



Addressing Ocean Acidification & Hypoxia on the West Coast



A coast-wide collaboration providing decision-makers with scientific guidance on changing ocean chemistry

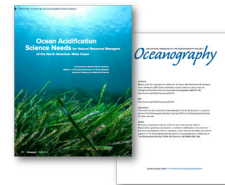
A Shared Challenge on the West Coast

Ocean acidification and hypoxia (OAH) will have profound economic and ecological consequences for the West Coast. Scientists recognize that the impacts of OAH extend through food webs and threaten marine-dependent industries and coastal communities. Managing for changing ocean conditions requires cooperation across academic, political, and jurisdictional boundaries.

An Unprecedented Effort:

The West Coast Ocean Acidification & Hypoxia Science Panel

A compelling catalyst for meeting this challenge is the West Coast Ocean Acidification and Hypoxia Science Panel (the Panel), a collaboration of 20 esteemed scientists. The Panel links the governments of California, Oregon, Washington and British Columbia to address the issue at a coast-wide scale. Convened by the Ocean Science Trust in 2013 at the request of the California Ocean Protection Council, the Panel was charged with summarizing the current state of knowledge and available management options to address OAH.



Executive Summary

- 6 Key Findings
- 8 Recommendations
- 14 Actions

Technical Guidance

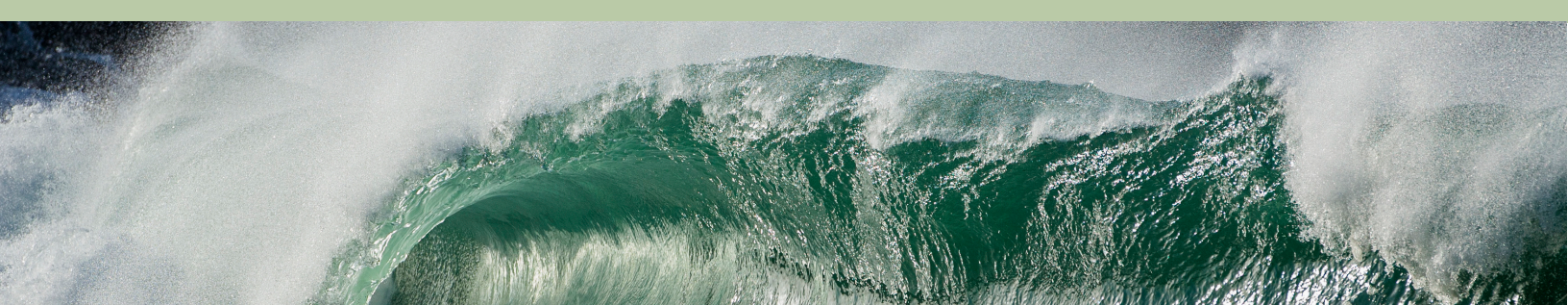
- Monitoring Framework
- Research Priorities
- Monitoring Tools
- Multiple Stressor Considerations

Foundational Science

- State of the Science: Effects on Individual Species
- State of the Science: Effects on Populations and Ecosystems
- Science Needs of Managers
- Scientific Approaches to Making a 303(d) Assessment

