

# How State Governments Have Responded to Ocean Acidification

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# Timeline

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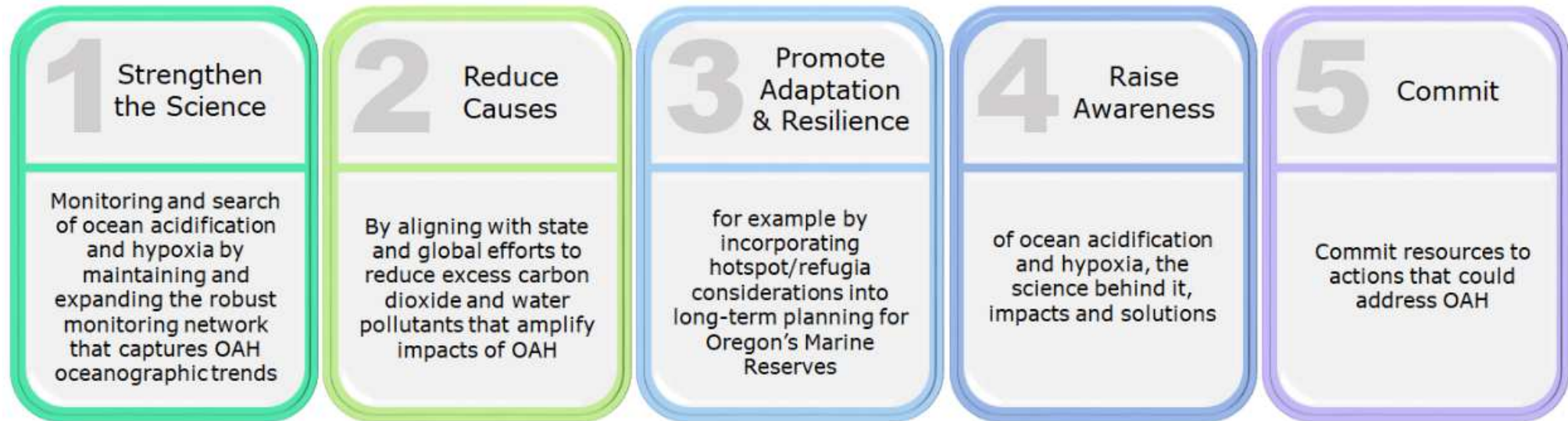
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- New York State Ocean Acidification Task Force convened

# Common Themes

## Summary of Recommendations from Oregon Coordinating Council on Ocean Acidification and Hypoxia



Source: First Biennial Report of the Oregon Coordinating Council on Ocean Acidification and Hypoxia

## Potentially Relevant Gaps

- Mention of existing policies or systems that could be modified
  - Could improve response speed
- Science:
  - Interaction of shellfish diseases/parasites
  - Finfish (impacts less understood)
- East Coast states don't include or mention indigenous/tribal groups

