

OAR Update to Ocean Exploration Advisory Board

Nancy Wallace

OAR Deputy Assistant Administrator for Programs and
Administration

March 19, 2026

OAR Transitions



Jeremy Weirich
OER Director



Jenn Lukens
OER Deputy Director



CAPT Bill Mowitt
OER Acting Director



Kristen Crosett
OER Acting Deputy



David Turner
OEAB DFO



Joanne Flanders
OEAB Alt. DFO



Liz Tirpak
OEAB DFO



Gretchen Spencer
OEAB Alt. DFO



Where We Are: 10 Labs and 6 Programs

Laboratories

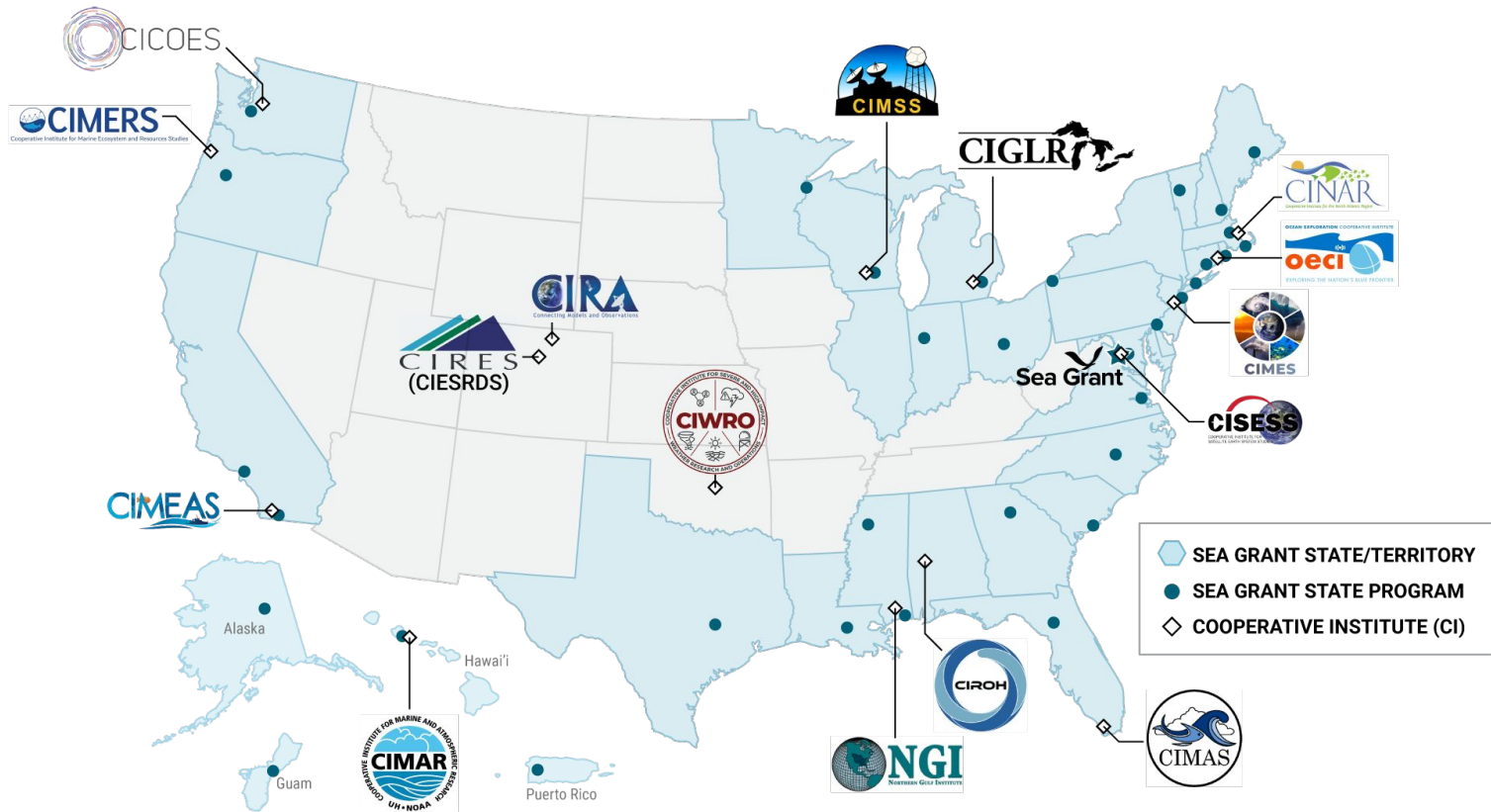
- Air Resources Lab
- Atlantic Oceanographic & Meteorological Lab
- Geophysical Fluid Dynamics Lab
- Chemical Sciences Lab
- Global Monitoring Lab
- Global Systems Lab
- Physical Sciences Lab
- Great Lakes Environmental Research Lab
- National Severe Storms Lab
- Pacific Marine Environmental Lab

