CA OOS Expressions of Interest Informational Webinar

18 June 2020, 11:00 AM - 12:00 PM

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CENTRAL & NORTHERN CALIFORNIA OCEAN

OBSERVING SYSTEM

Webinar Goals & Objectives

Goal: Introduce concepts related to the EOI call and answer any questions.

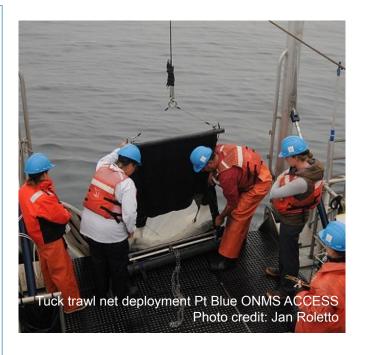
Objectives

- Discuss eligibility requirements
- Provide an overview of the proposal scoring criteria and timeline
- Discuss application process and proposal requirements
- Discuss potential project ideas
- Q&A



Webinar Agenda

- Program Background & Overview
- II. EOI Overview
- III. Project and applicant eligibility
- IV. Proposal scoring criteria
- v. Timeline
- VI. Application process
- VII. Q&A





U.S. Integrated Ocean Observing System (IOOS)

IOOS provides information on past, present, and future state of the coastal oceans to local, regional, and national users. Users include decision-makers, businesses, managers, and scientists.

Global Component

- —US contribution to Global Ocean Observing System (GOOS)
- -1 of 15 Regional Alliances of GOOS



-17 Federal agencies

Regional Imponent (RA/RCOOS)

- -11 Regional Associations
- -Stakeholder driven
- —Academia, state/local/tribal government, private industry



IOOS Societal Benefits:

- Improve predictions of ocean and weather conditions, and their effects on coastal communities and the nation
- ☐ Improve the safety and efficiency of maritime operations
- More effectively mitigate the effects of natural and anthropogenic hazards
- ☐ Improve national and homeland security
- ☐ Reduce public health risks
- More effectively protect and restore healthy coastal ecosystems
- ☐ Enable the sustained use of ocean and coastal resources

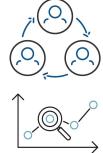
IOOS Program Goals

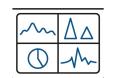
IOOS Vision - Improve lives and livelihoods with ocean, coastal, and Great Lakes information

IOOS Mission - To produce, integrate, and communicate high quality ocean, coastal and Great Lakes information that meets the safety, economic, and stewardship needs of the nation



- 1. Observation
- Data Management and Cyberinfrastructure (DMAC)
- 3. Modeling and Analysis,
- 4. User-Driven Products and Tools,
- 5. Enterprise Excellence.















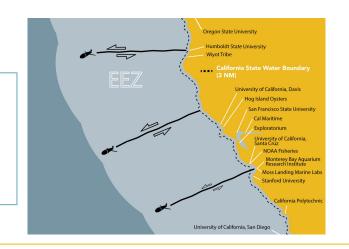


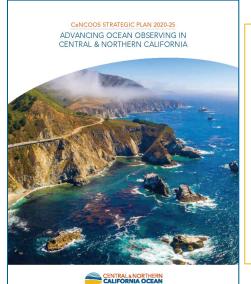


CeNCOOS 5-Year Priorities

Our Ocean Vision - A healthy and prosperous California coastal ocean powered by information solutions.

CeNCOOS Mission - Translating data into action through the production, curation, and delivery of high-quality ocean information.





CeNCOOS 5-Year Strategies

Strategy 1: Engage marine stakeholders to drive the creation of integrated information products that are valuable for decision-making.

Strategy 2: Observe coastal and ocean physical, biogeochemical, biology, and ecosystem variables to meet regional stakeholder needs.