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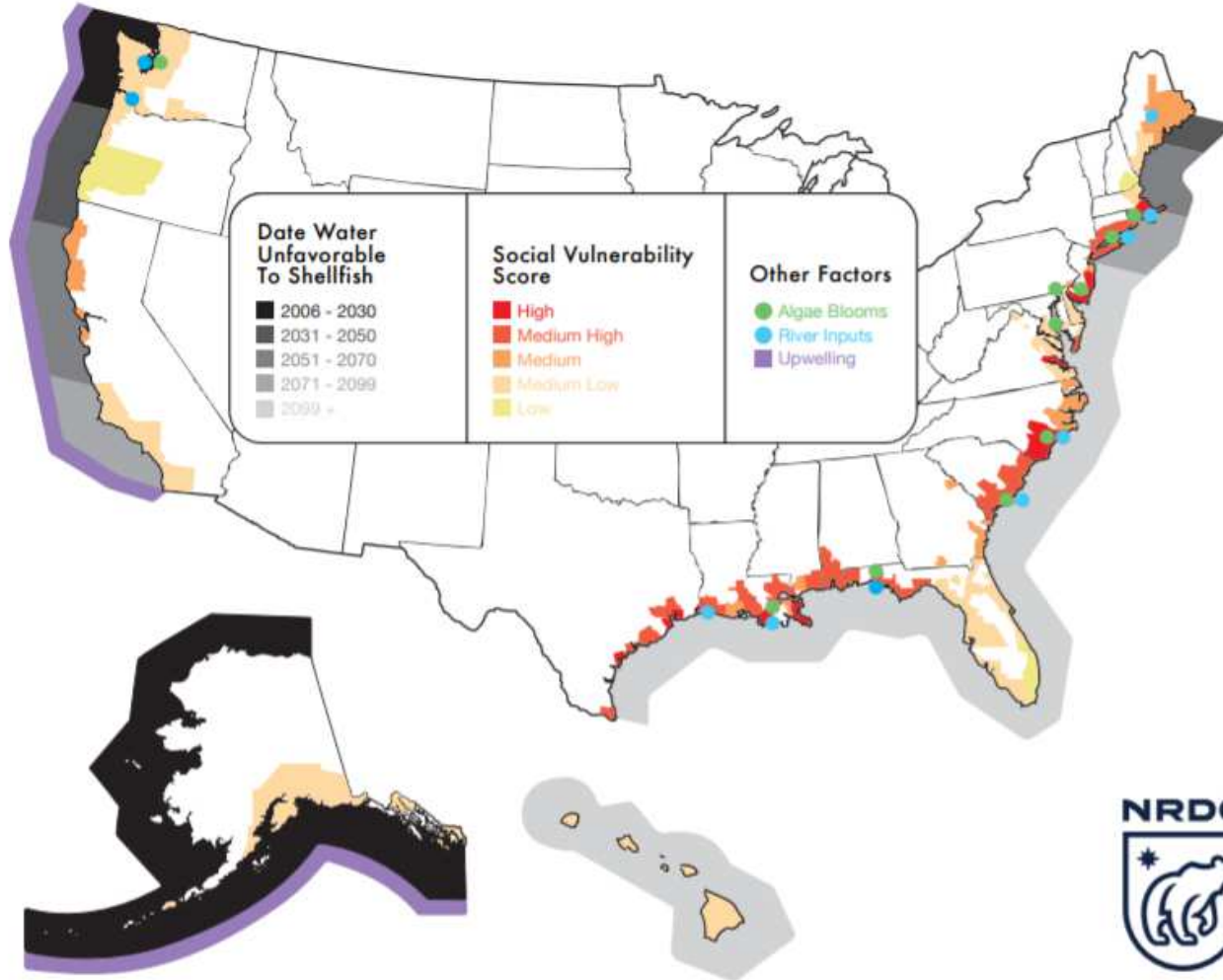
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adapted by NRDC from Ekstrom *et al.*, 2015



## Washington State

- **Panel:** limited-time entity created by governor and convened in February 2012
- **Members:** gov't and university scientists; state, local, federal, and tribal lawmakers; conservation NGO reps; and experts in environmental law and public opinion

Washington State Blue Ribbon Panel on Ocean Acidification



**Ocean Acidification:  
From Knowledge to Action**

*Washington State's Strategic Response*



# Washington State

- Main points:
  - Local processes and impacts
  - Mitigate sources and effects
    - Shells and marine plants/algae take up carbon dioxide
  - Investment in monitoring
  - Informing and engaging stakeholders, decision makers, and the public
  - Interagency coordination
- Follow-up report in 2017 – updates on progress and research

## Washington State Blue Ribbon Panel on Ocean Acidification



## Ocean Acidification: From Knowledge to Action

*Washington State's Strategic Response*



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# Maine Ocean Acidification Study Commission

- **Commission:** established in 2014, report published in 2015
- First state-legislated effort on East Coast
- **Members:** state government officials, reps from academia, stakeholder groups, and industry
- **Focus:**
  - Goals and recommendations with proposed legislation



# Maryland Ocean Acidification Task Force

- **Task Force:** limited-time entity created by governor and convened in 2014
- **Members:** nine reps from state departments, stakeholder groups, UMCES, Baltimore Aquarium
- **Focus:**
  - Background and current monitoring
  - Effects on marine life by group
  - Recommended monitoring and responses, incl. legislative

