

**BADLY REFLECTORS**  
Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

**CAUTION**  
Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

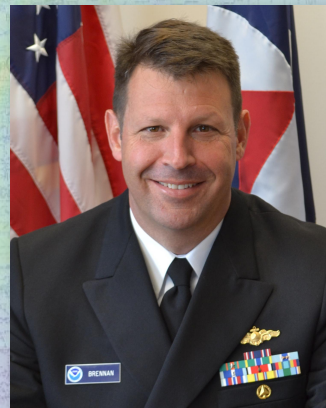
During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

reflect actual conditions following fixed aids to navigation may have been damaged or destroyed. Buoy only have been moved from their charted positions, damaged, sunk, extinguished or otherwise made inoperative. Mariners should not rely upon the position or operation of an aid to navigation. Wrecks and submerged obstructions may have been displaced from charted positions. Pipelines may have become uncovered or moved.  
Mariners are urged to exercise extreme caution and are requested to report any aid to navigation disappearance and hazards to navigation to the nearest United States Coast Guard cutter.

**MAGNETIC VARIATION**  
Magnetic variation curves are shown on this chart. Magnetic variation is shown in degrees. It is shown in degrees and the variation is increasing. It should change in opposite direction to the variation shown on the chart.

**FY24**

# Brennan Matching Fund Informational Webinar



**In honor of RDML Richard T. Brennan**

*We will start at 2pm E.T.*

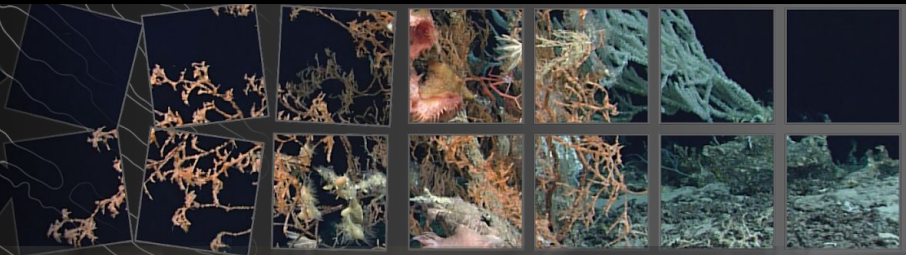
**Meredith Westington**

**NOAA Integrated Ocean and Coastal Mapping**

**Christy Fandel**

**Chief, Operations Branch, Hydrographic Surveys Division**

# Seminar Logistics



- ❑ We encourage you to share input and feedback using the webinar and email:
  - ❑ We will be recording; attendees or their likeness will not be posted
  - ❑ Use “Questions” function to write your questions.
  - ❑ When submitting a question, please let us know if you would like to speak and we will unmute you. We will hold questions for the Q&A portion.
  - ❑ You can email us at [iwgocm.staff@noaa.gov](mailto:iwgocm.staff@noaa.gov) for any follow-up questions.
  - ❑ If you are having technical difficulties, please contact Amber Butler at [amber.butler@noaa.gov](mailto:amber.butler@noaa.gov).