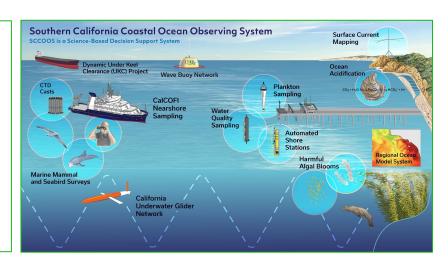
Strategy 3: Streamline access to information, including through a publicly accessible Data Portal.

Strategy 4: Provide access to improved ocean models and other tools to scale information from individual observations and to make data relevant for policy and management.

SCCOOS Priorities

Our Ocean Vision - A healthy and prosperous California coastal ocean powered by information solutions.

SCCOOS Mission - To produce, integrate and communicate sustained long-term, high-quality coastal and ocean observations that helps ensure safety, economic and environmental resilience, and sustainable use of the coastal ocean.





SCCOOS Emerging Priorities

- Integrated User-Driven Product Development
- Ocean Acidification and Hypoxia
- Coastal Hazards sea level rise and inundation

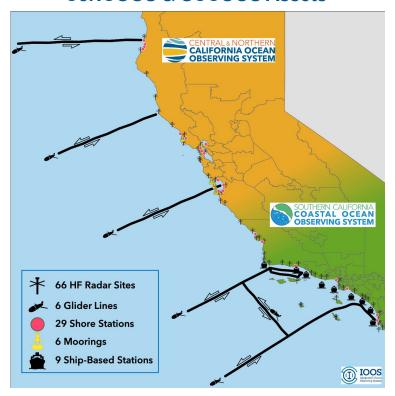


Call for Expressions of Interest (EOIs)

The <u>US Integrated Ocean Observing</u> System (IOOS) FY 2021 Notice of Federal Opportunity was released on May 26, 2020. This award will cover the 5-year period June 1, 2021, through May 31, 2026, and will sustain critical observing, modeling, product, and service activities, while also providing opportunities to add new, multidisciplinary projects to the system. To develop the proposal, we are soliciting Expressions of Interest (EOIs).

Submission Deadline July 8, 2020

CeNCOOS & SCCOOS Assets



Funding Tiers: Tier 1 (\$3M) versus Tier 2 (\$6M)

Tier 1: \$3M per year

- The more realistic funding level
- Aligns with current levels of support
- Much more likely to receive funding over the life cycle of the 5-year award

Tier 2: \$6M per year

- Considered a "reach" budget
- Significantly greater than the current or anticipated funding
- Potential NOAA or external funds







Core vs Emerging Efforts

Core Efforts:

- will most likely appear within Tier
 1 proposals.
- Activities that are currently funded
- have high strategic alignment
- ten years or more of time series data contributing reference data
- forming one of our core subsystem capabilities (HFR, gliders, shore stations, cruise lines, moorings, modeling, and data portal efforts)

Emerging Efforts:

- Emerging efforts will likely be included within Tier 2 proposals.
- complement long-term core capabilities
- major additions to the scope of Core Efforts,
- a major expansion of developing capability,
- new capabilities not yet integrated into our efforts.



Eligible applicants

Past, present, and prospective CA Ocean Observing System (CA OOS) Principal Investigators

Teams of information providers, particularly those representing region-wide or state-wide geographic scopes and interdisciplinary teams, including members from underrepresented communities, are encouraged to collaborate on EOIs.

Applicant categories (examples)

- Data and/or information providers
- Data scientists/specialists
- Modelers
- Product developers
- Social scientists
- Outreach and education specialists
- Industry and/or other stakeholders.





Eligible projects

Proposed projects may include any activities that fit within the <u>CeNCOOS</u> <u>Strategic Plan for 2020-2025</u>, <u>SCCOOS 2016-2021 Strategic Operational Plan</u>, and/or are consistent with the <u>IOOS Funding Announcement</u>.

