The new Center for Ocean Leadership Priorities and Opportunities for Partnership

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UCAR COMMUNITY PROGRAMS

The Center for Ocean Leadership at UCAR

The Center for Ocean Leadership (COL) is the newest UCAR (University Corporation for Atmospheric Research) Community Program, since October 2022.

COL connects, convenes, and supports collaboration with the ocean science and technology community, represented by a network of affiliate institutions from academic, non-profit, and commercial sectors.





The Center for Ocean Leadership Affiliate Program

Who can be an affiliate?

Any US-based organization focused on ocean science, education, and technology Affiliation is FREE

Who are the current affiliates?

More than 80 organizations, including academia, non-profit groups, industry, aquaria, and philanthropic organizations

What are the benefits of affiliation?

- Connection to the affiliate network
- Information about events, opportunities, and issues
- Coordinated communication of ocean science community priorities
- Coordinated ocean education and workforce development activities
- Connection to UCAR education, research, and data programs

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Current COL Affiliate Program Activities

COL's developing affiliate program includes:

- Monthly newsletters, highlighting information useful to community.
- Survey of community priorities.

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- Planned virtual discussions (beginning 03/26/2024) to develop shared talking points on community priorities.
- Input into the future direction of COL through the Strategic Advisory Committee.

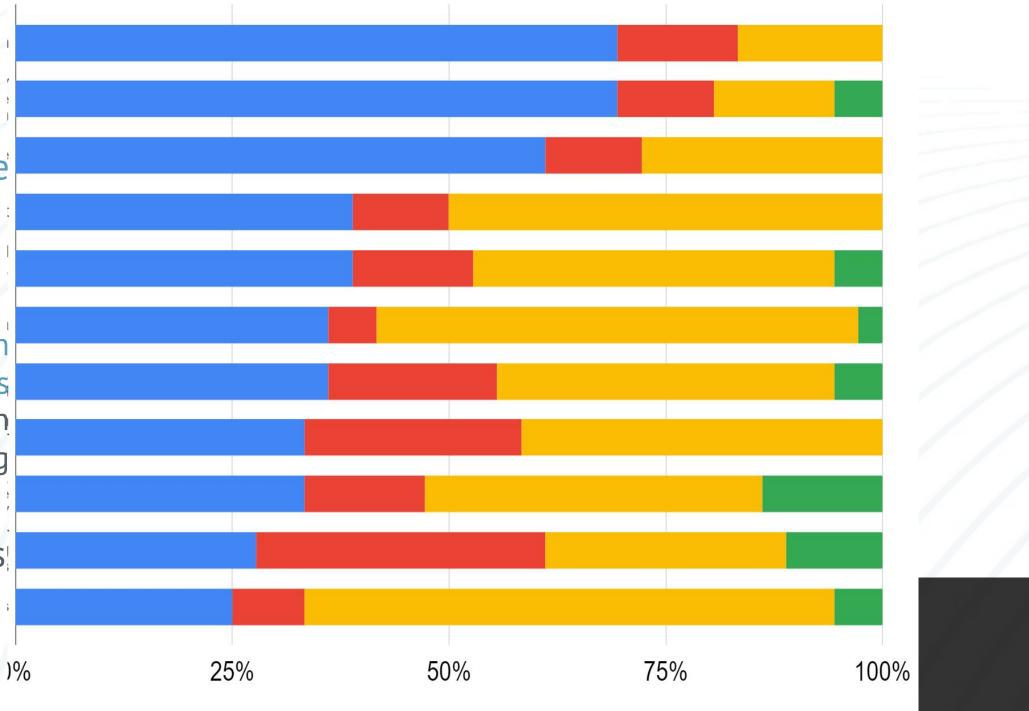
Opportunity for collaboration: coordinated communication of community priorities.



