and must act now in a pro-active way that will improve ecosystem outcomes for resilience, as a "no-regrets" strategy.

The Oregon OAH Action Plan identifies ways that our government and individual Oregonians can make a difference to slow these impacts and adapt to the changes we are already seeing. Ocean Acidification and Hypoxia (OAH) are harmful to ocean life and the economic stability of the Oregonians who rely on a healthy ocean.



To learn more about OAH science, impacts, and solutions, please visit the Oregon OAH Council's website:

oregonocean.info/index.php/ocean-acidification