Engagement/ Outreach	Observation	Data Management & Cyberinfrastructure	Models	Information Products
Curriculum using CA OOS Data/Portal	Coastal observing networks (climate, OAH)	Data acquisition/mgmt	West Coast & CA ROMS	Fisheries, IEA support
Interactive exhibits and visualizations	НАВМАР	Data delivery via Portal	COAMPS	Oyster Dashboards
Curated visitor experience using CA OOS data	Gliders	Ship-based data integration	WCOFS enhanced data assimilation/ products	Ports/Navigation
Targeted outreach to underserved communities	HFR	Novel data types delivery and integration (e.g. acoustics)	Nested fine scale for estuaries/bays	Marine Heatwaves, atmospheric rivers, drought
	Biology & ecosystems		BGC nowcasts/forecasts	Ocean sound

Collaboration sign-up sheet available online

EOIs Selection Process

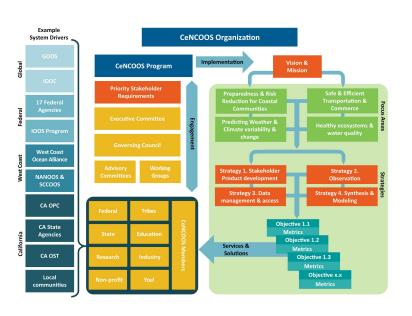
The <u>CeNCOOS Governing Council</u> and <u>SCCOOS Executive Steering</u>

<u>Committee</u> will serve as the EOI review committees to decide which EOIs will be selected to move forward in the CeNCOOS and/or SCCOOS full proposals.



CeNCOOS Framework for Decision-Making

The CeNCOOS Framework for Decision-Making contains the basic components of system operations, structured priority setting, and project consideration processes, which will allow the Governing Council, in coordination with the Director, to make strategic decisions about future CeNCOOS endeavors and choices.



Primary Considerations

- Responsiveness to
 Established IOOS/CA OOS
 Priorities & Drivers
- Legacy & Sustainability
 Considerations
- Reinforcement of Unique or Partner Role CA OOSes
- Likelihood of success

Secondary Considerations

- Impact of Project
- Geographic Considerations
- Time Scale of Funding
- Cost & Amount of Funding

We are looking for EOIs that communicate an outstanding approach using high quality standards and methods, addressing an extremely important societal issue, and is highly aligned with CeNCOOS Strategic Plan.

https://www.cencoos.org/organization-overview/documents/

SCCOOS Framework for Decision-Making

SCCOOS priorities and objectives are aligned with the seven societal goals as outlined in the IOOS Summit Report. SCCOOS focus areas highlight these priorities and are used as part of the SCCOOS Framework for Decision-Making. The matrix of SCCOOS four focus areas and IOOS goals helps guide the Executive Steering Committee, in coordination with the Executive Director, to make strategic decisions about future SCCOOS endeavors and choices.

HF Radar Example

SCCOOS Focus Areas

		Marine Operations	Coastal Hazards	Climate Variability and Change	Ecosystem, Fisheries and Water Quality
	Sustain Observations				
1008	Deliver Data				
Goals	Support Model Predictions				
	Provide Integrated Products				
	Partnerships, Stakeholder Engagement				

Proje	ect Application
	NA or not yet
	Some
	Medium
	Strong

Info Box 1 IOOS SOCIETAL BENEFITS

IOOS meets the nation's need for ocean coastal, and Great Lakes information by integrating across seven societal benefit areas.

- Improve predictions of climate and weather and their effects on coastal communities and the nation;
- Improve the safety and efficiency of maritime commerce;
- More effectively mitigate the effects of natural hazards:
- Improve public safety and national and homeland security:
- · Reduce public health risks;
- More effectively protect and restore healthy coastal ecosystems; and
- Enable the sustained use of ocean and coastal resources.



