

OER's Federal Funding Opportunity Overview: Process and Year in Review

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Ocean Exploration Advisory Board Nineteenth Meeting
April 7-8, 2021
Virtual

Outline

- Overview of OER federal funding opportunity (FFO) process
- FFO request for proposal topics
- FY20 FFO summary
- FY16 - FY20 FFO summary
- FFO funded 2020 fieldwork
- What's next for the FFO



Image courtesy of Craig Smith and Diva Amon, ABYSSLINE Project

OER FFO Process

Phase I

Grants
Notice
Created and
Published

Phase II

Pre-Proposals
Submission and
Internal
Assessment

Phase III

Full Proposals
Submission and
Administrative
Assessment

Phase IV

Full
Proposals
External
Review

Phase V

Management
and Business
Review,
Selection,
Award, and
Follow-up

FFO Created and Published



1. OER selects regions and/or topics for next fiscal year funding announcement based on identified mission needs and priorities
 - **NEW:** For FY22, OER will include language on sexual harassment prevention
2. OER publishes grants notice on Grants.gov
3. OER distributes announcement through relevant email lists, OER website, social media, *Okeanos Explorer* participants, etc.)
 - **NEW:** For FY22, OER will again host a webinar for prospective applicants once the grants notice is published

Pre-Proposal Submission and Internal Assessment



1. Applicants submit pre-proposals to OER via email
2. OER team assesses pre-proposals using five criteria:
 - Relevance to NOAA and OER missions and goals
 - Scientific and technical merit
 - Applicant qualifications and competence (including past performance on OER awards)
 - Costs for specific items and overall project cost (including value of cost-sharing and/or in-kind contributions)
 - Outreach and education/diversity and inclusion
3. OER responds to applicants encouraging or discouraging full proposal submission

Full Proposal Submission and Administrative Assessment



1. Applicants submit full proposals (only if they submitted a pre-proposal) by deadline—no exceptions
 - Nonfederal applicants submit proposals through Grants.gov
 - Federal applicants email proposals to OER
2. OER reviews each proposal for completeness before further review

Full Proposal Two Step Review



1. Mail Review

- OER sends each proposal to at least three mail reviewers who are experts in their field and of the project topic
- Reviewers review proposals using published evaluation criteria and return by date established by OER

2. Panel Review

- OER selects panelists who are experts in their field and also have a broad knowledge of the topics of the funding opportunity
- Panelists review and score each proposal using published evaluation criteria, mail reviews, and their expertise and knowledge
 - Panelists do not rank proposals and are not asked to reach a consensus

Management and Business Review, Selection, Award, and Follow-up



1. OER ranks proposals using mail reviews and panel scores
2. OER recommends proposals for funding based on final ranking, office priorities/budget constraints
3. OER negotiates budget with applicants, if necessary
4. Applicants revise proposals, if necessary
5. NOAA Grants Management Division reviews final proposal packages and makes grant awards

