International Alliance to Combat Ocean Acidification Gathering of U.S. State Members and Partners

Friday, December 18, 2020

Meeting Notes and Summary

(1) Welcome and Overview of OA Alliance in 2020

Overview of the OA Alliance, year in review and looking forward

• Jessie Turner, Program Manager

This meeting is a follow up of the 2019 meeting which had 60 participants from 14 states and was held in New York City on heels of Climate week. The Alliance was created in 2016 because the West Coast was witnessing OA threats to its marine life and coastal communities. Since then, the Alliance has grown to wide network of national and subnational governments along with many non-government members. Members of the OA Alliance work to create OA action plans, which describe how members will respond to ocean and coastal acidification—alongside other climate related changing ocean conditions within their region.

2020 highlights:

- Updated OA Action Plan Toolkit to support members
- Creation of Infographics and other communications support tools
- Hosted "U.S. States Leading on Climate and Ocean Action" during 2020 Climate Week NYC
- Participated in international (virtual) events:
- World Economic Forum Ocean Dialogues; UN World Ocean Day; UN High Level Political Forum to Implement SDGs; Climate Week and UNFCCC Ocean and Climate Change Dialogue
- Hosted webinars
 - Are we already seeing impacts of OA? Biological studies and research from around the world
 - Intro to Ocean Acidification Action Planning (with NECAN and MACAN)
 - Mitigation and Building Resilience through Kelp and Seagrass
 - Keeping up Momentum for Ocean and Climate Action in 2020
 - Innovative Solutions to Address Impacts of Ocean Acidification
- Hosted workshops
 - Engaging Cities on Ocean and Climate Action
 - Communicating OA Science to Policy Makers
- Grew members, increased activity and reach on Twitter
- Member Communications Survey to inform programming and communications in 2021

Brief welcome from founding members of OA Alliance

• Dr. Caren Braby (OR); Dr. Justine Kimball (CA); Martha Kongsgaard (WA)

State-to-state collaborations and sharing is very important. It is necessary for states to support one another in finding ways to adapt and mitigate the changes that are occurring in the ocean. Across U.S. state leadership, there has been advancement in mitigation and adaptation, monitoring, science and knowledge, collaborations across state agencies, assessments of regional vulnerabilities and education and outreach. As efforts across OA Alliance membership expand, so does the power of scale, further demonstrating meaningful actions to understand and address climate related ocean change which can be undertaken across the globe.

(2) Updates and Report Out from Selected States

• State of Oregon, Dr. Charlotte Regula Whitefield, Oregon Department of Fish and Wildlife

The OAH Council has begun implementation the state's OA action plan, which was adopted in 2018, and prioritized efforts to advance outreach and education on OAH and take inventory of OAH related projects or mandates across agencies departments. Oregon's Approaches and 5 themes in the OA action plan include:

- 1. Strengthen sciences research
- 2. Reduce causes of OAH
- 3. Promotes OAH adaptation and resilience
- 4. Raise OAH awareness
- 5. Commit resources to OAH actions

In 2019 and 2020, legislation was introduced to get additional funding for OAH efforts, but they were not passed. In 2020, the OAH council's second biennial report was submitted. Emphasis was placed on bolstering OAH monitoring in Yaquina Bay and creating a working group of education and outreach experts. Many goals for 2020 to 2022, also include a focusing on communities of government. The OAH Council also has ongoing inventory project across other state agencies in Oregon which will inform how best to maximize resources and assist OAH council in their efforts.

• State of Maryland, Dr. Suzanne Dorsey, Assistant Secretary Maryland Department of the Environment

Dr. Dorsey started off speaking toward Maryland's leadership across multiple scales including efforts to reduce greenhouse gases, which will help mitigate OA and its impacts. In 2015, the state commissioned a legislative report examining OA impacts to keystone species in the Chesapeake Bay. Jim George with MDE has been developing the OA action plan which includes three focus areas: 1) reducing the causes of OA, 2) improving resilience, and 3) improving science and education. The action plan will be grounded in existing programs in order to ensure engagement across other state agencies. The state plans to update their climate resilience plan to include the OA Action Plan. This will likely involve a focus on science, specifically, research, modeling, and monitoring of marine environments, emphasis on oysters (a keystone species), adaptation efforts that have co-benefits, and ongoing examination of social/ human impacts.

• State of Hawaii, Amy Markel, Division of Aquatic Resources

In 2020, the state has worked on identifying categories for action and potential task force members to help make recommendations to the Division of Aquatic Resources (DAR.) DAR undertook an inventory of partnerships across state government and has also been coordinating with in-region university partners and NOAA to inventory monitoring assets and regional data. DAR hosted two webinars series to communicate about the OA Action Plan, the first with internal agency partners and the second with external partners. A draft monitoring plan is being developed and has been shared with the State Climate Commission, encouraging the Commission to consider addressing ocean related impacts of climate change in addition to sea level rise. Additional outreach has been made to state partners who work with shoreline, wetlands and seagrass ecosystems. Overall, the state is in the process of creating its OA Plan and establishing working groups to make further recommendations.

