

Funding Opportunity: Integrated Research on Coastal and Ocean Acidification and Harmful Algal Blooms

NOAA-NOS-NCCOS-2022-2006992



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NOAA NCCOS Competitive Research Program (CRP)
& NOAA Ocean Acidification Program (OAP)

Program Managers



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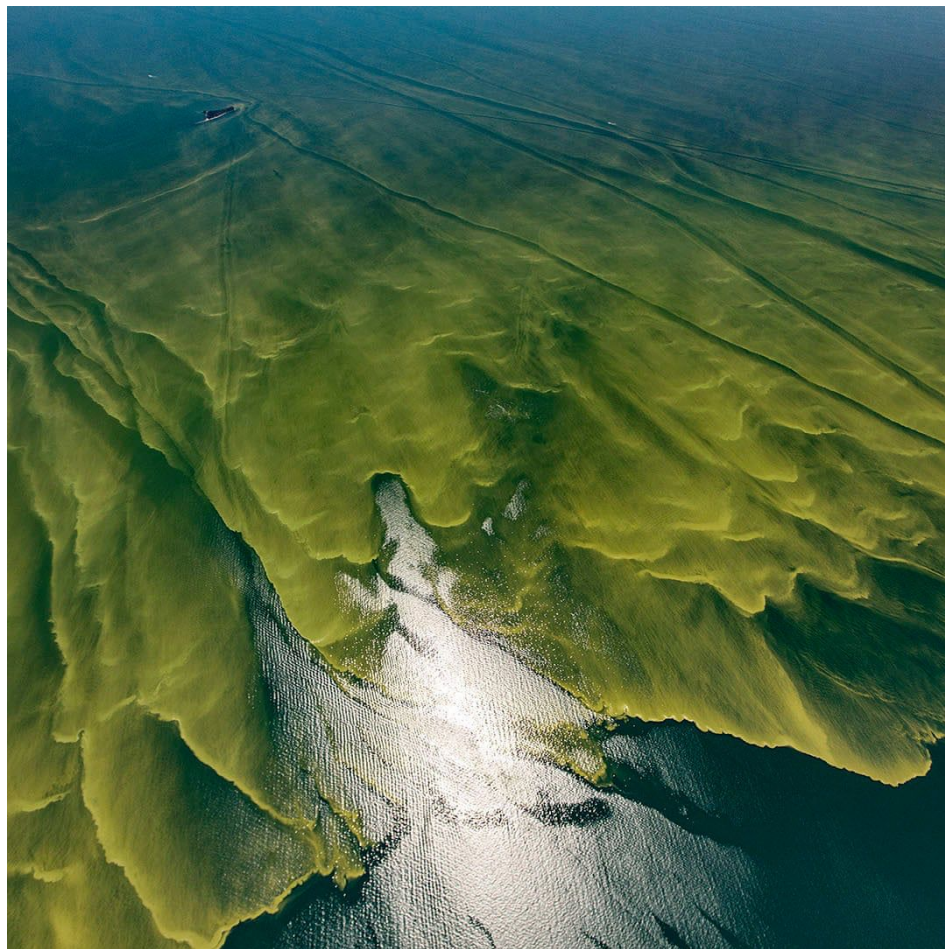
Senior HAB Scientist



Quay Dortch
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Agenda

- ❖ Definitions
- ❖ Program Objective
- ❖ Program Priorities
- ❖ Award Information
- ❖ Eligibility
- ❖ Letter of Intent
- ❖ Full Proposal
- ❖ Evaluation Criteria
- ❖ Final Advice
- ❖ Q&A with program managers



Definitions

NOAA uses the following definitions:

- ❖ **Harmful algal blooms (HABs)** are marine and freshwater phytoplankton that have proliferated to high concentrations, resulting in nuisance conditions or harmful impacts on marine and aquatic ecosystems, coastal communities, and human health through the production of toxic compounds or other biological, chemical, and physical impacts of the algae outbreak.
- ❖ **Ocean acidification (OA)** is driven predominantly by ocean uptake of atmospheric CO₂, resulting in global-scale changes in ocean chemistry with predictions of broad-scale ecosystem impacts. Coastal acidification, which refers to a pH decline over decadal or longer time scales, resulting not only from atmospheric CO₂, but also from changes in coastal biogeochemical and hydrographic processes, is recognized as the coastal manifestation of OA. Throughout the NOFO, the term "OA" represents both ocean and coastal acidification processes in marine and Great Lakes ecosystems.

Program Objective: Growing Concern Regarding HAB and OA Co-Occurrence and Impacts

Both HABs and OA are threats to marine ecosystems and human communities

There is a growing need to understand OA-HAB interactions and their cascading impacts to coastal ecosystems, communities, and economies to inform management decisions

- ❖ OA and HABs can impact the same coastal resources in different ways and there may be synergistic or antagonistic effects that are not recognized by current research efforts
- ❖ OA and HABs have some common drivers and often co-occur in space and time, which will likely become more common in the future

Program Objective: Legislative Mandates and Justification

As authorized under HABHRCA, NCCOS CRP funds HAB research to advance a holistic ecosystem understanding, enhance mitigation capacity, develop and advance control strategies, and support better measures of socioeconomic impacts

As established by FOARAM, OAP coordinates OA research, monitoring, and other activities to improve understanding of how ocean chemistry is changing and impacting marine organisms, people, and economies

NCCOS CRP & OAP have complementary objectives to address multi-stressor research questions in the coastal environment

Program Objective: Legislative Mandates and Justification

Aug 2020 Ocean Acidification and Harmful Algal Blooms: Defining a Research Agenda Workshop

