



# Freshwater Acidification Listening Session

## Great Lakes

Presented by NOAA Ocean Acidification Program

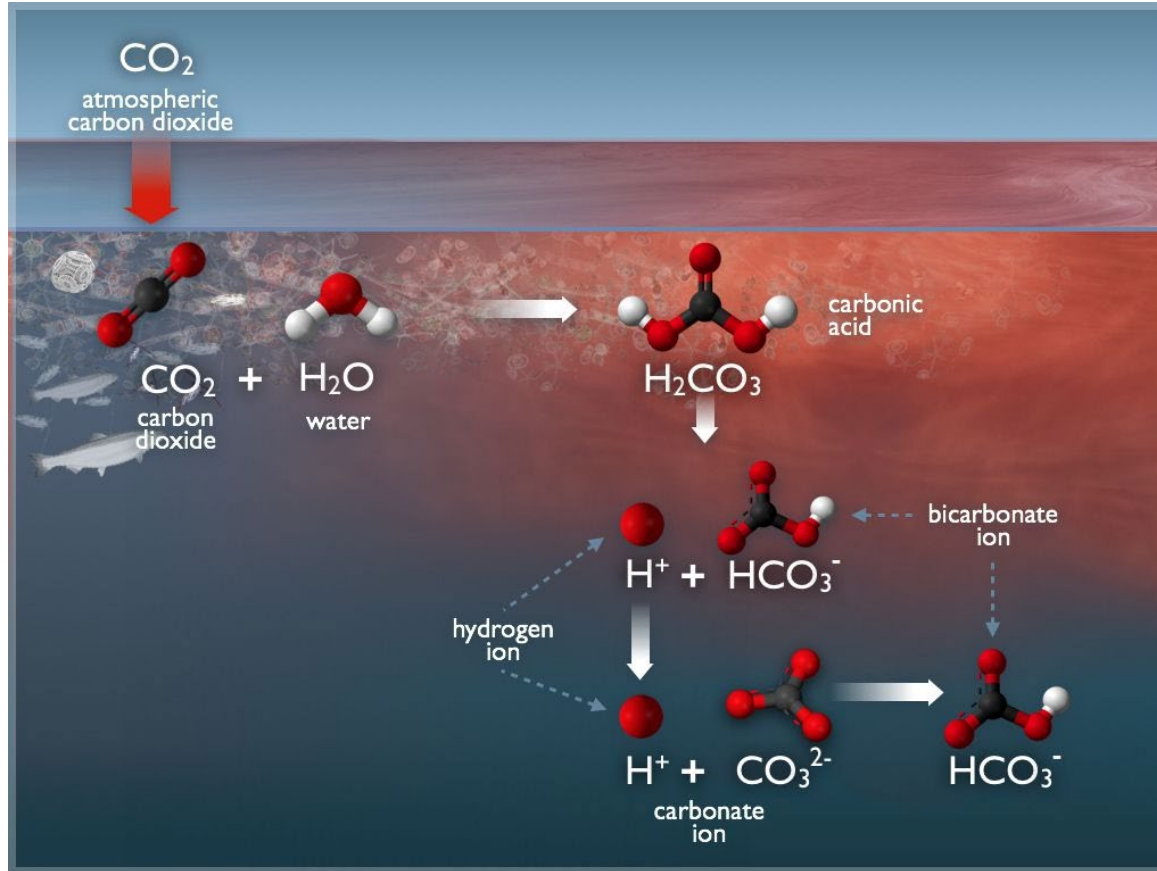
# The OAP Mission

NOAA's Ocean Acidification Program  
seeks to better **prepare society to respond to  
changing ocean conditions and resources** by  
**expanding understanding** of ocean acidification,  
through **interdisciplinary partnerships**,  
nationally and internationally.





# Freshwater Acidification





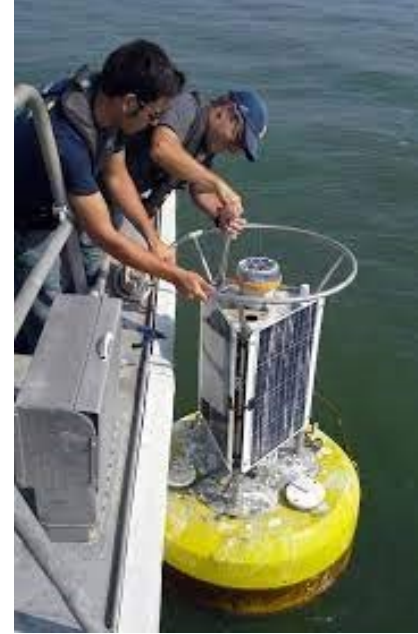
# NOAA's Great Lakes Research Goals

1. Establish a monitoring network
2. Conduct biological sensitivity research
3. Develop physical and biogeochemical food web models
4. Engage stakeholders to help identify research topics and adaptation strategies