OER FFO Process: National Science Foundation (NSF) Comparison

OER

Phase I

FFO Created
and Published

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NSF

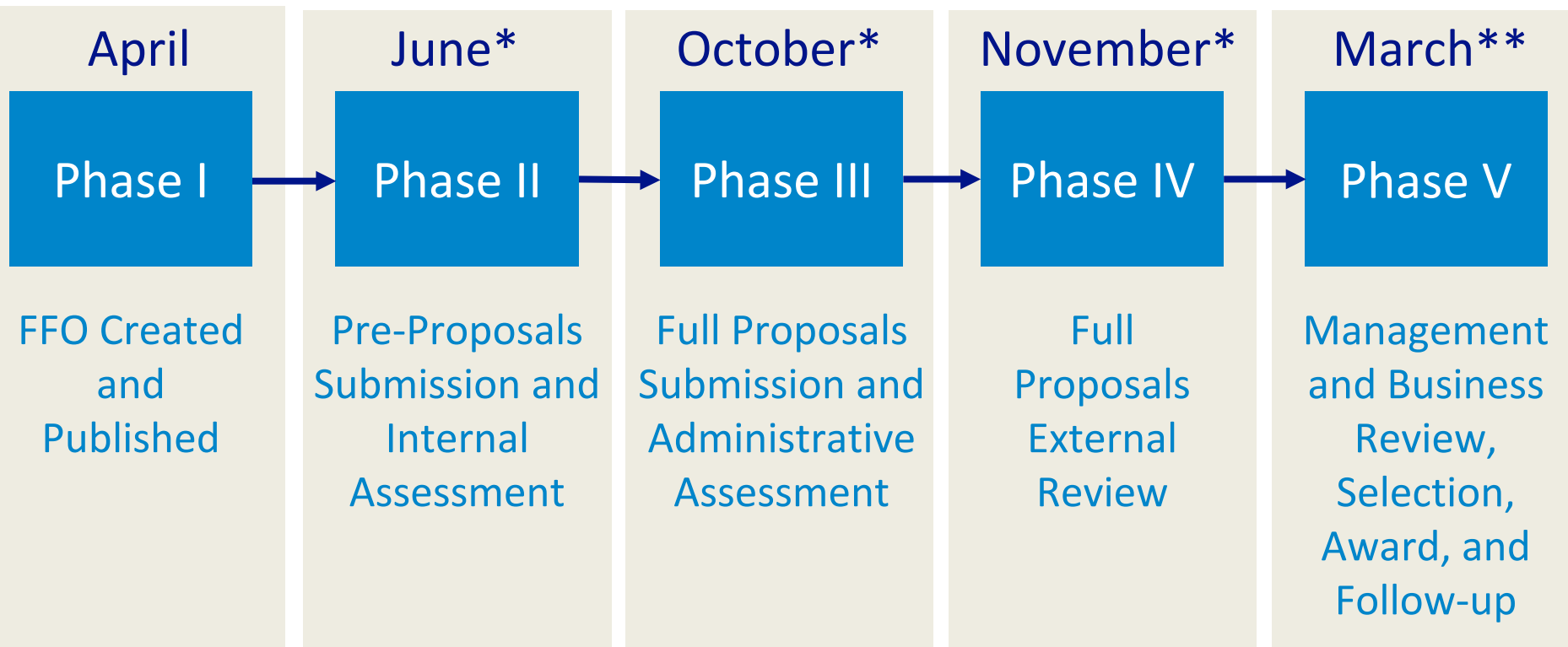
Phase I

Phase II

Phase III

Phase IV

OER FFO Process: FY 21 Timeline



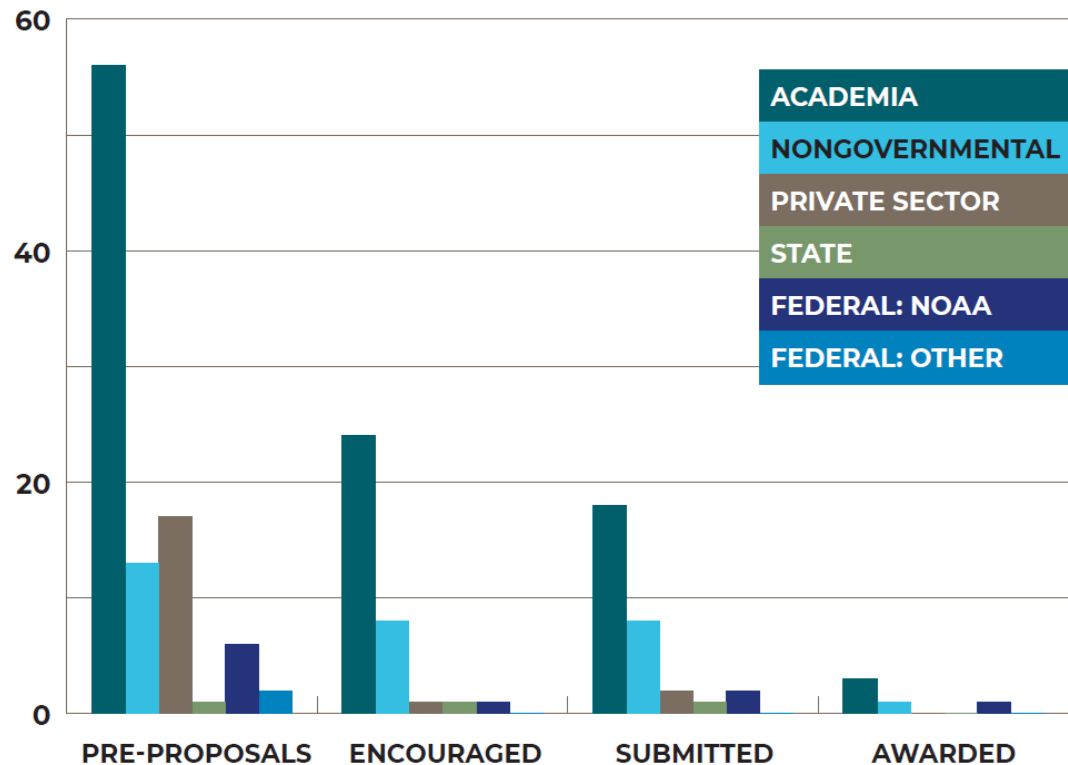
* This depends on FY22 grants notice

** This depends on FY21 budget allocations

FFO Request for Proposal Topics (Past 5 Years)

