



# **Special Projects Competition Sea Grant Emerging Contaminants**

## SPECIAL PROJECTS "H" ANNOUNCEMENT

# **Competition:**

Sea Grant Emerging Contaminants

## **Closing Dates and Deadlines:**

May 4, 2021 at 11:59 PM Eastern Time

# **Eligible Sea Grant Programs:**

This competition is open to all Sea Grant programs. All projects must take place within the United States or territories or their respective waterways.

## **Award Time Frame:**

The proposed start date should be no earlier than September 1, 2021, with projects to be completed no later than three years after the start date.

#### **Funding Availability:**

The National Sea Grant Office (NSGO) anticipates that up to **\$850,000** of federal funds will be available to a Sea Grant Program or a partnership of Sea Grant Programs in order to scope an overarching framework for the Sea Grant Network and execute a competitive research program to address contaminants of emerging concern. The NSGO anticipates making one award to the lead Sea Grant Program. Applications require the standard 50% non-federal match for Sea Grant projects.

# **Project Description (program priorities):**

Contaminants of emerging concern (CECs) are increasingly detected in surface water and groundwater, posing risks to the Nation's drinking waters and aquatic life. This broad class of chemicals and materials is characterized by the Environmental Protection Agency (EPA) for their perceived, potential, or demonstrated threat to human health and/or the environment, but are often excluded from monitoring programs and suffer from a lack of published health and/or water quality standards (EPA 2008). CECs include, but are not limited to: pharmaceuticals, personal care or household cleaning products, industrial chemicals (e.g., per- and polyfluoroalkyl substances (PFASs), lawn care and agricultural products, and microfibers.

Due to the diversity of CECs and their respective physical properties (e.g., analytical detection, toxicity) and/or chemical life cycles (e.g., environmental persistence, bioaccumulation, distribution, and source), holistic strategies to mitigate their public health and ecological risks have been challenging. To address this challenge, state and federal entities have begun to identify integrated strategies to streamline the regulatory process and address critical research gaps (ACWA and ASDWA 2019; NSTC 2018).

To date, Sea Grant has addressed CECs through physical and social science research, partnerships, extension, and education efforts to reduce the presence of these unwanted substances in aquatic environments. The importance of this topic as a priority is already reflected within the <a href="10-Year NOAA Sea Grant Water Resources Vision">10-Year NOAA Sea Grant Water Resources Vision</a>. In recognition of Sea Grant's valuable capabilities in coastal and Great Lakes environments, Congress has directed Sea Grant (Pub. L. 116-260) to support a research initiative to address this issue (see details below). To implement this effort it is important and timely for Sea Grant to develop an overarching framework for its work to address CECs, which prioritizes research foci, delineates Sea Grant's role within the state, regional, and/or nation-wide landscapes, considers integrated strategies across Sea Grant's core functional areas, and identifies specific partnerships that are needed to be most impactful.

The selected project will thus comprise two components: (1) activities to scope an overarching framework and implementation strategies to address CECs by the Sea Grant Network at national and regional scales (up to \$350,000 available); and (2) a competitive research program (at least \$500,000 should be requested) to conduct research studies and monitor CECs in partnership with state agencies, academic institutions, and other relevant entities. The overall proposal may be up to three years in length, however projects selected as part of the competitive research program can only be up to two years in length, and can not extend past the end date of the overall proposal. The scoping activity will be expected to disseminate findings (see description below) that will guide potential future investment and immediately help steer the Sea Grant Network in this subject area, although continued scoping and implementation may be considered over the entire proposal's duration. With the intention to optimize impact with available funding, the entire research program should focus on a single regional area, but should be nationally applicable.

#### Component 1

To refine the scope of Sea Grant's role and identify implementation strategies, the selected project will be expected to:

- (1) Proceed immediately in scoping activities to develop recommendations within six months which describe an overarching framework that considers the needs and expectations listed in this announcement to inform the associated competitive research program.
- (2) Review and synthesize Sea Grant's efforts to date and utilize existing state of knowledge reports and strategic documents.
- (3) Engage with NOAA, particularly the National Centers for Coastal Ocean Science's Ecotoxicology Branch and the Monitoring and Assessment Branch, and its Mussel Watch program, which have extensive experience in monitoring and researching CECs.
- (4) Engage with relevant communities in the Sea Grant Network and leverage complementary activities (e.g., Sea Grant's Community Science liaison; Water Resources Visioning team).
- (5) Facilitate dialogue, listening sessions, and/or information sharing with local, state, regional, tribal, and federal stakeholders that are focused on mitigating the impact of CECs (including microfibers as appropriate).
- (6) Develop recommendations that evolve into a formal strategic document, which can be disseminated to the Sea Grant network and other funders and partners to inform competitive research announcements and additional actions.