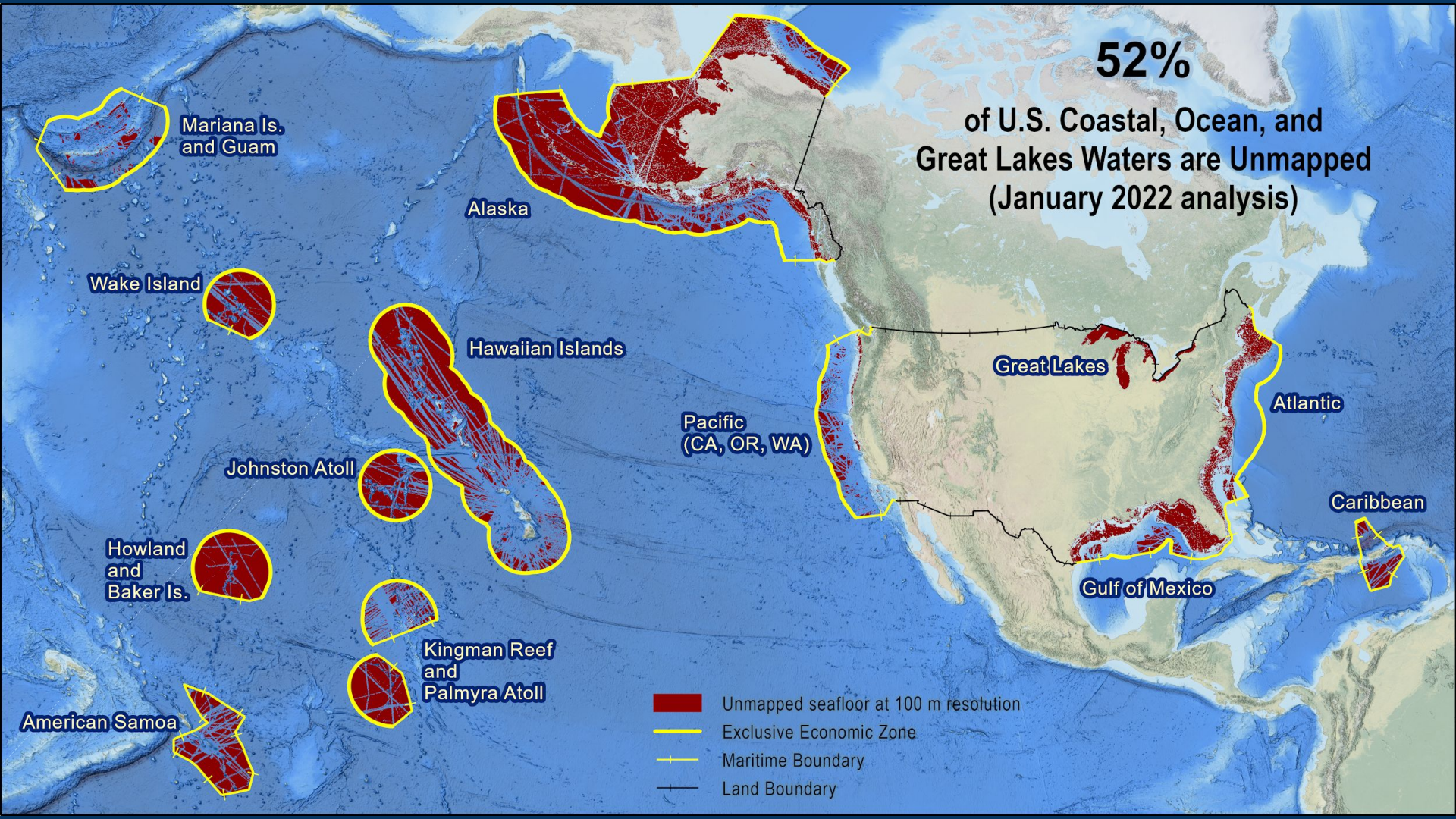
# FY24 NOAA Rear Admiral Richard T. Brennan Matching Fund Program