- ❖ Website: <https://oceanacidification.noaa.gov/HABOA2020.aspx>
- ❖ Report: <https://repository.library.noaa.gov/view/noaa/30908>
- ❖ Seminar: <https://www.youtube.com/watch?v=TMX7RCdggzw>

Other strategic planning and research documents:

- ❖ [Strategic Plan for Federal Research and Monitoring of Ocean Acidification](#)
- ❖ [NOAA Ocean Coastal and Great Lakes Acidification Research Plan](#)
- ❖ [Harmful Algal Blooms and Hypoxia Comprehensive Research Plan and Action Strategy](#)
- ❖ [HABs and Hypoxia in the United States: An Interagency Progress and Implementation Report](#)

Program Priorities

Proposals must directly address research questions/needs involving **both** OA and HABs, but other coastal stressors may also be included

Projects **must include at least one** of the following approaches:

- ❖ Analysis of new or existing OA and HAB observational data in combination with other environmental parameters to assess potential relationships and inform meaningful experiments to improve model predictions
- ❖ Lab and field studies that target OA effects on toxin-producing HABs that affect human health or HABs that directly affect important marine resources
- ❖ Studies of OA and HAB interactions across different ecological levels, such as species, population, community, and food web

Award Information

Funding = \$1.5 M in FY22 (pending appropriations)

- ❖ 3-5 targeted projects
- ❖ \$300,000-500,000 per year
- ❖ 1-3 years

Eligibility

U.S. institutions of higher education, non-profits, state, local, and Indian Tribal Governments, U.S. territories, and for-profit organizations

Federal applicants are eligible (*NCCOS researchers cannot be the lead PI)

There are no cost sharing or matching requirements

A Letter of Intent **MUST** be submitted for a full proposal to be considered

Letter of Intent (LOI)

1. Tentative project title
2. Contact information for each PI
3. Approximate cost of the project
4. Statement of the problem and its management relevance
5. Brief summary of work to be completed, methodology to be used, and plan for transitioning results to management application

Program managers will review each LOI to determine whether it is responsive to the Program's goals.

**LOIs must be submitted to
nccos.grant.awards@noaa.gov
by 11:59 pm Eastern Time on
October 14, 2021**

**Emails to encourage or
discourage a full application
will be sent approx. 2 weeks
after the LOI deadline**

Full Proposal

1. SF-424
2. Summary Title Page
3. Abstract
4. Project Description
 - a. Proposed Research
 - b. Application to Management
 - c. Data Management Plan
 - d. Statement of Diversity and Inclusion
5. References
6. Milestone Chart
7. Biographical Sketch
8. Current & Pending Support
9. Permits
10. Accomplishments from Prior Federal Support
11. Budget Narrative
12. CD-511
13. SF-424B
14. SF-424A
15. Alphabetized Collaborator List

**Full proposals must be
submitted to grants.gov by
11:59 pm Eastern Time on
January 19, 2022**

Evaluation Criteria

1. Importance and/or relevance and applicability to program priorities (30%)
2. Technical/scientific merit (35%)
3. Overall qualifications of applicants (15%)
 - a. Capability of the investigator and collaborators to complete the proposed work (10%)
 - b. Statement of Diversity and Inclusion (5%)
4. Project costs (10%)
5. Outreach and education (10%)

Final Advice

Read the NOFO, read the NOFO, read the NOFO

Submit the LOI by email by the deadline, **Oct 14, 2021**

Call the Program Managers or the Grants Manager if you have any questions, especially on:

- ❖ Applicability of topic to program goals
- ❖ Appropriateness of region
- ❖ Eligibility of applicant or institution
- ❖ Preparing the budget, budget narrative or any other federal forms.

Submit the proposal through Grants online BEFORE the deadline, **Jan 19, 2022**

Join our OA-HAB team on the OA Info Exchange!

Catalyzing response to ocean & coastal acidification through the power of collaboration

The Ocean Acidification Information Exchange is an online community for professionals involved with or interested in the topics of ocean and coastal acidification (OCA). Our mission is to respond and adapt to OCA by fostering an online environment built on trust, where our members feel empowered to ask, answer, and learn from one another.

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Affiliation

Position

Background Briefly tell us about your background and why you are interested in participating

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You will receive an email with your login credentials

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What's new

Welcome to the Ocean Acidification Information Exchange, where we're catalyzing response to OCA through the power of collaboration.

To get started, please:

1. Read the Participation Guidelines, which outline our community's governing values and expected conduct.
2. Complete your profile by uploading a photo and choosing your topics of interest.
3. Read descriptions of each Team's focus and join the ones that interest you.
4. Ask a question, share an update, document, or event.

You can find information about the site's features and answers to commonly asked questions on the FAQ page. Need help? Email the Community Manager.

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OA-HABS

A forum for discussing interactions of Ocean Acidification and Harmful Algal Blooms, the factors contributing to them, co-monitoring, and the development of better understanding and communication of risks and vulnerabilities.

Aerial Associates Photography, Inc., by Zachary Haslick; from NERC.org

Latest

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TOPIC
OA-HABS

Team leaders



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Questions?

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Letters of Intent due 11:59 p.m. Eastern Time on October 14, 2021

Send to nccos.grant.awards@noaa.gov

Responses by approximately October 28, 2021

Full Proposals due 11:59 p.m. Eastern Time on January 19, 2022

Submit on grants.gov

Forms & example application package:

<https://coastalscience.noaa.gov/about/funding-opportunities/application-forms/>

Send additional questions to Program Managers:

Maggie Broadwater at maggie.broadwater@noaa.gov

Erica Ombres at erica.h.ombres@noaa.gov