**Task Force to Study the Impact of Ocean Acidification on State Waters  
Report to the Governor and the Maryland General Assembly**

**January 9, 2015**



*Photo by Jay Fleming, MD DNR*

# Delaware

- **Format:** Standalone report
- Written by Jean Brodeur, a PhD student at U. of Delaware
- Emphasis on the publication by Kelly and Caldwell, “Ten Ways States Can Combat Ocean Acidification (and Why They Should)”

## Delaware and Ocean Acidification: Preparing for a Changing Ocean

Jean Brodeur  
December 2015



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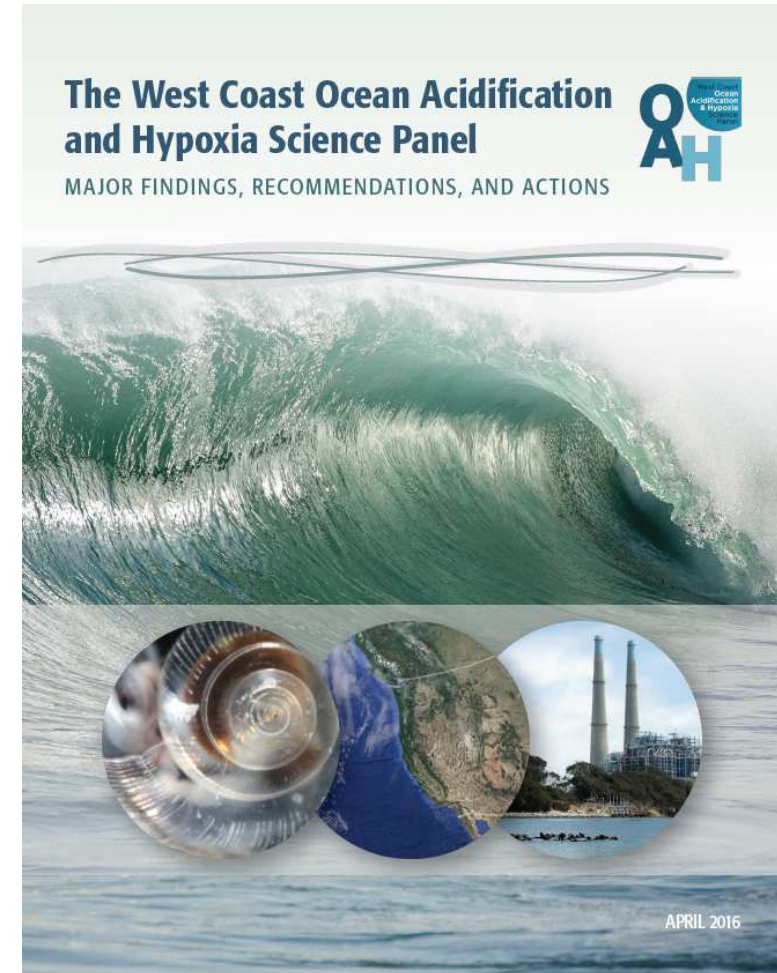
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# West Coast Ocean Acidification and Hypoxia Science Panel