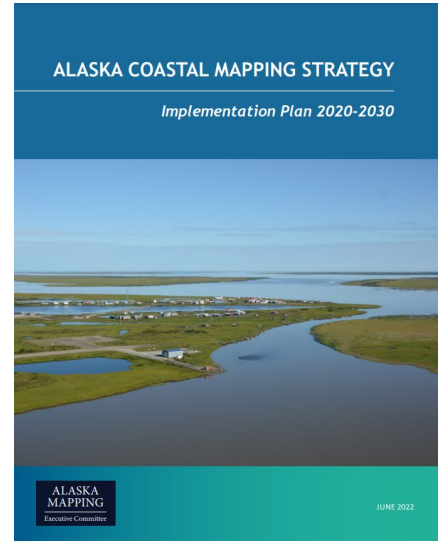
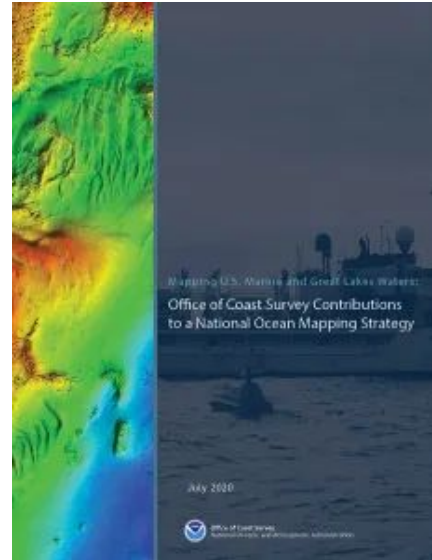
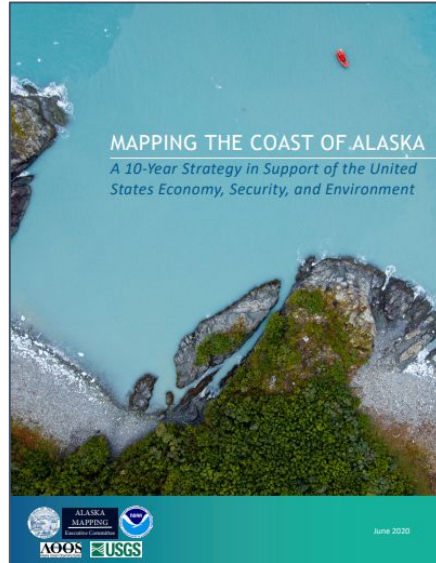
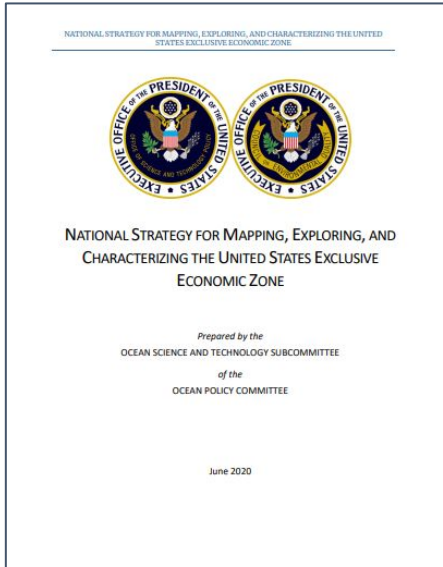
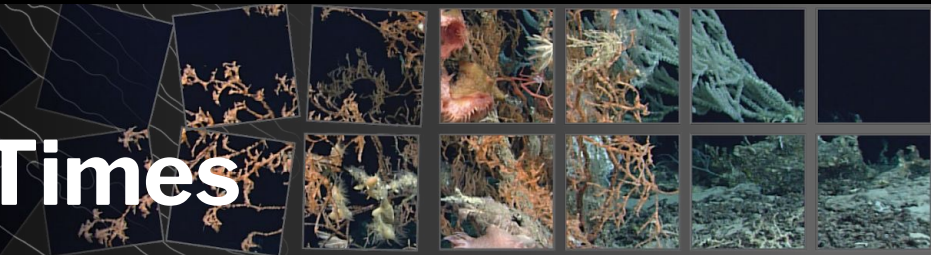
**52%**

**of U.S. Coastal, Ocean, and  
Great Lakes Waters are Unmapped  
(January 2022 analysis)**





# Map Once, Use Many Times



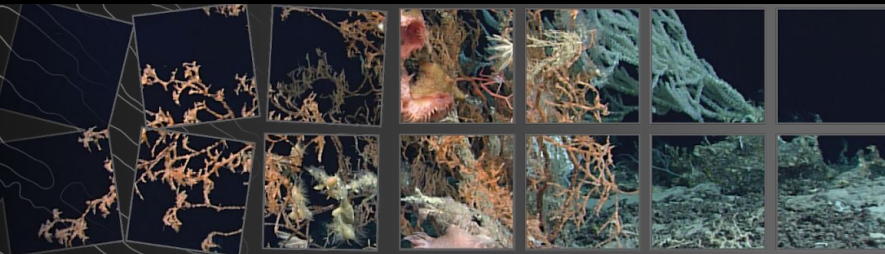
<https://iocm.noaa.gov/about/strategic-plans.html>

# Matching Fund in Brief

## GOALS

- ❑ Leverage NOAA and non-Federal partner funds to acquire more ocean and coastal mapping data collected by qualified contract surveyors during FY 2024
- ❑ Increase hydrographic surveying and coastal mapping to support:
  - ❑ Safer navigation
  - ❑ Hazard mitigation for coastal resilience
  - ❑ Preservation of marine habitats and heritage
  - ❑ Coastal and ocean science
  - ❑ Deeper understanding of natural resources for sustainable ocean economies
  - ❑ **MANY** other activities

# What's New for FY24?



- ❑ Subject to appropriations, NOAA will provide up to 70 percent of the total project cost, with the selected entity providing at least 30 percent of the total project cost.
- ❑ New office hours opportunity to discuss proposals in advance of the deadline.
- ❑ Cost estimator worksheet available by contacting [iwgocm.staff@noaa.gov](mailto:iwgocm.staff@noaa.gov).

