

State Legislation on Ocean & Coastal Acidification

Webcast sponsored by EPA's Watershed Academy in partnership with the Coastal States Organization (CSO)



Thursday, March 19, 2020, 2:00pm – 4:00pm Eastern

Speakers:

- **Holly Galavotti**, Office of Wetlands, Oceans and Watershed, EPA
- **Mike Molnar**, Deputy Director, Coastal States Organization (CSO)
- **Justine Kimball**, Senior Program Manager, California Ocean Protection Council
- **Caren Braby**, Marine Resources Program Manager, Oregon Department of Fish and Wildlife
- **Donald Witherill**, Director, Division of Environmental Assessment, Maine Department of Environmental Protection

Watershed Academy Webcast

www.epa.gov/watershedacademy

- The slides for today's presentations are posted.
- A recording will be posted within the next month.

Webcast Logistics

- **To Ask a Question** – Type your question into the “Questions” tool box on the right side of your screen and click “Send.”
- **To Report any Technical Issues** (such as audio problems) – Type your issue in the “Questions” tool box on the right side of your screen and click “Send” and we will respond by posting an answer in the “Questions” box.

Speakers

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-
- Established in 1970 by appointed representative from the nation's coastal states.
 - **Mission:** Support the shared work and vision of the coastal states and territories for the protection, conservation, responsible use, and sustainable economic development of the nation's coastal resources.
 - **Vision:** The nation's coastal areas are sustainably managed to balance economic and resource values and uses.

Learn more:
www.coastalstates.org

SUPPORTING HEALTHY COASTS & STRONG COASTAL COMMUNITIES



Ocean & Coastal Acidification Program Activities

Monitoring and Assessment

- National Estuary Programs (NEP) conduct OCA monitoring
 - Progress Report – Synthesis and Lessons Learned (in draft, complete in 2020)
 - Regional Data Analysis – (in draft, complete in 2020)
 - Guideline on Coastal Acidification Data Management & Data Sharing (in draft, complete in 2020)
- National Coastal Condition Assessment (NCCA 2020) – adding total alkalinity as a research parameter for 750 sites in the contiguous U.S.



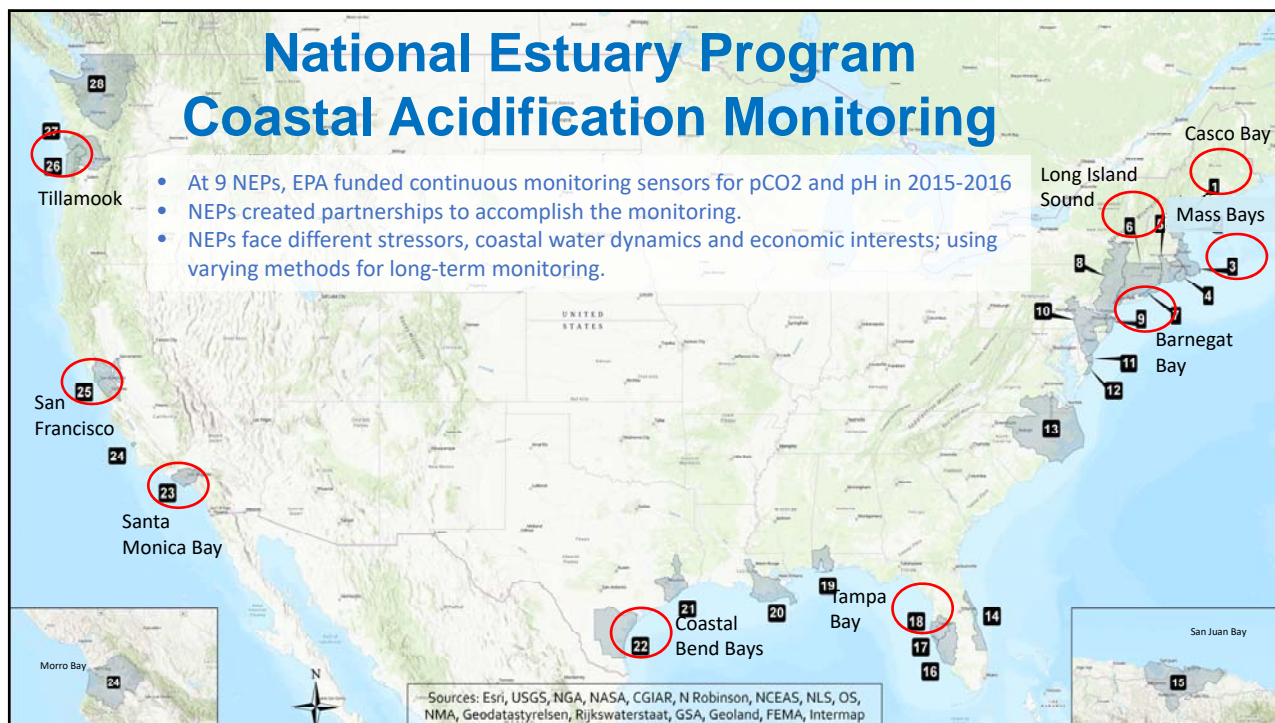
Office of Research and Development, EPA

- Atlantic Coastal Environmental Sciences Division in Narragansett, RI & Pacific Ecological Systems Division in Newport, OR conduct monitoring and research on the ecological impacts of coastal acidification.