Summary of affiliate survey data

Which of the following are priorities for communication to policy makers?

high priority = medium priority = low priority = not a priority



Ocean observing system

Economic and national security implications of ocean climate change impacts and mitigation Coastal resilience

Ocean workforce development

Ocean renewable energy and CDR

Big ocean data Strengthening connections between research and stakeholder communities Marine life data collection, sharing, observation and monitoring Integrating DEI and environmental justice with research

public/private partnership frameworks

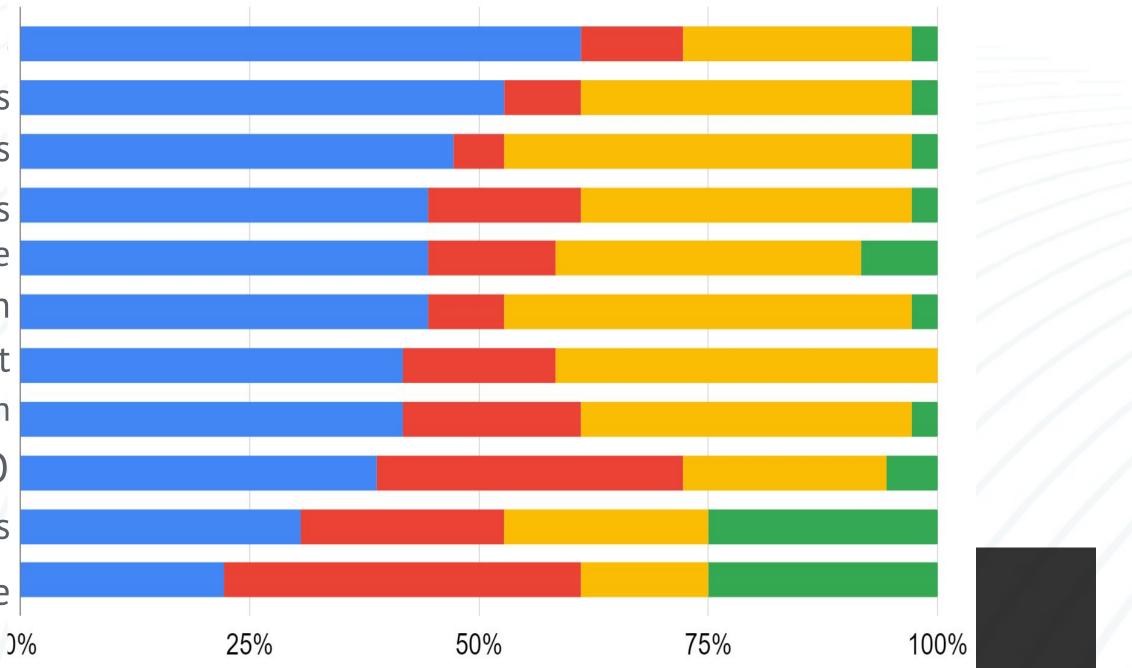
facilitating multi-agency activities

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Summary of affiliate survey data, cont...

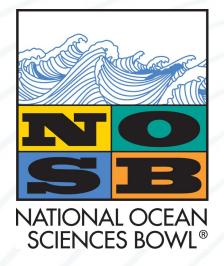
Indicate the relative priority of the following aspects of ocean observing for attention from policy makers

high priority = medium priority = low priority = not a priority



Observatory networks Data stewardship and access Ocean observing technology to fill critical gaps Transition from research to operational systems Recapitalization, modernization, and maintenance Integrated multidisciplinary exploration Academic research fleet Uncrewed systems and other recoverable ocean tech ARGO Other ocean observing system priorities Ocean drilling infrastructure COMMUNITY PROGRAMS

National Ocean Sciences Bowl



A COL education program, the National Ocean Sciences Bowl® (NOSB) is a **nationally recognized high school academic competition**. Students test their knowledge of the ocean sciences including biology, chemistry, physics, geology, technology, geography, and policy.