NOAA ships Fairweather and Rainier, photo by NOAA



# Areas of Focus

For this opportunity, proposals will be considered that are aligned with national priorities for climate and infrastructure, and the goals of the NOMECS, ACMS, and the Coast Survey Ocean Mapping Plan



- A. Map the United States Exclusive Economic Zone (EEZ)**
- B. Expand Alaska Coastal Data Collection to Deliver the Priority Geospatial Products Stakeholders Require**
- C. Map the full extent of waters subject to U.S. jurisdiction to modern standards**



United States Interagency Elevation Inventory

X HIDE LAYERS HOW-TO HELP

IDENTIFY BASEMAP SHARE

U.S. Mapping Coordination  
A Collaboration Site for Mapping Data Acquisition

seasketch

English Login About Help Sign Out

Data Layers My Plans Participate

Data Layers Basemap Legend & Ordering

Home Web Map: Planned NOAA Hydrographic Survey Projects - 2019-2021

Details Basemap

About Content Legend

Legend

Planned\_Survey\_Areas

OCS Survey Plans

- 2019
- 2020
- 2021
- 2022
- 2023

1:36,978,595.47

United States Department of Commerce

Esri GEBCO IHO IGC GEBCO DeLorme NOAA

## NOAA National Bathymetric Source Data

bathymetry earth observation marine navigation model oceans oceans

### Description

The National Bathymetric Source (NBS) project creates and maintains high-resolution bathymetry composed of the best available data. This project enables the creation of next-generation nautical charts while also providing support for modeling, industry, science, regulation, and public curiosity. Primary sources of bathymetry include NOAA and U.S. Army Corps of Engineers hydrographic surveys and topographic bathymetric (topo-bathy) lidar (light detection and ranging) data. Data submitted through the NOAA Office of Coast Survey's external source data process are also included, with gaps in deep water filled through Global Multi-Resolution Topography, a merged model of bathymetry. Different vertical datums and file formats are made available to meet various uses. The BlueTopo folder includes multilayer floating point GeoTIFFs with associated Raster Attribute Tables (RAT) containing elevation, vertical uncertainty, with other quality metrics and source information. These files are arranged in a tiling,

### Resources on AWS

Description  
NOAA National Bathymetric

Resource type  
S3 Bucket

Amazon Resource Name (ARN)  
arn:aws:s3:::noaa-ocs-nat

AWS Region  
us-east-1

AWS CLI Access (No AWS acc  
aws s3 ls --no-sign-req

## NOAA National Bathymetric Source Data

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## Resources on AWS

**Description**  
NOAA National Bathymetric Source Data

Resource type  
S3 Bucket

Amazon Resource Name (ARN)

arn:aws:s3:::noaa-ocs-nationalbathymetry-pds

AWS Region

**AWS CLI** Access (No AWS account required)

```
aws s3 ls --no-sign-request s3://noaa-ocs-nation
pds/
```

## Explore

[Browse Bucket](#)



## HYDROGRAPHIC SURVEYS SPECIFICATIONS AND DELIVERABLES

May 2020



# Eligibility

- ❑ Non-Federal entities. Examples:
  - ❑ State/local governments
  - ❑ Tribal entities
  - ❑ Universities/academia
  - ❑ Private sector
  - ❑ NGOs/philanthropic orgs
  - ❑ Coalitions of non-federal entities
- ❑ Qualifying proposals must demonstrate the ability to provide at least **30%** matching funds, for transfer to NOAA by September 2023 via memorandum of agreement

