California Approves Ocean Acidification Action Plan

Early Action Can Reduce Harm to Shellfish, Crab, Squid and Salmon Fisheries, and Communities that Depend on Them

Santa Cruz, CA -- The California Ocean Protection Council today approved the state’s first Ocean Acidification Action Plan, which lays out concrete steps to protect ocean resources. The plan, which has been under consideration for more than two months, will help California prepare for ocean acidification, reduce its effects and boost the resilience of coastal industries and communities.

As global carbon emissions rise, seawater is becoming more corrosive due to the carbon dioxide (CO₂) it absorbs. The acidification of the world’s oceans makes it difficult for zooplankton, oysters, crabs and other animals at the base of the food web to build and maintain their shells, which can have significant negative impacts on the health and productivity of California’s coastal and marine ecosystems and the communities and industries that depend on them.

Scientists expect the West Coast to experience some of the earliest and most severe changes, since the wind-driven upwelling that brings nutrient rich water to the surface and fuels the region’s productivity will also bring increasingly acidified waters to the surface.

“It has taken us years to understand the impacts of climate change on our oceans and how to address acidification, but with so many livelihoods at stake, inaction is no longer an option,” said California Secretary for Natural Resources John Laird, who chairs the California Ocean Protection Council.

California’s work on ocean acidification started after widespread oyster die-offs in the Northwest from 2006 to 2009. The state has been studying the threat jointly with Pacific Coast neighbors since that time, and is a founding member of the International Alliance to Combat Ocean Acidification, which currently has 74 members. The alliance hosted an event focused on ocean acidification during the Global Climate Action Summit.

“Our ocean is on the frontline of climate change: it is our largest heat and carbon sink, and absorbs 30 percent of the CO₂ released into the atmosphere every year,” said Deborah Halberstadt, Executive Director of the Ocean Protection Council. “California’s Ocean Acidification Action Plan outlines concrete steps we can take to protect the marine ecosystems that provide food, jobs, and a way of life for so many Californians.”

The Action Plan addresses ocean acidification in context with other threats like polluted runoff, warming, and rising seas. It promotes local solutions that are likely to provide multiple benefits - from improving water quality to promoting healthy seagrass, marsh, and kelp forest habitats. The Action Plan identifies six key strategies, and outlines five-year goals and actions for each:
- Prepare for the full range of risks and impacts
- Activate state leaders
- Reduce the pollution that causes ocean acidification
- Deploy living systems to store carbon and slow acidification
- Build resilience of affected communities, industries and interests
- Engage beyond state borders

To start, the Action Plan calls for a comprehensive assessment to identify the current and future risk to valuable fisheries like Dungeness crab and salmon, as well as California’s ocean-dependent tourism industry. This information will enable the state to prioritize actions to protect the species, industries and communities that will be affected first and worst.

“The fishing community will react once they understand the threat...more information is needed about effects on species that are commercially and recreationally important,” said urchin diver Bruce Steele, Captain, F/V Halcyon. “When the oyster industry got engaged in Washington, that created a huge push because the public believes when the fishing community is worried, they should be, too.”

The Action Plan was developed by the California Ocean Protection Council and in cooperation with the Ocean Science Trust. It was drafted with input from more than 70 people from the aquaculture and fisheries industries, state and national governments, private philanthropy, and the scientific community, and builds on other strategies underway related in other parts of the world. A draft plan was released for public comment in August, and highlights were shared at the Global Climate Action Summit last month in San Francisco.

During the next year, the Action Plan will be widely shared across the state, regionally, and at international forums. California will use it as a roadmap to make timely investments and decisions that advance the state’s 10-year vision on ocean acidification.

More information is available at http://www.opc.ca.gov/oa-action-plan/.

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**About the California Natural Resources Agency**
The California Natural Resources Agency’s mission is to restore, protect and manage the state's natural, historical and cultural resources for current and future generations using creative approaches and solutions based on science, collaboration and respect for all the communities and interests involved. www.resources.ca.gov

**About the California Ocean Science Trust**
The California Ocean Science Trust (OST) is a non-profit organization dedicated to accelerating progress towards our state vision for a healthy and productive coast and ocean. Our collaborative team draws together diverse perspectives to provide the science advice that can advance policy, funding and management decisions. A unique asset to the State, OST was established under the California Ocean Resources Stewardship Act (CORSA) of 2000. www.oceansciencetrust.org