ECOHAB
Ecology & Oceanography of Harmful Algal Blooms

NCCOS NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE

An Overview of NOAA's FY2024 ECOHAB Funding Opportunity for Potential Applicants

NOAA-NOS-NCCOS-2024-2008161

Maggie Broadwater
maggie.broadwater@noaa.gov
ECOHAB Program Manager
Competitive Research Program
National Centers for Coastal Ocean Science

Outline

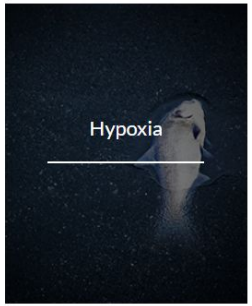
- Background
  - NCCOS Competitive Research Program
  - National Competitive HAB Programs
- ECOHAB & FY2024 Program Priorities
- Award Information
- Eligibility
- Letter of Intent (LOI)
- Full Application/Proposal
- Evaluation Criteria
- Advice to Potential Applicants
- Resources to Address Questions

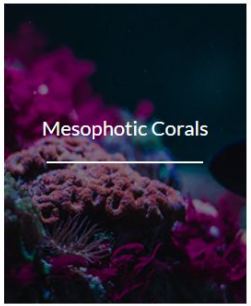
https://oceanservice.noaa.gov/facts/hab-solutions.html

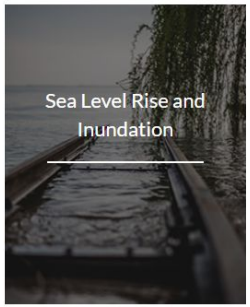
Competitive Research Program

NCCOS | NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE

NCCOS CRP supports the development of actionable information and tools that improve how the nation protects, manages, and conserves ocean and coastal ecosystems.







NCCOS CRP funds projects that provide **actionable information** and **user-driven products** that enable resource managers to **assess management and policy strategies**, and to **improve understanding** of threats to ecosystems and communities.

Collaborative research process – resource managers, planners, policymakers, and impacted communities are **partners** or **advisors** on research projects.

Research outcomes must benefit society.

National Competitive HAB Programs

NCCOS | NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE

- **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.
- **Programs**: ECOHAB** - MERHAB - PCMHAB - SEAHAB**
- **Overarching objective**: Address HAB occurrence and impacts on coastal ecosystems, public health, and the economy
- 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

* Consistent with HABHRCA 2017, 33 U.S.C. §4008(3)

† Includes microalgae, cyanobacteria, or macroalgae

‡ In relation to baseline or abundances observed during non-bloom or non-nuisance conditions, or in the absence of harmful impacts

** **FY2024 Funding opportunities are currently open**

NCCOS CRP Harmful Algal Blooms Team

NCCOS | NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE

Maggie Broadwater
ECOHAB
Program Manager

Marc Suddleson
MERHAB
Program Manager

Felix Martinez
PCMHAB
Program Manager

Brittany King
SEAHAB
Program Manager

Quay Dortch
NCCOS
Senior HAB Scientist

Rebecca Atkins
Coastal Ecology Program Analyst (ECOHAB)
rebecca.atkins@noaa.gov

Sarah Pease
HAB Event Response Coordinator

NCCOS Business Management Division
Grants support

Laurie Golden
laurie.golden@noaa.gov

Betsy Laban
elisabeth.laban@noaa.gov

ECOHAB: Ecology & Oceanography

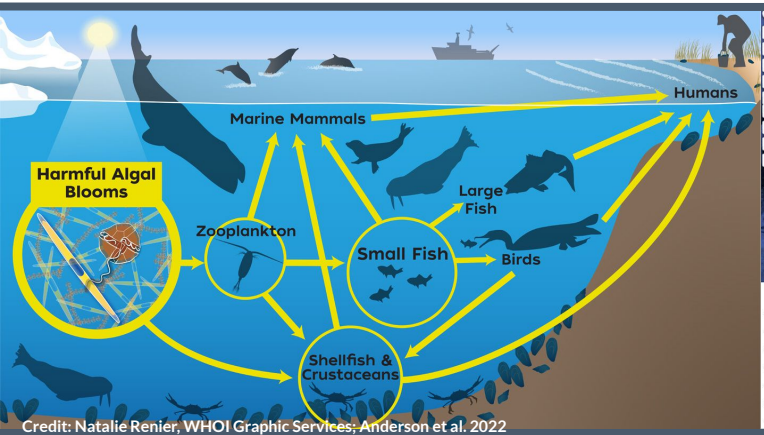
NCCOS | NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE

The overall goals of the ECOHAB program are to develop:

- **Quantitative understanding of HABs and**, where applicable, their **toxins** in relation to the surrounding environment with the intent of developing new information and tools, predictive models and forecasts, and prevention strategies to aid managers in coastal environments; and
- Understanding leading to models of **trophic transfer of toxins**, knowledge of **biosynthesis and metabolism of toxins**, and assessment of **impacts of toxins on higher trophic levels**.

[NOFO Section I.A. Program Objective, p.5]

https://coastalscience.noaa.gov/science-areas/habs/ecohab/



Credit: Natalie Renier, WHOI Graphic Services; Anderson et al. 2022


Credit: J. Ryan, MBARI


Credit: Bob Hallinen, ADN

Credit: NOAA

FY2024 ECOHAB Program Priorities

NCCOS | NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE

- The **local and regional drivers that govern bloom initiation, maintenance, toxin production (where applicable), and termination** from cellular-level processes to ecosystem-level interactions;
- The **biosynthesis and mechanism of toxicity** of known and emerging toxins (including those that are tumor-promoting or lead to long-term effects), including their persistence in dissolved and particulate form, and degradation in aquatic ecosystems;
- The **uptake and depuration of toxins** in commercial and subsistence seafoods and important prey species, including toxin biotransformation and fate;
- The **trophic transfer of toxins in aquatic food webs**, including the consequences of exposure of humans and animals to HABs via various routes, and cell and toxicity thresholds for HAB toxins and secondary metabolites;
- The presence of **HAB toxins in subsistence resources** and related risks to food safety and security; or
- The **effects of environmental or anthropogenic changes**, such as eutrophication, ocean acidification, or climate change, **on HABs and their impacts**.

