

Legislative Drivers



- “Development and coordination of a comprehensive interagency strategy to:
- (a) **Monitor and conduct research** on the processes and consequences of ocean acidification on marine **organisms and ecosystems**;
 - (b) Establish a **NOAA research and monitoring program** on ocean acidification;
 - (c) Establish a program at NOAA for assessment and consideration of **regional and national ecosystem and socioeconomic impacts** of increased ocean acidification research adaptation strategies and techniques for effectively conserving marine ecosystems as they cope with increased acidification.”

Federal Ocean Acidification Research and Monitoring (FOARAM) Act of 2009

NOAA Ocean and Great Lakes Acidification
RESEARCH PLAN

NOAA Ocean Acidification Steering Committee

“ The *purpose* ... is to present a **consensus research strategy** for NOAA to advance the understanding of the **impacts** of ocean acidification and to address related challenges to **local and national ecosystems and communities**. ”

NOAA National Ocean and Great Lakes Acidification Research Plan

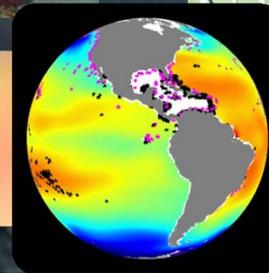
Monitor trends



Ecosystem Impacts



Model changes & responses



Develop adaptation strategies



Conduct education and outreach



Data management and synthesis

NOAA National Ocean and Great Lakes Acidification Research Plan

- NOAA working in an integrated way to address ecological and economic concerns, as well as conservation
- Regional coverage of both coastal waters and the open ocean
- “Divide and Conquer”—coordinated science activities. Example for ecosystem response research by NMFS
 - AFSC—Crabs, Fish
 - NEFSC—Phytoplankton
 - NWFSC—Bivalves, Crustaceans, Fish
 - PIFSC—Corals
 - SEFSC—Corals
 - SWFSC—Retrospective data analysis (CACOFI), Biological data off buoys

NOAA Policy Implications

- Magnuson-Stevens Act – EFH consultations
- ESA – Critical Habitat designation, Section 7
- CZMA – balance competing land and water issues
- Other – MMPA, CWA, NMSA, CRCA

EXTRA



Ocean Acidification Working Group

Monitor Trends

OAR Laboratory; CPO Reps
CRCP Rep
National Marine Sanctuaries Rep
IOOS Rep; OER Rep

Ecosystem Responses

NMFS Laboratory Reps
NCCOS/NOS Rep
CRCP and Sea Grant Reps

Model changes

NMFS Laboratory Reps
NCCOS/NOS Rep
CRCP Rep
OAR Laboratory reps

Synthesize Data

NODC/NESDIS Rep
Data Expert
All Laboratory Reps

Adaptation Strategies

Sea Grant Rep
Climate Program Office Rep

Outreach and Education

OA Program Office
Sea Grant and CRCP Rep
Internationally recognized OA expert

Federal Coordination

- Interagency Working Group on Ocean Acidification (NOAA – Lead, NSF, USGS, BOEM, EPA, DOS, DFW, NASA)
- Interagency Strategic Research Plan: In Review
- Coordinating data management and RFPs
- Participation in international efforts via the Solas-Imber OA Working Group (Dick Feely, Rik Wanninkhof)
- Department of State: Rio +20
- Participation in the Oceans in a High CO₂ World III International Symposium in Monterey, CA in Sept 2012 with Dr. Lubchenco as keynote speaker.