HQ Programs

- Climate Program Office
- National Sea Grant Program
- Ocean Exploration and Research
- Weather Program Office
- Global Ocean Monitoring and Observation
- Ocean Acidification Program



Cooperative Institutes and Sea Grant Partners



Partnerships and Collaborations

Necessary to achieve OAR mission

- Helps OAR access data, technology, infrastructure, and expertise

Reduces cost to collect critical data

- We receive approximately \$80M in ship time savings per year with international partnerships

Drives global science standards and priorities



What We Do

Ocean, Coasts, & Great Lakes Research

- Sustained Long-term Observations
- Hurricane Research & Forecasting
- Ocean Acidification & Hypoxia
- Ocean Exploration
- Tsunami Research & Forecasting
- Research, extension & education for coastal communities

Weather and Water Research

- Extreme Weather
- Tornadoes
- Precipitation
- Fire Weather & Smoke Tracking
- Earth Prediction Innovation Center (EPIC)
- Atmospheric Dispersion and Transport

Climate Research

- Observations, Monitoring, & Modeling
- Marine Heatwave Forecasts
- Heat
- Drought
- Regional Data Tools

Foundational Capabilities

- Developing and improving innovative technologies like uncrewed systems
- Modernizing observing systems that enable more accurate forecasting
- Improving Earth system modeling and advancing predictive capabilities
- Transitioning research into operations and applications to address major societal challenges

NOAA Research: Science Priorities

CONFRONTING THE CHALLENGES OF A CHANGING PLANET

PROTECTING AGAINST WEATHER & ENVIRONMENTAL HAZARDS

Severe Weather

Increase forecast lead times and equip local emergency managers with the most up-to-date information.



Hurricanes

Enhance NOAA's hurricane forecast accuracy to save lives and decrease economic impact.



Heat

Protect the American people and economy against the dangers of extreme heat through enhanced community engagement.



Wildfires

Accelerate the development and operationalization of wildfire prediction models and decision support tools.



MANAGING TOO MUCH & TOO LITTLE WATER

Precipitation

Empower Americans with information on rain, snow, and flood risk in order to save lives and reduce damage.



Drought

Improve nationwide drought forecasts for agriculture, water resource planning, and fire preparedness.



SUSTAINING A HEALTHY ENVIRONMENT & ECONOMY

Seafood Competitiveness & Aquaculture

Support the aquaculture industry and enable fisheries to respond to changing ocean conditions.



Deep Sea Minerals

Assess the resources of the deep sea through mapping and exploration.



Atmospheric Composition

Observe and predict air quality and composition changes in support of public health and the economy.



Ocean and Great Lakes Ecosystems

Understand ocean circulation and predict maritime hazards to enable safer transportation and improve resource management.



OAR Foundational Capabilities

Integrating Emerging Technologies

Develop, improve, and adopt new innovative tools, including uncrewed systems and AI-driven applications.



Sustaining Environmental Observations

Modernize observing systems to lead the world in global measurements that enable accurate forecasting and preparedness against environmental threats.



Improving Approaches to Modeling the Planet

Advance predictive capabilities by integrating the behavior of the atmosphere and ocean as a single system.



Transitioning Research into Operations and Applications

Conduct requirements-driven research and leverage partnerships to deliver innovative solutions to address major societal challenges.



Thank you!

<https://research.noaa.gov/>