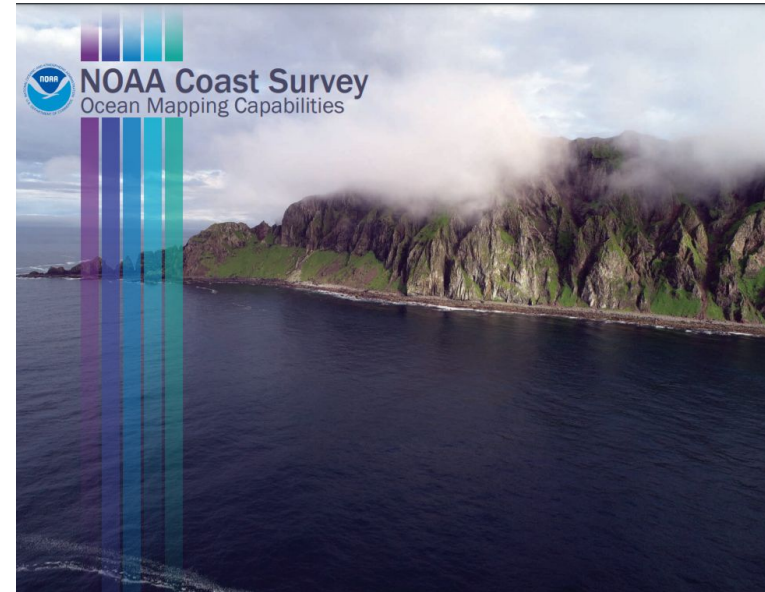


Big Sur coastline, photo by NOAA



# What NOAA Brings

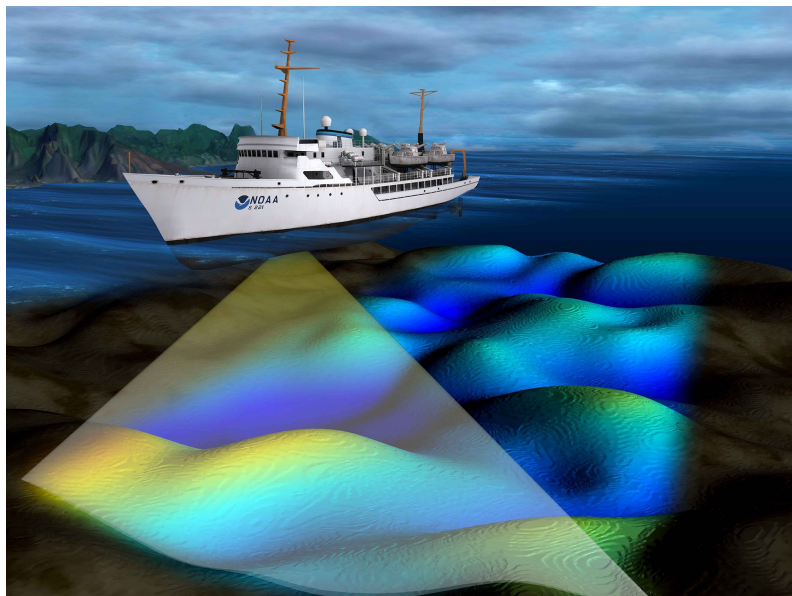
- ❑ Hydrographic surveying and shoreline mapping expertise
- ❑ 70% match
- ❑ 33 U.S.C. 883e authority to receive funds
- ❑ Value-added contract management and oversight
- ❑ Survey compliance
- ❑ Survey/control and correction/calibration services
- ❑ Data processing, quality assessment and review of all acquired hydrographic data
- ❑ Data management and stewardship from ping to hi-res products to archive at NOAA National Centers for Environmental Information



<https://nauticalcharts.noaa.gov/about/docs/about/ocean-mapping-capabilities.pdf>

# Products

Potential products include, but not limited to:



- ❑ Bathymetric data (multibeam, single beam, lidar)
- ❑ Backscatter
- ❑ Water column (depth dependent)
- ❑ Side scan sonar imagery
- ❑ Feature detection reports
- ❑ Sensor/data corrections and calibrations (e.g., conductivity, temperature and depth casts)
- ❑ Survey and control services, including the installation, operation, and removal of water level and Global Positioning System stations
- ❑ Data processing, quality assessment and review of all acquired hydrographic data
- ❑ Data management and stewardship through data archive at the National Centers for Environmental Information
- ❑ High-resolution topographic/bathymetric product generation



# How Mapping is Executed



## Geospatial Contract Vehicles

A number of federal agencies have geospatial contract vehicles that are available for use by other agencies and partners. A Memorandum of Agreement must be signed detailing the partnership but once that is accomplished, the partner benefits from the expertise these agencies have in managing and acquiring ocean and coastal mapping data with the private sector.