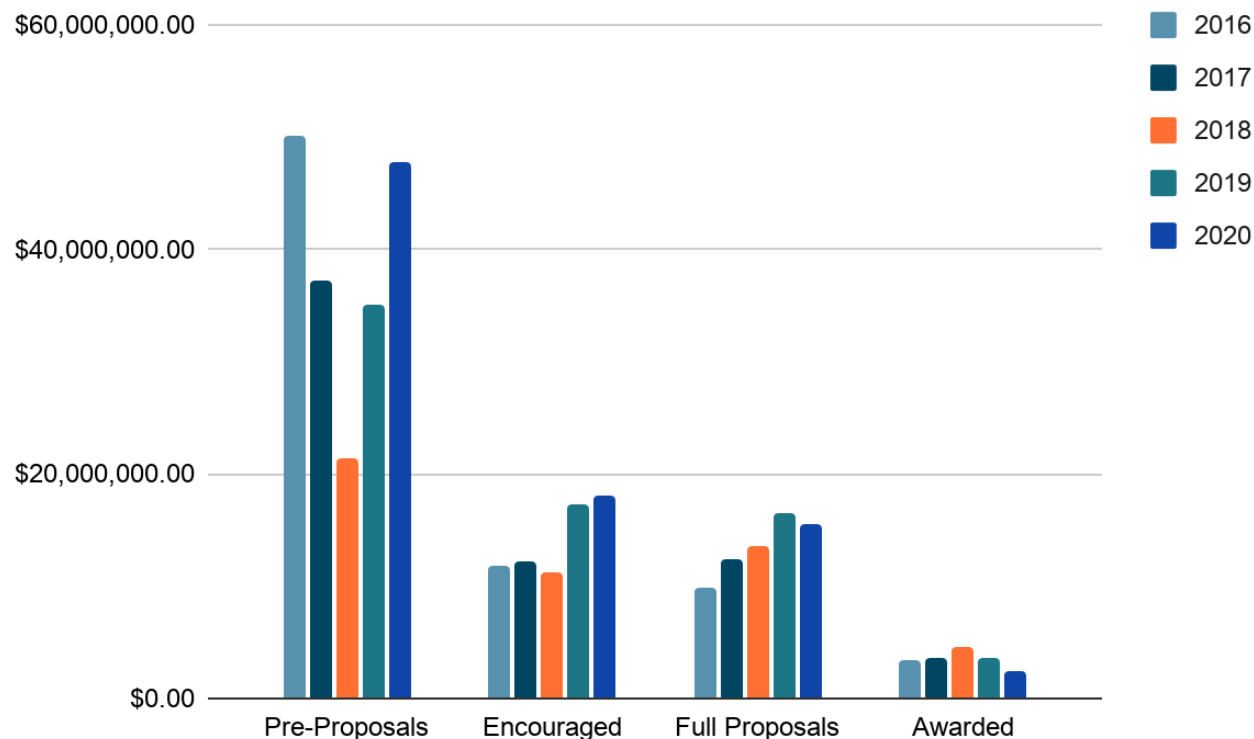
	2016	2017	2018	2019	2020/2021
Geographic Area			Gulf of Mexico	Waters under U.S. jurisdiction (inc. U.S. EEZ & ECS)	Waters under U.S. jurisdiction (inc. U.S. EEZ)
Themes	<p>General Ocean Exploration</p> <p>Innovative Use of Exploration Technologies</p> <p>Marine Archaeology and Heritage</p>	<p>Water Column Exploration</p> <p>Seamounts</p> <p>WWII Marine Archaeology</p> <p>Advanced Technology</p>	<p>General Ocean Exploration</p> <p>Marine Archaeology</p> <p>Innovative Technology Applications</p>	<p>Biopharma or Biotechnical Potential</p> <p>General Ocean Exploration</p> <p>Marine Archaeology</p>	<p>General Ocean Exploration</p> <p>Marine Archaeology</p> <p>Technological Innovation</p>

FY20 FFO Summary



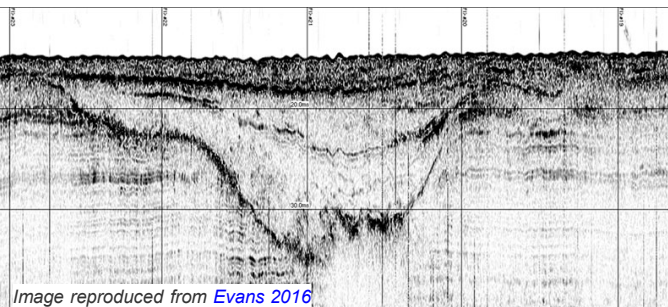
For further details see the Fiscal Years 2016-2020 Ocean Exploration Funding Opportunity Report

FY16-FY20 FFO Summary



For further details see the Fiscal Years 2016-2020 Ocean Exploration Funding Opportunity Report