Coordination

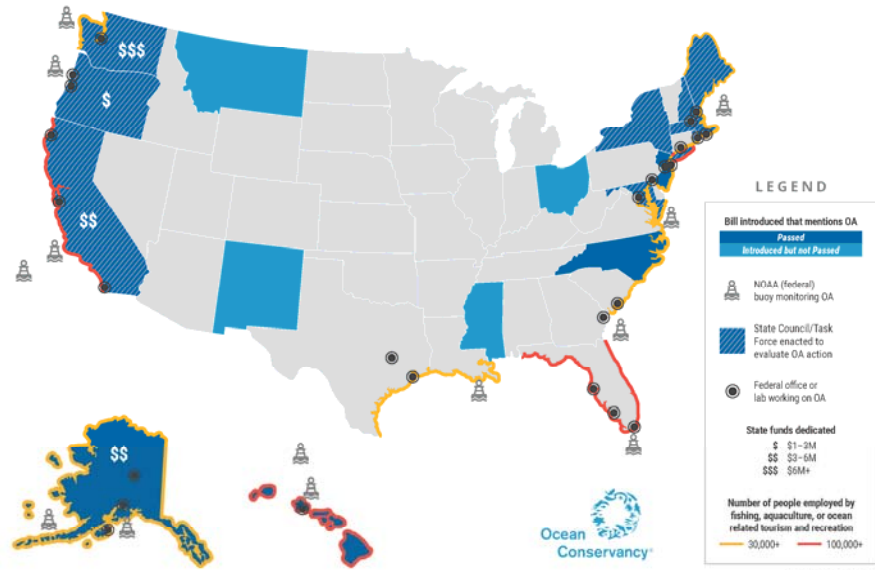
- [Inter-Agency Working Group on OA](#)
- [OA Information Exchange](#)

<https://www.epa.gov/ocean-acidification>



OCEAN ACIDIFICATION

State Actions and Investments



Data current as of December 2019





OCEAN
PROTECTION
COUNCIL

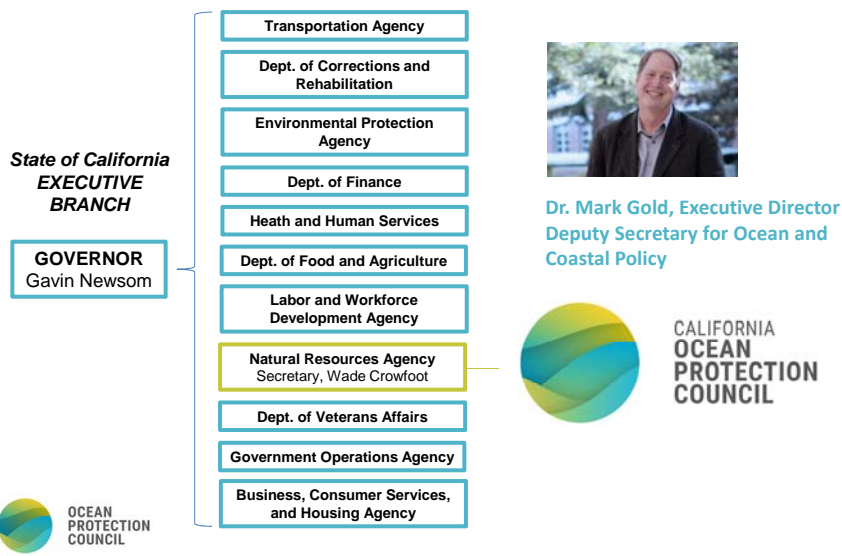


CALIFORNIA
natural
resources
AGENCY

Ocean and Coastal Acidification Legislation, Policy, and Action in California

Dr. Justine Kimball
March 19, 2020

Ocean Protection Council's Role



Council Members



Wade Crowfoot
Secretary for
Natural
Resources,
Council Chair



State Controller
Betty T. Yee



Jared Blumenfeld
Secretary for
Environmental
Protection



Ben Allen, State
Senate



Mark Stone, State
Assembly



Michael Brown
Public Member



Jordan Diamond
Public Member



OCEAN
PROTECTION
COUNCIL

Our Mission and How We Work

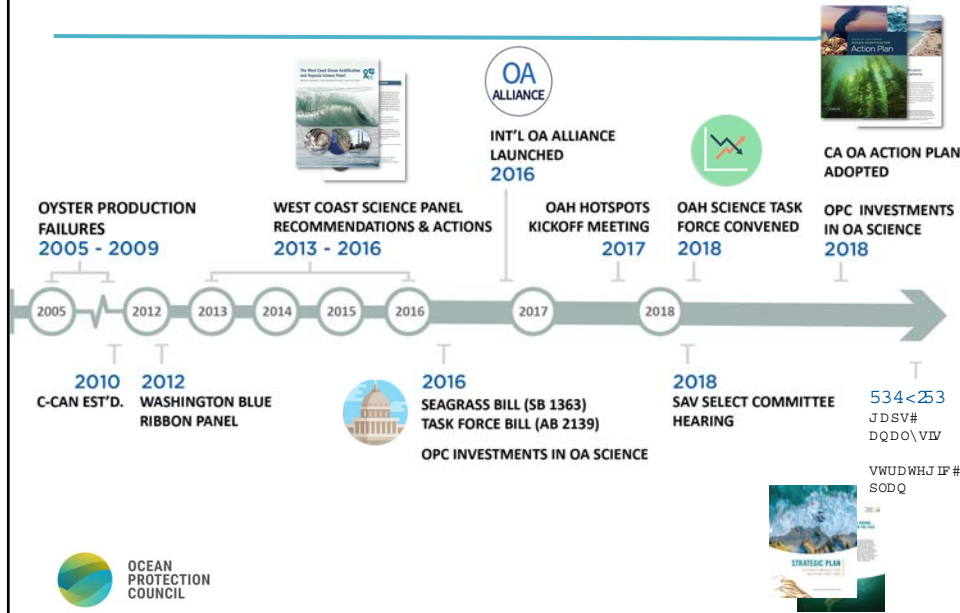
California Ocean Protection Act, 2004:

Ensuring healthy, resilient, and productive ocean and coastal ecosystems for the benefit of current and future generations. Committed to basing decisions and actions on best available science, and promoting the use of science among all entities involved in the management of ocean resources.

