Federal Funding Opportunity Overview: Process and Summary Information from 2014-2019

Alan Leonardi, Director
Twelfth Meeting
Ocean Exploration Advisory Board
Oakland, CA
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Outline

• Overview of Federal Funding Opportunity (FFO) process
• Overview of FFO proposal topics
• Summary information about the FFO from 2014-2019
• What’s next for the FFO
OER FFO Process

Process steps for OER federal funding opportunity (FFO) announcements

- **Phase I**: FFO Created and Published
- **Phase II**: Pre-proposals Submission and Internal Assessment
- **Phase III**: Full Proposals Submission and Administrative Assessment
- **Phase IV**: Full Proposals Review
- **Phase V**: Management and Business Review, Selection, Award, and Follow-up
OER FFO Process: Phase I

Process steps for OER federal funding opportunity (FFO) announcements

Phase I: FFO Created and Published
1. Based on identified mission needs and priorities, OER selects regions and/or topics for next fiscal year funding announcement
2. The FFO is published on Grants.gov
3. OER distributes the announcement using relevant listservs, OER website, social media, EX participants, etc.)
OER FFO Process: Phase II

Process steps for OER federal funding opportunity (FFO) announcements

Phase II: Pre-proposal Submission and Internal Assessment

1. Pre-proposals submitted directly to OER via email
2. Pre-proposals assessed by OER team using 5 criteria:
   1. Relevance to NOAA and OER missions and goals
   2. Scientific and technical merit
   3. Qualifications and competence of the applicants (including past performance on prior OER awards)
   4. Costs for specific items as well as the overall project cost (including value of cost-sharing and/or in-kind contributions)
   5. Outreach and education
3. Response provided to investigators encouraging or discouraging full proposal submission
OER FFO Process: Phase III

Process steps for OER federal funding opportunity (FFO) announcements

Phase III: Full Proposal Submission and Administrative Assessment

1. PIs can only submit a full proposal if they have submitted a pre-proposal
2. Full proposals from non-federal PIs submitted through Grants.gov
3. Full proposals from federal PIs are submitted through email to OER
4. Proposals must be received by the deadline—No exceptions
5. Submitted packages are reviewed for completeness before being considered for competition
Phase IV: Full Proposal Two Step Review

1. Mail Review
   - Each proposal is sent to a minimum of three mail reviewers (experts in their field and of the project topic)
   - Mail reviewers use evaluation criteria published in FFO
   - Reviewers must return their review by the selected date

2. Panel Review
   - Selected panelists are experts in their field but must have a broad knowledge of the topics covered by the FFO
   - Panelists review and score proposals using the FFO evaluation criteria, the mail reviews, and their own expertise and knowledge
   - Each panelist discusses and scores every proposal
   - Panel does not rank proposals or reach a consensus
OER FFO Process: Phase V

Process steps for OER federal funding opportunity (FFO) announcements

**Phase V: Management and Business Review, Selection, and Award**

1. OER ranks proposals using mail reviews and panel scores
2. Proposals are recommended for funding based on final ranking, office priorities/budget constraints
3. OER negotiates budget with PIs if necessary; PIs revise proposals if necessary
4. NOAA Grants Management Division reviews the final proposal package and makes the grant award
OER FFO Process: NSF Comparison

**OER**
- Phase I: FFO Created and Published
- Phase II: Pre-proposals Submission and Internal Assessment
- Phase III: Full Proposals Submission and Administrative Assessment
- Phase IV: Full Proposals Review
- Phase V: Management and Business Review, Selection, Award, and Follow-up

**NSF**
- Phase I
- Phase II
- Phase III
- Phase IV
OER FFO Process: Anticipated Timeline FY20*

Potential new OER FFO timeline intended to allow applicants more time to prepare proposals and earlier disbursement of funds to awardees

* This time line depends on FY20 budget allocations
# FFO Request for Proposal Topics

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<td>General Ocean Exploration</td>
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<td>Water Column Exploration</td>
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<td>Biopharma or Biotechnical potential</td>
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<td>Innovative Use of Exploration Technologies</td>
<td>Seamounts</td>
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<td>Marine Archaeology</td>
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OceanExplorer.NOAA.gov
Numbers of Proposals and Awards

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<thead>
<tr>
<th>Year</th>
<th>Pre-Proposals</th>
<th>Encouraged Proposals</th>
<th>Full Proposals Submitted</th>
<th>Awards</th>
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<tr>
<td>2014</td>
<td>106</td>
<td>27</td>
<td>28</td>
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<tr>
<td>2015</td>
<td>15</td>
<td>7</td>
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<td>2016</td>
<td>31</td>
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<td>2017</td>
<td>33</td>
<td>27</td>
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<td>2018</td>
<td>59</td>
<td>32</td>
<td>30</td>
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FFO Funding by Year