[NOFO Section I.B. Program Priorities, p. 7]

Funding availability & award information

NCCOS | NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE

$3 million anticipated in FY24

(pending NCCOS Competitive Research appropriations)

3 to 6 Projects - Cooperative Agreements - Targeted and Regional

Anticipated start date: September 1, 2024

Targeted Projects

Annual budget: $200,000 - $500,000

Duration: 1 - 3 years

MTAG - Optional

Regional/Cross-regional Projects

Annual budget: $500,000 - $1,000,000

Duration: 3 - 5 years

MTAG - Required

[NOFO Section II. Award Information, p. 12]

[NOFO Section I.B.2. ECOHAB Project Characteristics, p. 7] - Targeted/Regional

Who can apply?

NCCOS | NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE

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

- Federal applicants are eligible - NCCOS researchers cannot be the lead PI
- No cost sharing or matching requirements
- NOAA supports cultural and gender diversity and encourages women and minority individuals and groups to submit applications
- Applications involving historically black colleges and universities, Hispanic serving institutions, tribal colleges and universities, and institutions that work in underserved areas are encouraged

[NOFO Section III. Eligibility Information, p. 15]

A Letter of Intent (LOI) MUST be submitted for a full proposal to be considered.

Required Letter of Intent (LOI)

NCCOS | NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE

1. Tentative project title
2. Identify lead PI and provide contact info for all PIs
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 application

Applicant(s) who do not submit an LOI are not eligible to submit a full proposal.

LOI Review

Is the proposed research responsive to FY2024 ECOHAB Program Priorities?

LOIs must be submitted to nccos.grant.awards@noaa.gov by 11:59 pm Eastern Time on October 18, 2023

Responses will be emailed ~2 weeks after LOI deadline.

Full proposals encouraged only for relevant & competitive LOIs

[NOFO Section IV.B. Content and Form of Application, p. 16] - *2p, Single spaced, 12-pt, 1" margins*

Full Proposal

NCCOS | NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE

1. Standard Form (SF)-424
2. Summary Title Page
3. Abstract
4. Project Description (18p)
   a. Proposed Research
   b. Application to Management
   c. Data Management Plan
   d. Statement of Diversity and Inclusion
5. References cited
6. Milestone Chart
7. Biographical Sketch
8. Current & Pending Support
9. List of Permits
10. Budget Narrative
11. CD-511
12. SF-424B
13. SF-424A
14. Collaborator List (spreadsheet)

Full proposals must be submitted to grants.gov by 11:59 pm Eastern Time on January 31, 2024

[NOFO Section IV.B.2. Full Application, (c) Required Elements, p. 18] - *Single spaced, 12-pt, 1" margins*

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

Statement of Diversity and Inclusion

NCCOS NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE

In this section, describe how well the proposed research activities incorporate the principles of diversity, equity, and inclusion.

Examples could include, but are not limited to:

- broadening the **participation of underrepresented groups**
- **partnering with underserved communities** to ensure relevant science, services and tools reach decision-makers
- **partnering with minority serving institutions** or programs that promote diversity in science, technology, engineering, and mathematics (STEM)
- having a **diverse project team** or, if applicable, a project advisory committee across several factors (e.g., sectors, age, career stage, gender, ethnicity, disability, geography, etc.)
- encouraging **diverse perspectives** from project team members and partners
- fostering an **inclusive environment** that empowers and engages all team members

[NOFO Section IV.B.2.(c)(4)d. Statement of Diversity and Inclusion, p. 20]

Proposal Evaluation Criteria

NCCOS | NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE

1. Importance and/or relevance and applicability to program priorities (35%)
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 (5%)

Timeline

LOIs DUE: October 18, 2023

LOI Responses: ~ November 2, 2023

Applications DUE: January 31, 2024

Panel Review: April 2024

Notification: May - July 2024

Project Start Date: September 1, 2024

[NOFO Section V.A. Evaluation Criteria, p. 29]

Advice to Potential Applicants

NCCOS | NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE

Read the NOFO, read the NOFO, read the NOFO!

Focus on the Program Priorities [Section I. B., p. 7]

Submit your LOI by email by the deadline – **October 18, 2023**

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

- Applicability of your 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, **January 31, 2024**

★ **If you are not submitting a proposal and have related expertise, please consider serving as a reviewer.**

Questions?

NCCOS | NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE

NOAA-NOS-NCCOS-2024-2008161

Letters of Intent Due 11:59 p.m. Eastern Time on October 18, 2023
Send to nccos.grant.awards@noaa.gov

Full Proposals Due 11:59 p.m. Eastern Time on January 31, 2024
Submit on grants.gov

★ **Quick reference guide for NCCOS CRP applications:**
https://cdn.coastalscience.noaa.gov/page-attachments/funding/FY24-Quick-Reference-Guide-for-NCCOS-CRP-Applications.pdf

Forms & example application package: https://coastalscience.noaa.gov/about/funding-opportunities/application-forms/

Send additional questions to:
Maggie Broadwater (ECOHAB Program Manager) at maggie.broadwater@noaa.gov
Laurie Golden (NCCOS Business Management Division) at laurie.golden@noaa.gov