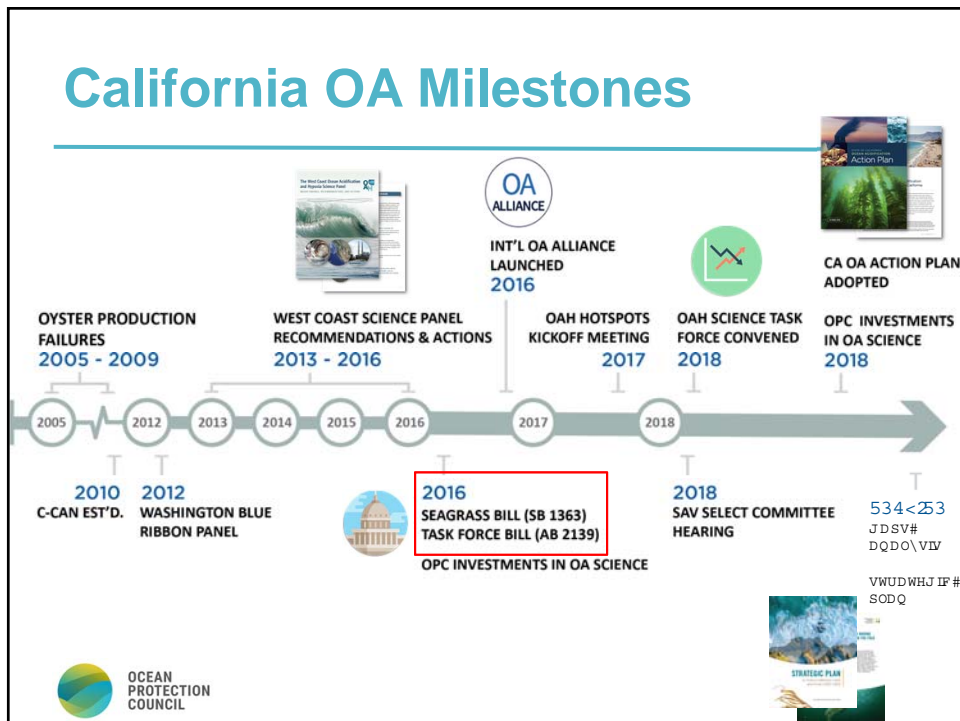


OCEAN
PROTECTION
COUNCIL

California OA Milestones



California OA Milestones



Legislation

SB 32 (Pavley, 2016) and AB 32 (Nunez, 2006) Statewide limit on GHG emissions

- Landmark legislation requiring California to reduce its overall greenhouse gas emissions to 1990 levels by 2020 and 40% below 1990 levels by 2030.
- By reducing emissions, we can better protect our marine ecosystems from the impacts of warming and OA.



Gov. Jerry Brown signs SB 32 on Sept 8, 2016



Legislation

SB 1363 (Monning, 2016) Ocean Protection Council: Ocean Acidification and Hypoxia Reduction Program

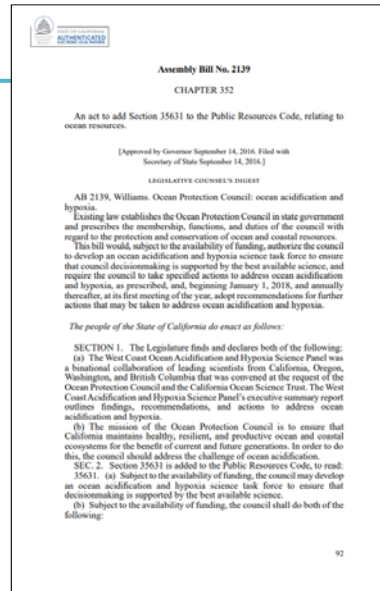
1. **Research** how eelgrass functions for carbon dioxide removal and OA mitigation
2. **Identify** where conservation or restoration of aquatic vegetation can be applied to mitigate OA
3. **Consider** this benefit, among many others when restoring and conserving this habitat
4. **Support** science, monitoring and coordination to ensure management reflects best available science



Legislation

AB 2139 (Williams, 2016) Ocean Protection Council: Ocean Acidification and Hypoxia Task Force

- Directs the OPC to establish an OAH science task force to ensure that Council decision-making is supported by the best available science
- Requires the Council to annually adopt recommendations for further actions that may be taken to address OAH