<table>
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<tr>
<th>Year</th>
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<tr>
<td>2014</td>
<td>$9,800,000</td>
<td>$9,742,047</td>
<td>$4,244,265</td>
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<td>2015</td>
<td>$9,932,000</td>
<td>$10,150,000</td>
<td>$7,594,079</td>
<td>$3,889,456</td>
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<tr>
<td>2016</td>
<td>$11,800,000</td>
<td>$9,928,604</td>
<td>$3,350,949</td>
<td>$3,350,949</td>
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<td>2017</td>
<td>$12,240,000</td>
<td>$12,349,833</td>
<td>$3,571,944</td>
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<tr>
<td>2018</td>
<td>$11,305,000</td>
<td>$13,084,278</td>
<td>$4,519,928</td>
<td>$4,519,928</td>
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</tbody>
</table>

Total Funding: $59,900,000
FFO Funding + Leverage By Year

- 2014: $4,244,265
- 2015: $3,889,456
- 2016: $3,350,949
- 2017: $3,571,944
- 2018: $4,519,928

Leverage:
- 2014: $5,338,896
- 2015: $3,940,935
- 2016: $11,765,680
- 2017: $9,541,273
- 2018: $5,589,877

Awards:
- 2014: $4,244,265
- 2015: $3,889,456
- 2016: $3,350,949
- 2017: $3,571,944
- 2018: $4,519,928
PI Affiliation 2014-2018

Pre-proposal
- 5
- Federal: NOAA: 271
- Federal: Other: 18
- Academic: 34
- Private Sector: 42
- NGO: 13

Invited
- 73
- Federal: NOAA: 94
- Federal: Other: 6
- Academic: 22
- Private Sector: 2
- NGO: 7

Submitted
- 85
- Federal: NOAA: 21
- Federal: Other: 2
- Academic: 2
- Private Sector: 7
- NGO: 6

Awarded
- 27
- Federal: NOAA: 12
- Federal: Other: 2
- Academic: 9
- Private Sector: 7
- NGO: 2
Distribution of Awards by Affiliation

2014
- $0
- $529,000
- $587,429
- $395,000
- $2,732,836

2015
- $0
- $379,839
- $30,000
- $1,273,917

2016
- $0
- $189,191
- $472,697
- $1,415,144

2017
- $0
- $89,969
- $78,000
- $3,403,975

2018
- $0
- $596,424
- $1,721,605
- $2,201,899

Affiliations:
- Academic
- NGO
- Private Sector
- Federal: NOAA
- Federal: Other
Awards by Affiliation 2014 - 2018

Federal: NOAA

Academic

NGO

Private Sector

Federal: Other

- $13,233,471
- $2,439,796
- $2,319,185
- $897,697
- $686,393

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Award Themes: 2014-2018

- Exploration
  - 2014: 3
  - 2015: 2
  - 2016: 4
  - 2017: 7
  - 2018: 11
- Archaeology
  - 2014: 2
  - 2015: 3
  - 2016: 14
  - 2017: 11
- Technology
  - 2014: 0
  - 2015: 0
  - 2016: 0
  - 2017: 4
  - 2018: 7
Review of Types of Personnel Awards Support (in numbers of people)

- **2014**
  - Science: 28
  - Technical: 9
  - Graduate: 8
  - Undergrad: 3

- **2015**
  - Science: 9
  - Technical: 3
  - Graduate: 1
  - Undergrad: 1

- **2016**
  - Science: 14
  - Technical: 8
  - Graduate: 6
  - Undergrad: 1

- **2017**
  - Science: 26
  - Technical: 10
  - Graduate: 3
  - Undergrad: 2

- **2018**
  - Science: 28
  - Technical: 10
  - Graduate: 5
  - Undergrad: 1
Summary Points

• Despite variation in FFO themes, number of applications, amounts requested, and funds dispersed are relatively consistent over the past few years (with allowances for 2015 with its constrained focus on the Arctic)
  – Similar trend in 2018 with the GOM focus
• A careful analysis of these data is critical to understanding the FFO and its results; we have been operating the program in its current form since 2014
• Regular bibliographic citation analyses demonstrate program’s impact and value
What’s Next for the FFO Process

• Quantitative evaluation of grants outcomes, especially their relevance to, and impacts on, NOAA missions and objectives
• Considerations for future FFOs:
  – Contribute to Seabed 2030 goals by mapping and characterizing the deep water US EEZ by 2030
  – Support the Blue Economy, ocean-related segments of the US economy
  – Complement ocean exploration campaigns (e.g., ASPIRE)?
  – Technology (e.g., new sensors and help build reliance on seagoing assets other than ships)?
  – Implement FFOs in partnership with other agencies and programs (e.g., NOPP)?