FFO Funded 2020 Fieldwork



June 18-23, 2020: Paleolandscapes of the Gulf of Mexico 2020

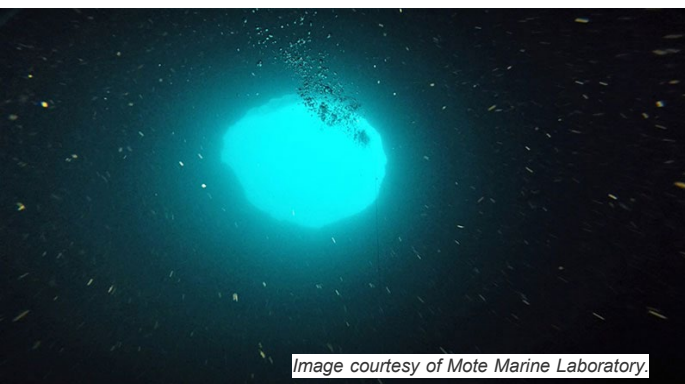
PI: Dr. Amanda Evans

Building on a 2019 cruise, the team used sub-bottom profilers and coring to search for archaeological sites on the continental shelf in the Gulf of Mexico. Data indicate that paleochannels and valleys located farther offshore may exhibit better preservation.

July 22-August 8, 2020: Wimble Shoals

PI: Joe Hoyt

The team explored the maritime heritage resources of Wimble Shoals to enhance knowledge of coastal processes affecting cultural resources (shipwrecks) and the marine ecosystem off Hatteras Island.



September 2020: Exploring Blue Holes

PI: Dr. Emily Hall

Building on 2019 fieldwork, the team explored the Green Banana, an underwater sinkhole 47 meters (155 feet) below the sea surface off Florida. They deployed a benthic lander carrying sensing and sampling gear into these offshore holes to gather data on their chemistry, life forms, and other features.

FFO Funded 2020 Fieldwork



Image courtesy of Francis Choi.

August-December 2020: Bioprospecting in an Ancient Submarine Forest

PI: Dr. Dan Distel

The research team explored the biodiversity and economic potential of the submerged forest off the Alabama coast, which is an unusually large, biodiverse, and temporally stable wood-associated marine habitat.

September 20-October 1, 2020: Economic Seep Resources

PI: Dr. Andrew Thurber (on E/V Nautilus)

The team explored how methane seeps interact with ocean systems and potential avenues for a Blue Economy future along the Olympic Coast. The team's work highlighted the diversity of seep habitats and some exciting patterns with depth.

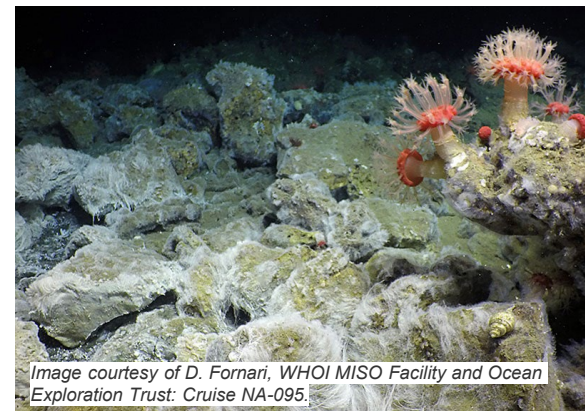


Image courtesy of D. Fornari, WHOI MISO Facility and Ocean Exploration Trust: Cruise NA-095.



© Greg Rouse

October 28-November 6, 2020: Mineral Rich Marine Biomes

PIs: Dr. Lisa Levin and Dr. Paul Jensen (on E/V Nautilus)

The team studied the Southern California Borderland benthic communities to gain a better grasp of the biotic diversity, biopharmaceutical potential, and substrate mineral composition of the ecosystems.

Summary Points

- Detailed metrics are in the Fiscal Years 2016-2020 Ocean Exploration Funding Opportunity Report
- Despite variation in themes, the number of applications, amounts requested, and funds dispersed have been relatively consistent over the past few years
 - 2019, 2020, and 2021 funding opportunities included a Blue Economy component
- Regular bibliographic citation analyses demonstrate program's impact and value
- FY19 and FY20 funded projects were impacted by the pandemic

What's Next for the FFO Process

- Annual continuation of the funding opportunity five- year summary report
- Upcoming publication of the FY22 funding opportunity
- Considerations for future funding opportunities:
 - Complement the National Strategy for Mapping, Exploring, and Characterizing the United States Exclusive Economic Zone
 - Technology (e.g., develop new sensors and help build capacity reliance on seagoing assets other than ships)
 - Implement funding opportunities in partnership with other agencies and programs (e.g., National Oceanographic Partnership Program)

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**Ocean Exploration
and Research**