Task Force Members



Steve Weisberg
Co-chair
Southern California Coastal Water Research Project



Francis Chan
Co-chair
Oregon State University



Jim Barry
Monterey Bay Aquarium Research Institute



Alexandria Boehm
Stanford University



Shallin Busch
NOAA Northwest Fisheries Science Center



Sarah Cooley
Ocean Conservancy

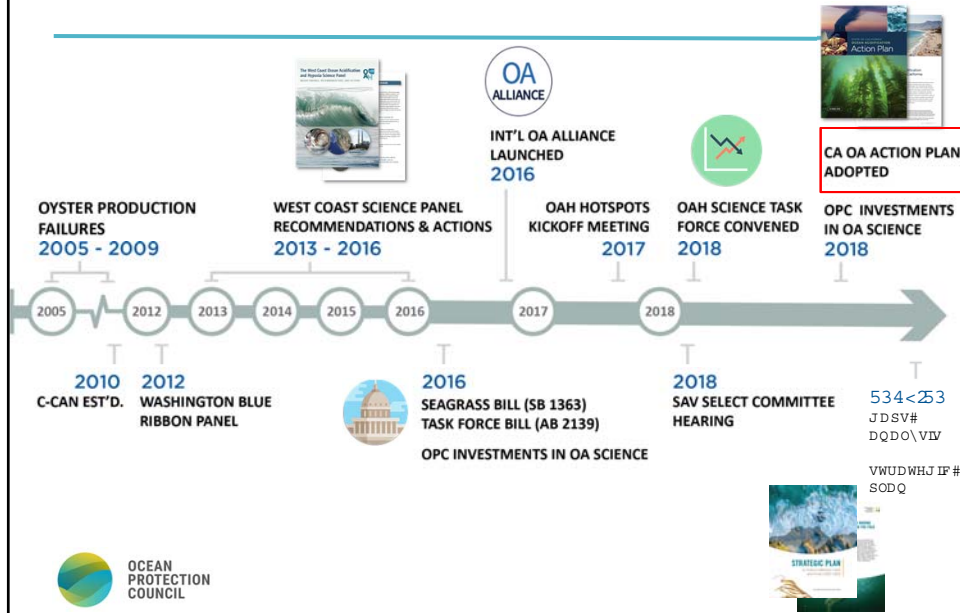


Richard Feely
NOAA Pacific Marine Environmental Laboratory



Lisa Levin
University of California, San Diego

California OA Milestones



State of California Ocean Acidification Action Plan

10-year vision designed for integration into public agency operations



- **Developed with input from 60+ experts across landscape**
 - Ocean-use industries, state & fed gov, conservation community, science, and philanthropy
- **OAH Science Task Force input**
 - Input & development of science implementation appendix
- **Applied learning from other regions**
 - WA, OR, ME, BC, Monaco, Latin America & the Caribbean, and the *OA Alliance Toolkit*



October 2018

OA Action Plan

1. Prepare for the Full Range of OA Risks and Impacts
2. Activate Responsible Elements of State Government
3. Reduce the Pollution that Causes OA
4. Deploy Living Systems to Slow OA and Store Carbon
5. Build Resilience of Affected Communities, Industries, & Interests
6. Engage Beyond State Boundaries

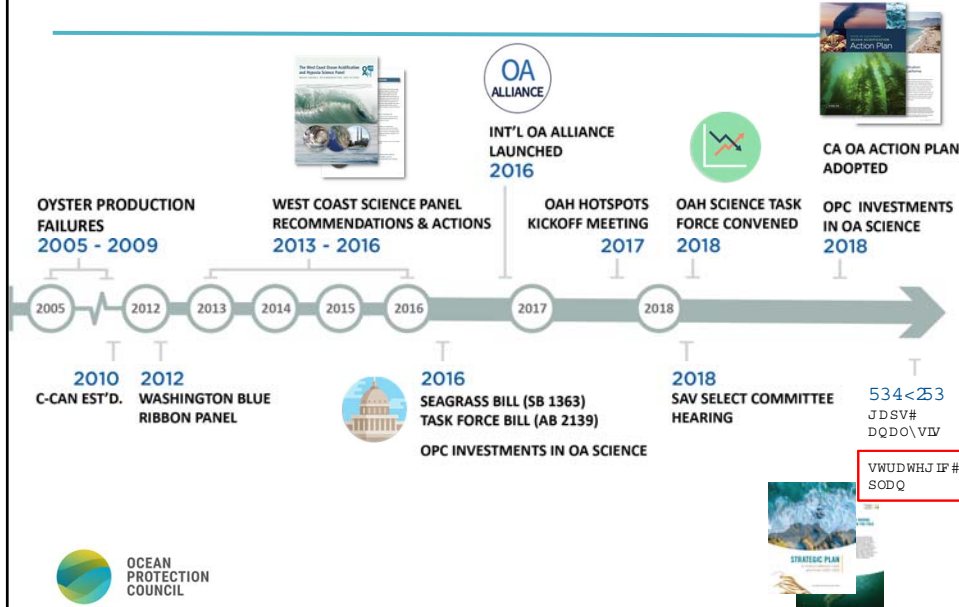


Google!

<http://www.opc.ca.gov/oa-action-plan/>



California OA Milestones



Strategic Plan

Goal 1: Safeguard Coastal and Marine Ecosystems and Communities in the Face of Climate Change

Objective: Minimize Causes and Impacts of Ocean Acidification and Hypoxia

Targets..



Target 1.2.1:

Based on the latest scientific research, advance adoption of regulations, as needed, establishing WQ criteria for OAH by 2025, with scientific analysis of the relationship between nutrients and OAH impacts completed by 2022.

- Coupled physical-biochemical model and scenarios
- Biological thresholds
- Next steps: continue to refine model scenarios and biological impact linkage



Target 1.2.4:

Work with partners and make targeted investments to support the development of an OAH monitoring and observation system optimized to deliver decision-relevant information that serves user needs by 2023

- OAH monitoring inventory
<https://oceanmonitoring.cnra.ca.gov/Analytics>
- OAH Science Task Force - monitoring gaps analysis
- Next steps: coordinate with partners to fill gaps and streamline information delivery



Target 1.2.4:

Advance the science on OAH vulnerability and identify risks to California's biological resources, communities, and economies, within the context of other ongoing environmental changes

- Biological vulnerability and thresholds
- Raise awareness
- Options for adaptation and mitigation



Target 3.1.4:

Work with partners to preserve the existing, known 15,000 acres of seagrass beds and create an additional 1,000 acres by 2025

- Role of SAV in ameliorating OA
- Blue carbon
- Multi-benefit



Photo: Audubon



Target 3.6.1:

Create an annual California State of the Coast and Ocean Report starting in 2021 and a Report Card by 2025 (utilizing a scientific, indicator-based approach to grading the State of California's Coast and Ocean)

- OAH monitoring and observation system
- Analysis, synthesis, indicator development



International Alliance to Combat Ocean Acidification

Officially launched in December 2016, the Alliance brings together jurisdictions across the globe to highlight ocean acidification as an immediate threat to coastal economies and ocean ecosystems in their region, and consider solutions.