Timeline: EOIs and Proposal

Date	Activity
26-May 2020	NOAA IOOS FFO Released
8-June 2020	SCCOOS and CeNCOOS Opening of online call for Expressions of Interest
18-June 2020	SCCOOS and CeNCOOS EOI Overview Webinar
8-July 2020	SCCOOS and CeNCOOS Close of call for Expressions of Interest
July 2020	Review EOIs by SCCOOS Executive Steering Committee and CeNCOOS Governing Members
Early August 2020	Approve EOI concepts to go forward in the full proposal and communicate outcomes to all applicants
Fall 2020	Receive Statements of Work, Budgets, Budget Justifications
31-December 2020	SCCOOS and CeNCOOS 2021-2026 IOOS proposal due



Application Process – EOI Submission Form

Online submission form available at cencoos.org/eoi and sccoos.org/sccoos-and-cencoos-eoi/eoi

EOIs should be submitted by a single PI or co-PI.

Application close 12:00am PST on July 8th.

Interest Submission Form
Advancing California's Ocean Observing Systems (2021-2026)
Submission Deadline: July 8, 2020
The name and photo associated with your Google account will be recorded when you upload files and submit this form. Not alex.cencoos@gmail.com? Switch account
* Required
Your email
1. Project Title or Field of research *
Your answer
2. Lead Principal Investigator (Name, Affiliation, Email Address, Phone Number) *



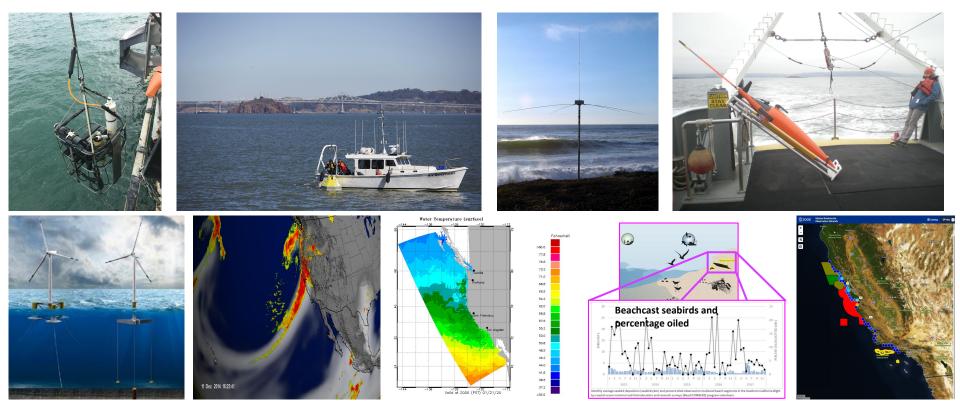
EOI Submission Form Overview

The form has multiple-choice options and text limited sections, as well as a place to upload supporting files such as a Gantt (timeline) chart, figures, or tables.

- 1. Project title or field of research
- 2. Lead Principal Investigator
- 3. Co-investigators and collaborators
- 4. Geographic scope
- 5. Societal applications
- 6. Infrastructure/Technology
- 7. IOOS Core Variables
- 8. The Issue (1500 characters)
- 9. Meeting End-user Needs (1500 characters)
- 10. Goals and Methods (1500 characters)
- 11. Objectives, outcomes, and deliverables (3000 characters)
- 12. Data Management and Cyberinfrastructure (DMAC) Plan (3000 characters)
- 13. New Initiatives (3000 characters)
- 14. Funding Request (1500 characters)
- 15. Supporting documents

Questions & Answers

Visit <u>cencoos.org/eoi</u> or <u>sccoos.org</u> for more information.