**Hydrographic Surveying Services:** NOAA's Coast Survey manages this contract vehicle for hydrographic data, including multibeam sounding data, side scan sonar, acoustic backscatter, lidar, processing of the data, quality control and resulting products.

**Shoreline Mapping Support Services:** NOAA's National Geodetic Survey manages this contract for remote sensing, digital shoreline mapping, surveying, and associated tasks. Services include planning; collecting remotely sensed data from ground, aircraft, and/or satellite based sensors; conducting ground geodetic surveys; determining tidal datums; and digital map compilation.

# Funding Availability & Project Period

Year 1: Coast Survey and the National Geodetic Survey anticipate funding up to five survey projects at a 70% match of up to \$1 million per project. All projects are expected to have an FY2024 project start date and all non-Federal partner matching funds must be received by NOAA in September 2023. NOAA intends to complete each selected project within two (2) years.



# Deadlines and Dates

To: [iwgocm.staff@noaa.gov](mailto:iwgocm.staff@noaa.gov)

- ❑ **September 30, 2022:** Due date for proposals, statements of interest regarding potential future proposals, and all supporting GIS files
- ❑ **November 1, 2022:** NOAA issues its decisions on proposals
- ❑ **November 2022 - January 2023:** NOAA works with selected partners to develop memoranda of agreement to facilitate the transfer of funds from the non-Federal partner to NOAA
- ❑ **February 2023:** NOAA finalizes the memoranda of agreement with partners
- ❑ **June-September 2023:** Non-Federal partners transfer matching funds to NOAA; funds must be available to NOAA for contracting in October 2023
- ❑ **January-September 2024:** NOAA issues task orders to its survey contractors for NOAA/partner FY24 projects



# Submission Requirements



Six (6) total pages (plus optional GIS files of project areas) and the following **three** components:

1. A project title; executive summary (3-5 sentences); and the names, affiliations, and roles of the project partners and any co-investigators, as well as the project lead that will serve as primary contact (1 page maximum).
2. A justification and statement of need; description and graphics of the proposed survey area, including relevance to the strategic areas of focus noted in Section III and degree of flexibility on timing of survey effort (4 pages maximum).
3. A project budget that lists the source(s) and amount(s) of funding that the partner would provide as its match to NOAA. Budget must confirm that partner funds can be transferred to NOAA by September 2023 (1 page maximum).



# Evaluation Criteria



Proposals will be evaluated by the Brennan Matching Fund Program Management Team.

E.g., does the proposal have:

- ☐ Intrinsic IOCM value and/or relevance to NOAA missions and priorities?
- ☐ Clear need, anticipated outcomes, public benefit?
- ☐ POC and partners identified? Funding sources identified?
- ☐ Realistic proposed budget?
- ☐ Feasibility, flexibility?

# Questions?

We want to hear from you!

Interested, but the timing doesn't work? You'd consider submitting a proposal in future?

One page letter of interest:

Tell us what your timing hurdles are, where/what you are interested in, potential partners if more time, etc.

If you have outstanding questions, you can also join us for office hours on September 14th by emailing [iwgocm.staff@noaa.gov](mailto:iwgocm.staff@noaa.gov)



# Contact information

Proposals must be submitted in PDF format via email to:

[iwgocm.staff@noaa.gov](mailto:iwgocm.staff@noaa.gov)

by **September 30, 2022**

FOR FURTHER INFORMATION CONTACT:

Meredith Westington, NOAA Integrated Ocean and Coastal Mapping

(505) 278-9851 - [meredith.westington@noaa.gov](mailto:meredith.westington@noaa.gov)

Or

Paul Turner, NOAA Integrated Ocean and Coastal Mapping

(302) 648-7612 - [paul.turner@noaa.gov](mailto:paul.turner@noaa.gov)

# Questions?