Photo: Lincoln Chu



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COUNCIL**

Thank you!

www.opc.ca.gov

Justine.kimball@resources.ca.gov



Oregon Coordinating
Council on Ocean
Acidification & Hypoxia

The State of Oregon

Ocean Acidification and Hypoxia Actions

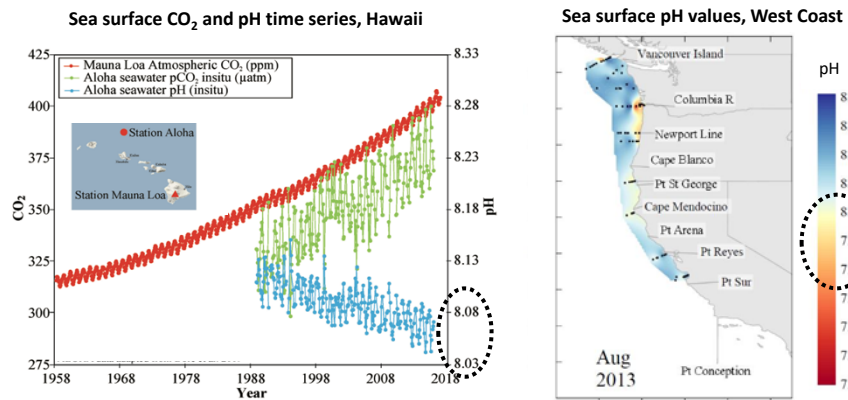


Dr. Caren Braby
Oregon Department of Fish and Wildlife



Ocean Acidification

Increased CO_2 and CO_2/pH = Ocean Acidification



NOAA PMEL Carbon Program:
Mauna Loa Data adapted from Dore et al. 2009

Feely et al. (2016) Estuarine, Coastal and Shelf Science

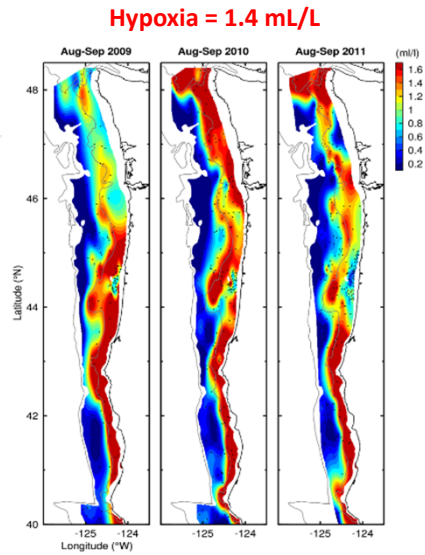
Ocean Hypoxia

2007
The Seattle Times Local News
LOCAL | BIZ/TECH | SPORTS | ENTERTAINMENT | LIFE | TRAVEL | HOMES | OPINION | JOBS | AUTOS | EXPLORE | All Sections
Traffic | Lab | Project Homeless | Crime | Local Politics | Education | Eastside | Watchdog | News | Obituaries | FYI | Gay | Westbeat | Beacon

Local News
Low-oxygen zone found again off Oregon Coast
Originally published July 29, 2007 at 10:00 am | Updated July 29, 2007 at 10:02 am

NORTHWEST
PUBLIC BROADCASTING
HOME | ABOUT US | TV | RADIO | NEWS | MUSIC & CULTURE | EVENTS | SUPPORT

Oregon Now Has A Hypoxia Season, Just Like A Wildfire Season
By Kristian Eadie-Costall | September 18, 2018



Keller et al. (2017) Marine Ecology Progress Series

West Coast shellfish aquaculture: \$270 Million annually



Pteropods & Food Web



Wild Dungeness Crab larvae



Wild Dungeness Crab & Biotoxins



Wild Dungeness Crab & Whales





Oregon Action on Ocean Change

Dr. Caren Braby

Oregon Department of Fish and Wildlife

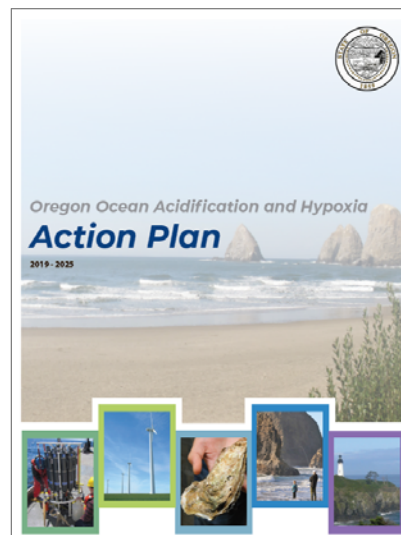
*Oregon's representative to the
Pacific Coast Collaborative
Ocean Acidification Working Group*

Oregon Policy

- Legislative Policy/Budgets
 - Ocean Science Trust
 - OAH Council
- Governor Mandate
 - Pacific Coast Collaborative (PCC)
 - OAH Action Plan
- Agency Policy (rules)
 - ODFW policy (soon)



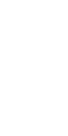
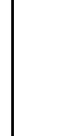
<https://www.oregonocean.info/>



PCC Governors' Leadership: International Alliance to Combat Ocean Acidification

Members endorse a Global Call to Action

1. Advance scientific understanding
2. Reduce causes
3. Explore adaptation and mitigation
4. Expand public awareness
5. Build sustained international support



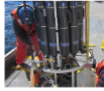
PCC Governors' Leadership: Monitoring Network

Inventory & Gaps

- How should we define “network” and priorities?
- Local gaps: we are already filling gaps, locally
- Regional gaps: what does filling gaps mean regionally?