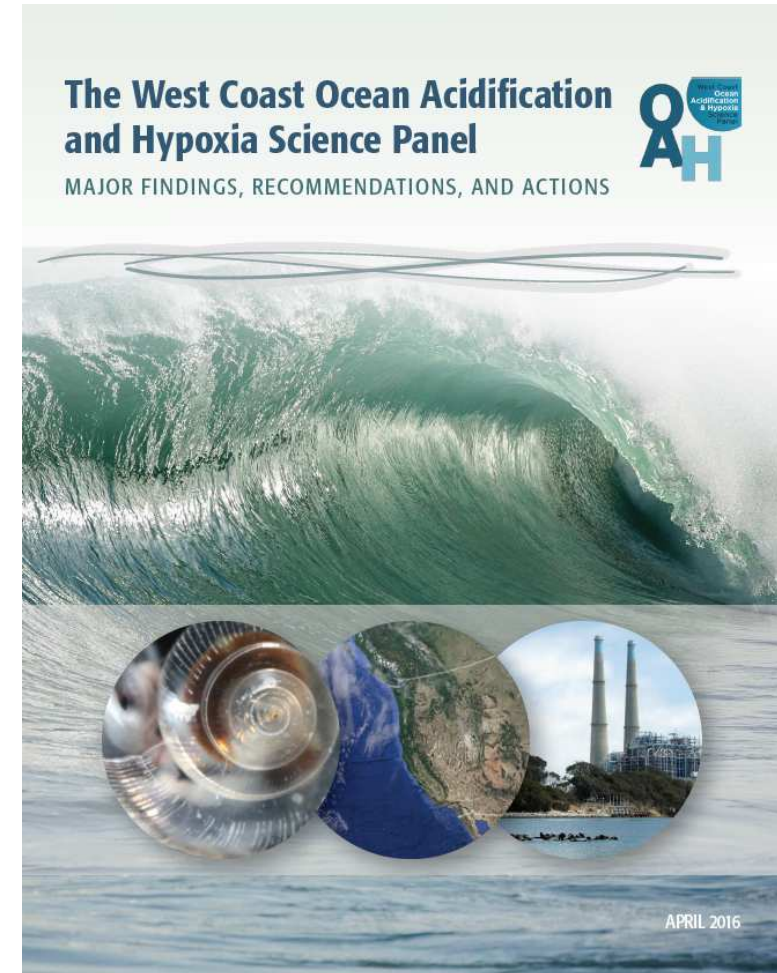
- **Panel:** Includes California, Oregon, Washington, British Columbia
- Convened by California Ocean Science Trust
  - Report supplied recommendations to state and local governments
- **Members:** Reps from academia; state, local, and tribal lawmakers; independent consultants; NGO, stakeholder, and industry reps



# West Coast Ocean Acidification and Hypoxia Science Panel

## Outcomes:

- California OAH Task Force
  - Report will highlight the state's investments in research and monitoring, and new ways of mitigating and adapting
- Oregon Coordinating Council on OAH
  - Released first report in September 2018





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# Oregon Coordinating Council on Ocean Acidification and Hypoxia

- **Council:** Formed in response to recommendations from West Coast OAH Panel
  - Two-year commitment with possible extension
  - Will issue reports biennially
- **Members:** 13 from state agencies, academia, tribal and state lawmakers, and NGOs



## The Oregon Coordinating Council on **Ocean Acidification and Hypoxia**

September 15th 2018

*1st Biennial Report to the Legislature and Ocean Policy Advisory Council*



# Other Efforts

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- Massachusetts and Rhode Island: recently introduced bills
  - Massachusetts created an Ocean Acidification Commission, announced in October
- California: The Ocean Protection Council published the California Ocean Acidification Plan
- The Coastal Acidification Networks (CANs) in the:
  - Northeast (NECAN)
  - Mid-Atlantic (MACAN)
  - Southeast (SOCAN)
  - Gulf of Mexico (GCAN)
  - California (C-CAN)

# Supplemental Information

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- Links to each state group mentioned:
  - Washington: <https://ecology.wa.gov/About-us/Our-role-in-the-community/Partnerships-committees/Ocean-acidification-Blue-Ribbon-panel>
  - West Coast and California: <http://westcoastoah.org/>
  - Oregon: <https://www.oregonocean.info/index.php/ocean-acidification>
  - Maine: <https://www.maine.gov/legis/opla/Oceanacidificationreport.pdf>
  - Maryland: [https://dnr.maryland.gov/waters/bay/Pages/MDOATF/OATF\\_Home.aspx](https://dnr.maryland.gov/waters/bay/Pages/MDOATF/OATF_Home.aspx)
  - Delaware: <http://www.dnrec.delaware.gov/coastal/Documents/OceanAcidification.pdf>
  - Rhode Island: <http://www.rilin.state.ri.us/commissions/OARI/pages/members.aspx>
- Other references:
  - R. P. Kelly & M. R. Caldwell. 2013. Ten Ways States Can Combat Ocean Acidification (and Why They Should). *Harvard Environmental Law Review*. Vol. 6, 287-347.