26 25 40,000+

Years Running

Regional Bowls Annually

Students Reached

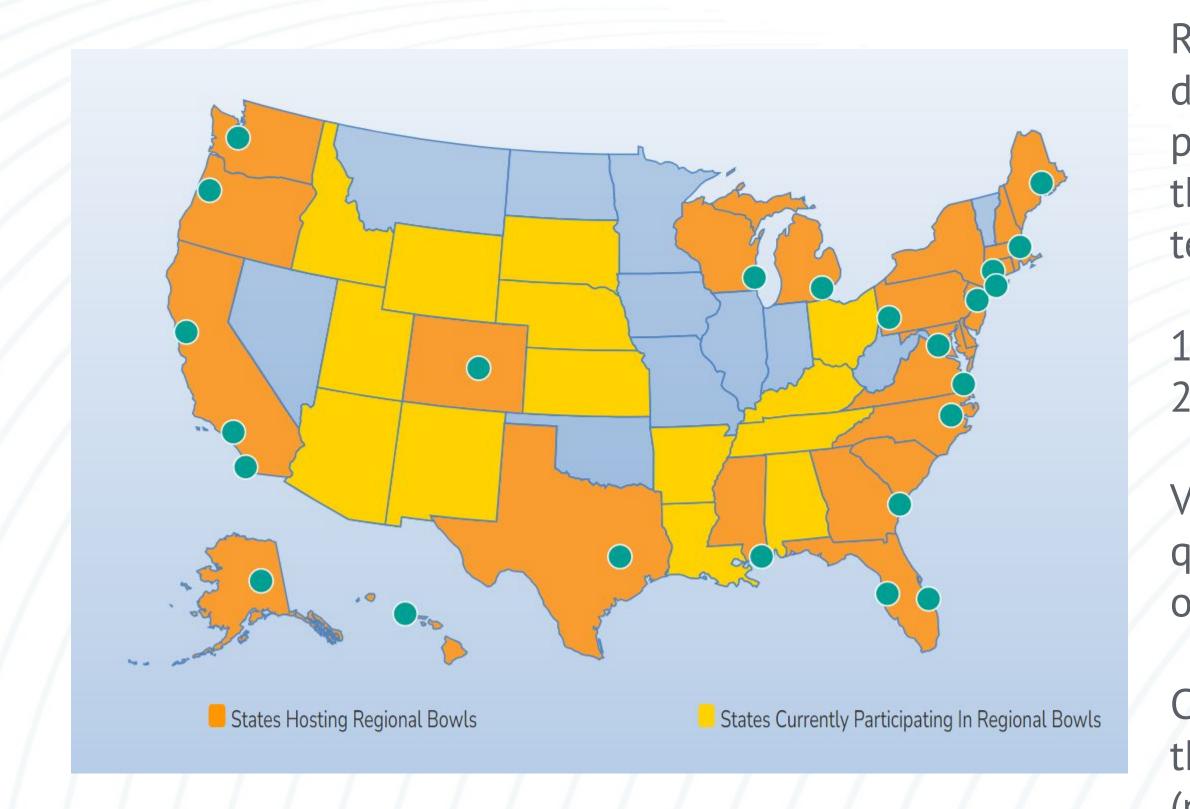
www.nosb.org nosb@ucar.edu





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NOSB regional bowls



Regional bowls take place annually during the winter/spring hosted by partners (often COL affiliates) around the country, assisted by COL's NOSB team.

17 regional bowls are taking place in 2024.

Volunteers write and review questions, and serve as regional bowl officials.

COL coordinates finals competition for the regional bowl winners (no finals in 2024).

COL's Ocean Observing Program

Strengthening Regional, National, and Global Networks and **Partnerships to Advance Ocean Sciences**

This Program manages major ocean, coastal, and Great Lakes initiatives and **provides** intellectual, administrative, and fiscal support for interagency and community coordination, such as...