Oregon: OAH Action Plan



THEME 1

Science, monitoring, and research



THEME 2

Mitigate CO2 & OAH



THEME 3

Promote resilience



THEME 4

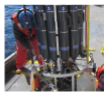
Raise awareness



THEME 5

Commit resources to action

Oregon: OAH Action Plan



THEME 1

Science, monitoring, and research



THEME 2

Mitigate CO2 & OAH



THEME 3

Promote resilience



THEME 4

Raise awareness

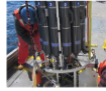


THEME 5

Commit resources to action



Oregon: OAH Action Plan



THEME 1
Science, monitoring, and research



THEME 2
Mitigate CO2 & OAH



THEME 3
Promote resilience



THEME 4
Raise awareness



THEME 5
Commit resources to action



Oregon: OAH Action Plan



THEME 1
Science, monitoring, and research



THEME 2
Mitigate CO2 & OAH



THEME 3
Promote resilience



THEME 4
Raise awareness



THEME 5
Commit resources to action

Build Sustained Support

Oregon OAH Action Plan - Appendix D

This appendix lists each of the 8 State agencies who's authorities have the most direct with OAH impacts, adaptation, and mitigation. Here, we outline issues that connect to authorities to the goals and priorities of the Oregon OAH Action Plan, that can serve as a point for agencies conducting evaluation of programs, regulations and compliance (as in this Oregon OAH Action Plan, Action 5, Step 1). Additional authorities and nexus points may be relevant.



Oregon Department of Fish and Wildlife
• emerging fisheries, resilient fishing communities, OAH research & monitoring
Nexus with 2018 Report Recommendations: 1.1, 1.2, 3.2, 5.1



Department of Land Conservation and Development
• ocean planning, coastal zone management, federal consistency, statewide planning goals, climate adaptation framework
Nexus with 2018 Report Recommendations: 3.2, 1.2, 1.1, 5.1



Department of Environmental Quality
• water quality planning, point and non-point source pollution, TMDLs
Nexus with 2018 Report Recommendations: 2.2, 5.1



Oregon Department of Agriculture
• food safety, aquaculture and agriculture permitting and practices
Nexus with 2018 Report Recommendations: 2.2, 3.2, 5.1



Department of State Lands
• submerged aquatic vegetation, removal/fill permitting, mitigation of development impacts, authorization of use of state-owned navigable waterways (includes estuaries and the territorial sea)
Nexus with 2018 Report Recommendations: 3.2, 5.1



Oregon Department of Forestry
• forested watersheds, carbon offset and mitigation, nonpoint source pollution on forested lands
Nexus with 2018 Report Recommendations: 2.2, 5.1



Oregon Health Authority
• impacted coastal communities
Nexus with 2018 Report Recommendations: 3.1, 4.2, 5.1



Oregon Department of Energy
• carbon mitigation framework, impacts on ecosystem and economics.
Nexus with 2018 Report Recommendations: 1.1, 2.2, 5.1

Oregon: What's next?

Oregon: What's next?

- Soon
 - ODFW Policy on Climate and Ocean Change
 - Oregon Climate Adaptation Framework
- In progress
 - Legislation & Agency Budgets
 - Agency planning
 - Education and Outreach

Oregon: SB1554 (2020)

80th OREGON LEGISLATIVE ASSEMBLY—2020 Regular Session

Senate Bill 1554

Sponsored by Senator ROBLAN, Representatives MITCHELL, SMITH DB; Senators BEYER, DEMBROW, FREDERICK, GELSER, GOLDEN, HEARD, MANNING JR, MONNES ANDERSON, TAYLOR, WAGNER, Representatives CLEM, GOMBERG, HELM, PILUSO, SOLLMAN, WITT (Pre-session filed.)

SUMMARY

The following summary is not prepared by the sponsors of the measure and is not a part of the body thereof subject to consideration by the Legislative Assembly. It is an editor's brief statement of the essential features of the measure as introduced.

Appropriates moneys from General Fund to Oregon Ocean Science Fund, State Department of Fish and Wildlife, Higher Education Coordinating Commission and Oregon Department of Administrative Services for certain ocean program purposes.
Declares emergency, effective on passage.

A BILL FOR AN ACT

1
2 Relating to oceans; and declaring an emergency.
3 Whereas Oregon is an epicenter for the global manifestation of ocean acidification and hypoxia;
4 and
5 Whereas the natural seasonal process of upwelling transports corrosive waters into the
6 nearshore and estuaries, causing marine waters within this state's jurisdiction to be especially vul-
7 nerable to ocean acidification; and
8 Whereas ocean acidification, hypoxia and changes in ocean temperature are intensifying; and
9 Whereas Oregon has rich and vibrant wild marine fisheries, including shellfish fisheries; and
10 Whereas ocean acidification and hypoxia are known to cause mortality and reduced growth and
11 productivity in marine organisms, including in species that form the foundation of the marine food
12 web; and
13 Whereas negative impacts from ocean acidification, hypoxia or both have already been observed
14 in species that are commercially, culturally and economically important to this state, including
15 oysters, mussels and crabs; and
16 Whereas Oregon's coastal communities and economies are important to this state and are de-
17 pendent on a thriving marine ecosystem; and

Oregon OAH Council



Comments or Questions? Please contact
OAH Council Co-Chairs
Jack.Barth@oregonstate.edu or Caren.E.Braby@state.or.us



or OAH Council staff
Charlotte.M.RegulaWhitefield@state.or.us





Maine Legislation on Ocean & Coastal Acidification

Don Witherill, Director, Division
of Environmental Assessment

March 19, 2020

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

Protecting Maine's Air, Land and Water

Topics Included in this Presentation

- 2014 Legislative Commission
- Maine Ocean & Coastal Acidification Partnership (MOCA)
- 2019 Climate Change Legislation



MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

www.maine.gov/dep

2014 Legislative Coastal and Ocean Commission Established



LAW WITHOUT
GOVERNOR'S
SIGNATURE

CHAPTER
110

APRIL 30, 2014

RESOLVES

STATE OF MAINE

—
IN THE YEAR OF OUR LORD
TWO THOUSAND AND FOURTEEN

—
H.P. 1174 - L.D. 1602

Resolve, Establishing the Commission To Study the Effects of Coastal and Ocean Acidification and Its Existing and Potential Effects on Species That Are Commercially Harvested and Grown along the Maine Coast