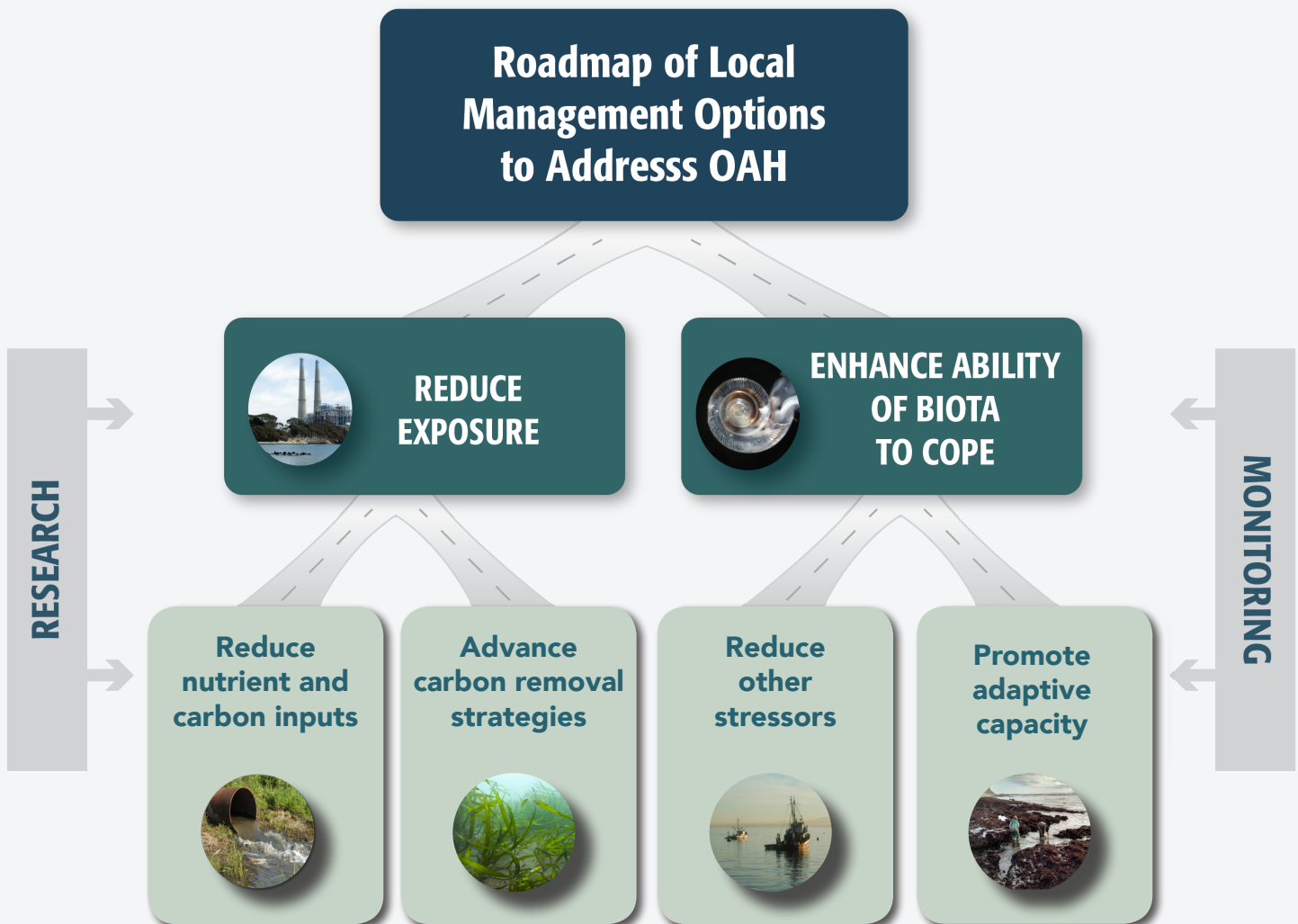
Panel Products:

The Panel produced several products that provide the comprehensive analysis needed to catalyze concerted management action around OAH. In addition to the Executive Summary, the Panel produced supporting documents that offer technical guidance for program managers and foundational science for scientific experts.



EXECUTIVE SUMMARY: MAJOR FINDINGS

- OAH will have **severe** environmental, ecological and economic **consequences** for the West Coast, and requires a concerted regional focus.
- Global carbon **emissions** are the dominant cause of OA.
- There are **actions we can take** to lessen exposure to OA.
- We can **enhance** the ability of **ecosystems** and organisms to cope with OA.
- Accelerating OA **science will expand** the number of **management options** available.
- **Inaction** now will reduce options and impose **higher costs** later.



Executive Summary and Supporting Panel Products available at
www.westcoastoah.org