EOI Submission Form - Societal Applications

- Aquaculture and Fisheries
- Biodiversity and Ecosystem Health
- Climate Change and Variability
- Data Management and Cyberinfrastructure (DMAC)
- Education and Outreach
- Harmful Algal Blooms
- Information Products and Solutions (e.g. data dashboards, ocean health indicators, curated data views, bulletins)

- Modeling and Analysis
- Navigation and Commerce
- Ocean Acidification and Hypoxia
- Water quality (e.g. Pollution, Nutrients, Disease)
- Other local/regional priority areas (please specify)



EOI Submission Form – Infrastructure/Technology

- Acoustics
- Animal-borne tags or sensors
- Autonomous Underwater Vehicle (AUV)
- Buoys & Moorings
- High-Frequency Radar (HFR)
- Imaging or video
- LiDAR
- Models: Forecasts, Nowcasts, and Hindcasts

- Omics
- Optical sensors (biogeochemistry)
- Profiling floats or drifters
- Remotely Operated Vehicles (ROV)
- Satellites (remote sensing)
- Ship-Based
- Shore Stations
- Unmanned Aerial Vehicles (UAV)
- Unmanned Surface Vehicles (USV)
- Other (please specify)



EOI Submission Form – IOOS Core Variables

PHYSICS

- Bathymetry
- Bottom character
- Currents
- Heat flux
- Ice distribution
- Salinity
- Sea level
- Surface waves
- Stream flow
- Temperature
- Wind speed and direction

BIOGEOCHEMISTRY

- Acidity
- Colored dissolved organic matter
- Contaminants
- Dissolved nutrients
- Dissolved Oxygen
- Ocean color
- Optical properties
- Pathogens
- Partial pressure of CO2
- Total suspended matter

BIOLOGY AND ECOSYSTEMS

- Biological vital rates
- Coral species and abundance
- Fish species/ abundance
- Invertebrate species and abundance
- Marine mammal species/abundance
- Microbial species/ abundance/activity
- Nekton diet

- Phytoplankton species/abundance
- Sea birds species/abundance
- Sea turtles species/abundance
- Submerged aquatic vegetation species/abundance
- Sound
- Zooplankton species/abundance



EOI Submission Form – The Issue (1500 characters)

What is/are the important oceanographic or societal challenge(s) being addressed by this work?

How will this work improve understanding and response to these processes, drivers, and environmental changes?



EOI Submission Form – End-users(1500 characters)

Who are the stakeholders and end-users for this effort?

Identify key users and explain how the data and/or product(s) will be made useful/usable for stakeholders.



EOI Submission Form – Goals and Methods (1500 characters)

What are you proposing to do?

How will the issue be addressed and what are the high-level goals?



EOI Submission Form – Objectives, Deliverables, and Outcomes (3000 characters)

Describe your project aims and objectives.

Use SMART (specific, measurable, achievable, realistic, and time-bound) objectives when possible.

Provide a timeline or Gantt chart if possible.



Data Management and Cyberinfrastructure (DMAC) Plan (3000 characters)

How will the data and information generated from the project be managed to ensure the data are FAIR (findable, accessible, interoperable, and reusable), timely, and high-quality?

What DMAC requirements might be associated with the efforts you are proposing?

Will this require additional DMAC investment?



New Initiatives (3000 characters)

If you are an existing PI please list any new initiatives you'd like to achieve in the next five-year award.

This could include consideration of: (1) aging infrastructure; (2) advancing technologies; (3) product delivery (4) potential for leveraging and improving efficiencies.

This can include a reference to additional PIs, institutions/NGOs, industry sectors, technologies/platforms, PIs, geographic scope, end-user applications, etc.

Note: You have the option to submit an additional EOI for new initiatives. If you are proposing a build-out, recapitalization, or significant expansion of one or more sub-systems (i.e. observations, DMAC, models, or products) please submit a separate EOI form



Funding Request: (1500 characters)

What is your estimated annual funding request? At this time we do not need a detailed budget or budget justifications but are requesting how much you anticipate you will need annually to support your project.

There is no funding cap for a single EOI, but keep in mind that RAs generally do not fund projects in excess of \$300,000.

Budgets that are statewide or cover a major subsystem can be higher.



Supporting documents

Additional: Any additional supporting information you'd like to include (e.g. references, other needs, partners).

Please upload additional documents here (e.g., Gantt chart, figures, tables).



END.