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Ocean & Coastal Acidification Study Commission

- First meeting - August 2014
- Final Commission Report with recommendations- January 2015
- **Six Goals**— and a recommendation for an OCA Council to continue the work



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Commission Goals

1. Invest in Maine's capacity to monitor and investigate the effects of ocean acidification and determine impacts of ocean acidification on commercially important species and the mechanisms behind the impacts;
2. Reduce emissions of carbon dioxide;
3. Identify and reduce local land-based nutrients and organic carbon that contribute to ocean acidification by strengthening and augmenting existing pollution reduction efforts;
4. Increase Maine's capacity to mitigate, remediate and adapt to the impacts of ocean acidification;
5. Inform stakeholders, the public and decision-makers about ocean acidification in Maine and empower them to take action; and
6. Maintain a sustained and coordinated focus on ocean acidification.



Commission Follow-Up

January 2015 - Commission sunsets and final Commission report with recommendations released.

Legislation introduced to create OCA Council to carry out recommendations of the Commission.



Maine Ocean and Coastal Acidification Partnership (MOCA)

Purpose

This volunteer partnership formed in March 2016 seeks (1) to implement recommendations of the Ocean Acidification Study Commission authorized by the 126th Legislature, as set forth in the [study commission's report](#) and (2) to coordinate the work of governmental agencies and private organizations and citizens who are studying and implementing means to reduce the impacts of or help adapt to ocean and coastal acidification.



<http://www.seagrant.umaine.edu/extension/maine-ocean-and-coastal-acidification-partnership>

MOCA Functions

- To provide a forum for coordinating OCA research and policy efforts
- To communicate ME OCA work to those interested in MOCA
- To provide support regarding regulatory approach to agencies and to legislators
- To inform elected officials
- To provide updates on OCA work in the state and elsewhere as it pertains to ME via webinars, seminars and meetings
- To work on coordinating monitoring, research, and policy through committees
- To hold regular meetings in order to: Provide updates on OCA activities, Track progress on MOCA goals, Plan MOCA in-person meetings and webinars, Communicate opportunities (such as RFPs and scientific meeting sessions), and Discuss emerging and changing priorities in the state relevant to OCA



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MOCA Represents:

- Lobstermen
- Aquaculture
- Legislators
- State Agencies
- Researchers
- Nonprofits
- Educators



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MOCA Partnership Symposia

- Current Research and Revisit Commission Recommendations, USM, Portland, June 2016
- Remediation Strategies and Policy– State House, Augusta, November 2016
- MOCA Webinar Update, May 2017
- Winter Science Meeting, Bigelow Laboratory for Ocean Sciences, December 2017
- Ocean Acidification and Lobster Research, Bowdoin College, June 2018
- Policy Implications and Moving Forward, State House, Augusta, November 2018
- Held 3 mtgs for Research/Monitoring, Policy/Law, Resilience/Adaptation– leading to recommendations and report for ME Climate Council



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Maine Ocean and Coastal Acidification Partnership



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An Action Plan to Address and Adapt to Ocean Climate Change in Maine



Official report to the Maine Climate Council,
adopted by The Maine Ocean and Coastal
Acidification Steering Committee
September 26, 2019

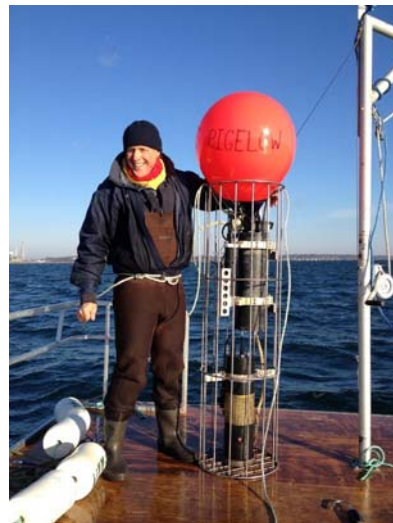
- Identify funding to support essential strategies and actions
- Build on existing efforts
- Enhance staffing and budget of Department of Environmental Protection and Department of Marine Resources
- Recognize the critical roles that municipalities, fishermen, aquaculturalists, and others are playing and will play to address climate change



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Support robust, long term monitoring that builds upon existing efforts



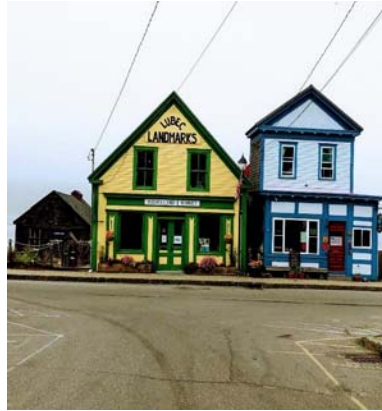
Courtesy of Island Institute and Bigelow Laboratory for
Ocean Sciences



MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

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Assist communities to evaluate and implement local remediation and adaptation strategies



Identify strategies to adapt fisheries and diversify the working waterfront



Identify and develop resources and training to recognize and address ocean climate change.



Enforce and strengthen regulations that reduce land-based inputs



Photo Courtesy of Portland Water District



Require all relevant state and municipal plans, permits and regulations to address ocean climate change.



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How is Maine tackling climate change?