# Current Acidification Research

- EPA GLNPO long term water quality monitoring program
- TBNMS and GLERL's Freshwater Acidification Monitoring and Environmental Stewardship in the Great Lakes project
- pCO<sub>2</sub> monitoring in Lake Michigan, using the Lake Express ferry (Milwaukee to Muskegon) and fixed moorings (University of Wisconsin Milwaukee)
- Existing observing networks include the Real-Time Coastal Observation Network (ReCON), National Data Buoy Center (NDBC), and Great Lakes Evaporation Network (GLEN)
- **There are presently no long-term monitoring programs in the Great Lakes that are designed to detect long-term trends in pH and inorganic carbonate system variables**



# OAP's Stakeholders

- Researchers
- Policymakers
- Climate Solutions Industry
- NGOs and local organizations
- Educators
- Tribes and Tribal organizations
- Coastal/Water Quality Managers
- Shellfish Growers
- Fishermen
- General Public





# OAP Resources

## Great Lakes Research and Monitoring Plan







# OAP Resources

Freshwater Acidification Research in the Great Lakes 1-pager



# FY24 Education Mini Grant

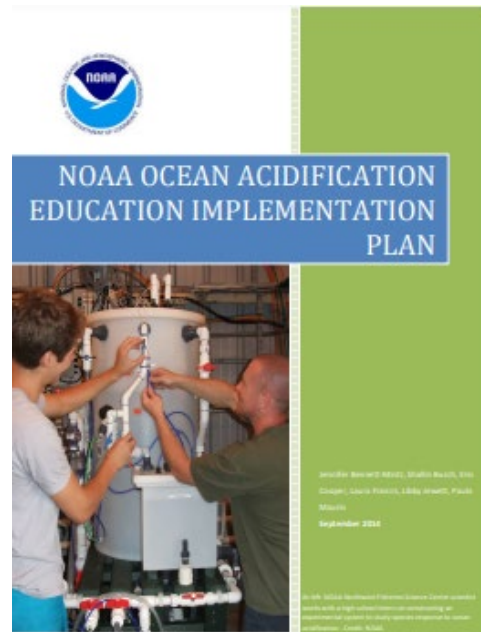
The principal objective of OAP's Education Mini Grant Program for FY24 is to provide federal financial assistance to develop ocean and coastal education and programs in underserved and/or indigenous communities or Tribes.

**Final Proposals Due: February 23**



# We Want to Hear from You!

- **Determine** where ocean acidification can accompany existing initiatives for outreach and education and stakeholder engagement in other topic areas
- **Identify** how to best provide technical assistance to stakeholder groups (e.g. monitoring activities, data accessibility, research) to meet Congressional mandates
- **Define** stakeholder priorities and where ocean acidification may intersect or support
- **Address** the Education Implementation Plan
- **Engage** and grow with OAP's network





*Thank you!*

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**<https://oceanacidification.noaa.gov/>**





NOAA OCEAN ACIDIFICATION PROGRAM

Tell us about your needs to support freshwater acidification!

Join at [menti.com](https://menti.com/join/83919241) | use code 8391 9241



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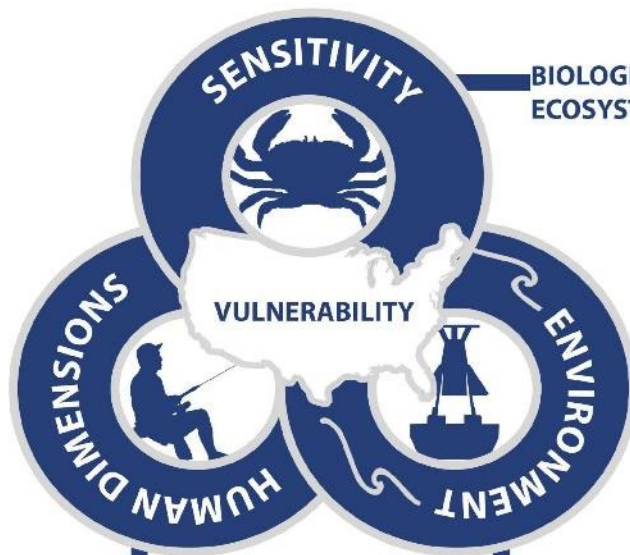


# The OAP Trifecta:

## *A Transdisciplinary Approach*



**ADAPTATION STRATEGIES  
SOCIO-ECONOMIC IMPACTS  
EDUCATION & OUTREACH**



**BIOLOGICAL RESPONSE  
ECOSYSTEM MODELS**



**OCEAN ACIDIFICATION  
MONITORING & MODELING**

# Your Hosts for Today's Listening Session



**Liz Perotti**  
Education & Outreach  
Coordinator



**Natalie Lord**  
Stakeholder Engagement  
and Capacity Building  
Knauss Fellow

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