REGIONAL EFFORTS

- Systems (NANOOS)

NATIONAL EFFORTS

- 100S)

INTERNATIONAL EFFORTS













Integrated Ocean Observing System (IOOS) Association Northwest Association of Networked Ocean Observing

Interagency Working Groups and Task Teams U.S. Integrated Ocean Observing System (U.S.

United Nations (UN) Ocean Decade Programs





Ocean Observing: Regional Support and Engagement





Ocean Observing: National Engagement and Collaboration



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Data Management and Cyberinfrastructure

Interagency Support: Subcommittee on Ocean Science and Technology (SOST) Biodiversity Interagency Working Group (IWG)

COL supports the SOST Biodiversity IWG, co-chaired by NOAA, NASA, and BOEM. It is composed of federal representatives who meet quarterly to discuss biodiversity research and collaborative opportunities, marine biological data archiving and accessibility, and new technologies, among many other marine biodiversity-related topics.

Current/recent IWG-supported activities include:

- The 2023 National Oceanographic Partnership Program (NOPP) Ocean Life Forum
- Development of a National Aquatic eDNA Strategy
- Development of a National Ocean Biodiversity Strategy
- The Summit on Ocean Biodiversity, hosted on January 23, 2024



The Summit on Ocean Biodiversity: (Left) Jane Lubchenco (Deputy Director for Climate and Environment at the White House Office of Science and Technology Policy); (Right) Summit organizers: Masha Edmondson (COL), Gabrelle Canonico (NOAA), Emmett Duffy (Smithsonian) and Katie Fillingham (COL).

Ocean Observing: International Engagement and Collaboration

COL provides coordination, document creation, and meeting support to improve the effectiveness of the ocean observing system, collaborating with a wide range of stakeholders to improve dialog and effective co-design.

Intergovernmental Oceanographic Commission, Global Ocean Observing System (GOOS) **Co-Design Program:** Requirements, technology, data management maturation through dialog with

- stakeholders and users
- CoastPredict Program: Advance knowledge to support products and services for coastal resilience

UN Decade for Ocean Science and Sustainable Development

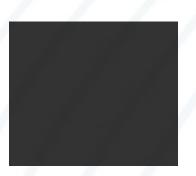
- **OASIS Program:** Observing Air-Sea Interactions Strategy
- Engage in the GOOS Programs listed above: A wide range of support and advisory activities
- **Support National Academies for Science 'OceanShots':**
 - OpenOceanCloud Working Group: An ad hoc group convened to advise agency cloud activity
 - Integrated Satellite and in situ design and data assimilation: Building interfaces and dialog
- Support Marine Life 2030: Convene, leverage, integrate, and apply ocean marine science knowledge











New Partnership with the Regional Wildlife Science Collaborative for Offshore Wind (RWSC)

In July 2023, COL signed a Memorandum of Understanding (MOU) with the **Regional Wildlife Science Collaborative for Offshore Wind (RWSC) to help** manage funding related to research projects focused on offshore wind and wildlife in U.S. waters.

- The research funding will be guided by a Science Plan which was released by RWSC in January 2024.
- For more information on RWSC, including a link to the Science Plan, please visit rwsc.org.

RWSC is a collaboration among U.S. federal agencies, Atlantic coast states, offshore wind companies, and environmental non-profits. It was formed in 2021 to coordinate offshore wind and wildlife research, data collection, and data management among those four sectors and with the broader research community. It is co-hosted by the Northeast Regional Ocean Council (NROC) and the Mid-Atlantic Regional Council on the Ocean (MARCO).







COL's future plans

Develop new coordinated programs to serve and support affiliate network, including industry partners, leveraging UCAR expertise for ocean community benefit:

- Workforce development: internships, training
- Data access and sharing
- Communication of priorities to policy makers

Serve as a trusted, knowledgeable, neutral broker, at intersection betweer academia/research and commercial activity, in the new blue economy.

Emphasize lowering barriers to participation, fostering a diverse and inclusive ocean sector.