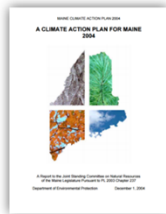


MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

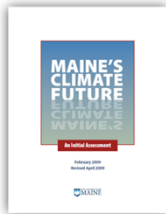
www.maine.gov/dep

LEGACY OF ACTION

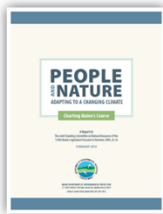
Mitigation Impact Assessment Adaptation Preparedness Unified



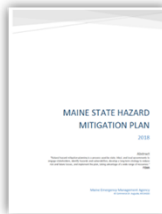
Climate Action Plan 2004



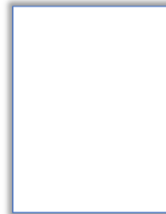
Climate Future 2009



Adaptation Plan 2010



Hazard Mitigation Plan 2018



Unified Climate Action Plan 2020



Progress every 2 years

Update 2015 Coastal 2018

Sector Specific Planning

1st 1987 Update every 5 years

Progress every 2 years Update every 4 years

LD 845 An Act To Provide Leadership in Addressing the Threat of Climate Change (2003)

LD 460 Resolve to Evaluate Climate Change Adaptation Options for the State (2009)

LD 825 Resolve to Study Climate Change and Implement the Recommendations of the Department of Environmental Protection Report on Climate Change (2013)

LD 1679 An Act To Promote Clean Energy Jobs and To Establish the Maine Climate Council (2019)



MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

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Mills Administration Early Climate Actions

"Today our connection to the land is endangered. After 80 years of studies that carbon emissions are destroying our environment, the danger is now at our doorstep...Climate change is threatening our jobs, damaging our health and attacking our historic relationship to the land and sea. Tonight, I say enough. Enough with the studies, talk and debate. It's time to act!"
 – Governor Janet Mills, Inaugural Address

- Joined the U.S. Climate Alliance – a bi-partisan coalition of 25 U.S. States committed to meeting Paris Climate Goals
- Launched electric vehicle rebate & infrastructure programs using VW settlement funds
- Signed legislation to restore net metering to encourage renewable energy for homeowners and small businesses
- Ended the blanket ban on wind power development
- Withdrew Maine from the offshore drilling coalition



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Maine Climate Council Bill

- Sets reductions in law: 45% reduction in Maine's greenhouse gas emissions by 2030 and 80% by 2050 (relative to 1990 levels)
- Creates Maine Climate Council to advise the Governor and Legislature on ways to mitigate the causes of, prepare for and adapt to the consequences of climate change
- State Climate Action Plan update due by December 1, 2020



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Executive Order 10, Signed September 23, 2019

- Goal is to achieve state **carbon neutrality by 2045**
- Climate Council is tasked with including recommendations on how to achieve neutrality in its Climate Action Plan
- Carbon neutrality can help grow the clean energy economy in Maine and benefit farmers, foresters, and others whose practices and land sequesters carbon



Governor Mills speaking in New York during the UN Climate Action Summit

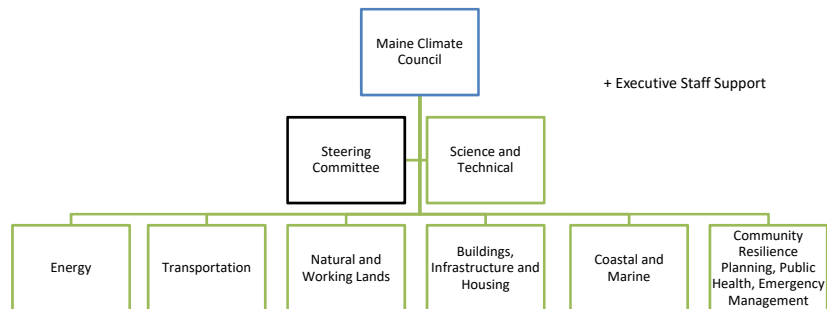


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MAINE CLIMATE COUNCIL LD 1679

- **Advise** Governor and Legislature
- Ways to **mitigate** the causes of, **prepare** for and **adapt** to the consequences of climate change
- Develop an updated and **unified Maine State Climate Plan**



Maine Climate Council

ROLES AND RESPONSIBILITIES SCIENTIFIC AND TECHNICAL SUBCOMMITTEE

- Identify, monitor, study and report relevant data, findings and recommendations on how climate change is impacting Maine
- Highlight critical scientific data and knowledge gaps
- Provide sea level rise projections and maps that indicate the areas of the State that may be most affected by storm surges, ocean and river flooding and extreme weather, based on the latest data and science
- Advise on methodologies and science for land and ocean based opportunities for carbon sequestration

More info at <https://www.maine.gov/future/initiatives/climate>



Maine Climate Council

WORK GROUPS - ROLES AND RESPONSIBILITIES

- **To develop and recommend mitigation and adaptation actions** to the council
- Groups include legislators, representatives of scientific and academic institutions, affected and involved businesses, nonprofit organizations and foundations, youth, and leaders from federal, state and local governments and agencies
- All working groups will solicit stakeholder input; consider costs and benefits including impacts on low-income, elderly and rural residents and other vulnerable communities; advise on economic and workforce benefits and challenges; and recommend funding and financing mechanisms for strategies

More info at <https://www.maine.gov/future/initiatives/climate>



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Maine Climate Council

Timeline

- Council kick-off September 26, 2019
- Working groups develop, model, and recommend strategies from October 2019 until summer 2020
- Summer/Fall 2020 - Maine Climate Council considers and prioritizes strategies for Action Plan
- State Climate Action Plan delivered December 1, 2020 and plan is **updated every 4 years**
- Legislature and DEP pass legislation and initiate rulemaking
- Council and working groups continue to meet to monitor progress
- DEP reports on state greenhouse gas emissions every 2 years
- Council, and Work Groups required to establish annual work plan at first meeting of calendar year.

Public
Engagement
& Comment
Opportunities

More info at <https://www.maine.gov/future/initiatives/climate>



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January 13, 2020 -
Maine joins the
International Alliance
to Combat Ocean &
Coastal Acidification.



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www.epa.gov/watershedacademy

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A recording will be posted within the next month.

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- You can type each of the attendees names into the PDF and print the certificates.

Thank You!