• State of New Jersey, Kevin Hassell, Coastal Zone Management Program, Department of Environmental Protection

The New Jersey Coastal Management Program will lead the development of an OA Action Plan. NJ's OA Action Plan has relevance to Governor Murphy's recent Executive Order, which directs the state to reduce the effects of climate change. A recent state scientific report on climate change included a chapter on OA and establishes that NJ is likely at high risk for the impacts of ocean change, due to dependence on shellfish. Additionally, coastal ecosystems will be affected by local amplifiers. Currently, NJ is working to build an OA Action Planning team who will coordinate with the Bureau of Climate Resilience Planning and Marine Water Monitoring. NJ is also coordinating with other states to learn how they formed process and OA Action Plan recommendations and seeking to join the OA Alliance.

• State of Connecticut, Brian Thompson, Department of Energy & Environmental Protection

The Governor's Council on Climate Change (CG3) Science and Technology Subgroup Report includes recommendations that will be relevant to the state developing an OA Action Plan. Example recommendations include: 1) advance water quality observations, 2) join the OA Alliance, and 3) to appoint a task force to develop an OA Action Plan (which will include outreach and learning from other states.) CT does have a Climate Mitigation Plan and updates to that primary plan (which includes more than 100 recommendations) are due to the Governor on Jan 15, 2021.

(3) Federal Landscape and Partners

- NOAA Ocean Acidification Program- Priorities and Expectations 2021
 - o Dr. Libby Jewett, Director of NOAA OAP

In 2020 NOAA OAP released an updated research plan which included emphasis on three regional vulnerability assessments: 1) Northeast focus on scallops, 2) Chesapeake Bay focus on oysters, and 3) California current focus on the seriocomic and human dimensions of OA. NOAA OAP also held a workshop series on OA and HABs to better understand the intersection of the two events. There was also an increase in the amount of funding for mini-grants and awards to state and community partners.

In 2021, NOAA OAP has planned cruises on the West Coast which will focus on OA and the Gulf of Mexico. There has been increased funding opportunities for shellfish aquaculture research. NOAA OAP hopes to have the federal strategic plan released in 2021, along with a Biennial report. Additionally, there is a desire to include the Integrated Coastal Ocean Observing System act amendments to FOARRM and add vulnerability and monitoring prioritizations.

 US EPA Ocean and Coastal Acidification Research Program- Report out from OCA Program and Next Steps in 2021

Holly Galavotti, Office of Wetlands, Oceans and Watersheds

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The aim of EPA OCA program is to promote a better understanding of ocean and coastal acidification drivers and vulnerability and to increase regional monitoring and adaptation efforts. The National Estuary Program uses various deployment methods and works to anticipate equipment challenges. There will be an NEP report out early 2021, along with the following supplement reports:

- Comparison of NEP's across 7 NEPS
- Strengthening NEPS through citizen science
- Improving models to assess economic impacts of OCA

Examples of NEP projects include the Casco Bay Estuary Partnership, which includes partnerships with shellfish growers to discuss findings produced in their monitoring. Additionally, an Urban Watersheds project is looking at how OA is impacting the bays and then they are comparing it to findings from Tillamook OR, which is a rural watershed. Other outcomes of 2020 include adding total alkalinity to coastal monitoring, increased R&D on the East and West coast, and hosting webinars that highlighted relevant state legislation, coastal acidification, and adaptation strategies.

- Ocean-Based Climate Solutions Act of 2020 (emphasis on Title XI: Ocean Acidification and Harmful Algal Blooms)
 - o Jeff Slyfield, Government Relations Manager, Ocean Conservancy

The Ocean Based Climate Solution Act was introduced in 2020 and brings together existing and new efforts to address climate and ocean change. Core components include: (1) blue carbon partnership grant and pilot programs; (2) renewable offshore energy; (3) climate ready fisheries including ocean aquaculture research and policy; (4) coastal resiliency and adaptation measures; and (5) regional ocean partnerships and increased coordination regarding data and monitoring.

Title XI focuses on OA and incudes increasing federal research, monitoring, looking at how OA impacts the marine environment and building the capacity to respond to OA (building upon previous legislation like the Coastal Communities OA Act, and Coastal and OA Stressors and Threats Research Act. Looking ahead, the new administration will likely move to apply executive order, regulatory, and appropriations influence to advance climate and ocean issues, in addition to relying on bi-partisan legislation.