#### Component 2

To carry out a successful competitive research program that is regional in nature, the selected project(s) will be expected to:

- (1) Meet the expectations outlined in Congressional appropriations language to: "Partner with state agencies and academic institutions to research and monitor CECs that may cause ecological or human health impacts, including PFAS, in coastal and estuarine waters".
- (2) Leverage scoping efforts conducted at the beginning of this project to identify projects that address clear research gaps and/or undertake "proof of concept" detection or mitigation strategies.
- (3) Consider a balance of research projects, which may include social science approaches, that could deliver immediate and long-term benefits, such as new sampling and/or detection methodology, or a new pilot monitoring program.
- (4) Deploy engagement strategies to reach end users, beyond those who actively participate in the proposed work, to increase the potential for effective technology transfer.

Any proposed future competed research in response to this funding opportunity must adhere to the National Sea Grant College Program <u>National Competition Policy</u> to ensure compliance with federal review processes as well as a robust and efficient review process.

Future competed research funding will result in a specific award condition on the grant and will require that selected projects undergo environmental compliance review before funding can be spent on those projects. The recipient program will need to submit an award action request to satisfy that specific award condition which will need to be approved by NOAA's Grants Management Division before funding can be expended.

#### **Application Requirements:**

Consult the NOFO <u>NOAA-OAR-SG-2020-2006435</u>, available at <u>Grants.gov</u>, for eligible applicants, required elements of the application, how to submit, general programmatic priorities and selection factors, and other necessary information. Submit your application to **SPECIAL PROJECTS "H"** under this opportunity in grants.gov.

Discrepancies between this special project announcement and the NOFO may exist. Specific application details and instructions outlined in this special project announcement take precedence over guidelines in the NOFO.

Applications <u>must</u> include the following elements. Failure to adhere to these provisions may result in a delay in award processing or rejection of the application, based on the extent of the noncompliance.

- **1. Project Narrative.** The Project Narrative must include the following documents:
  - a. Project Description. The total number of pages in the project description should not exceed fifteen (15). Excess pages will not be included in the review. The works cited, CVs, letters of support, and current and pending support sections do not contribute to the page limit.
    - i. Cover page (1 page maximum)
      - Project title and names, titles, affiliations, and contact information (email and phone) of co-Pls.
      - Budget overview Total cost and annual breakdown of requested funding by partner.
    - ii. Project Abstract (1 page maximum)
    - iii. Project background (suggested 2 pages)

- Explain the specific problem(s) this project seeks to address and justify its importance.
- iv. Project objectives (suggested 1 page)
  - Provide a list of clearly defined objectives. For each objective, provide a concise statement explaining how it is aligned with the goals and priorities of this funding opportunity.
- v. Project details (suggested 4 pages)
  - Provide an explanation of the methods you will use to address your project objectives. Explicitly explain how this project leverages the expertise of both researchers and stakeholders.
- vi. Anticipated outcomes and deliverables (suggested 1 page)
  - What are the expected outcomes and deliverables related to the creation of data products, tools, technologies, and management practices that can be directly applied to the current and future needs of assessing CECs?
- vii. Outreach and technology transfer plan (suggested 1 pages)
  - Provide a strategy that details how end users, beyond those who actively participate in the proposed work, will learn about the project's outcomes.
- viii. Project timeline (suggested 1 page)
  - Please provide a timeline for accomplishing the proposed work, which
    covers the entire duration of the project. Include approximate dates for
    key milestones related to the proposed work, including the
    accomplishment of anticipated outcomes and release of deliverables.
  - Applicants submitting proposals that involve the use of human test subjects should state so clearly in their application. These proposed research activities require approval of the applicant's Institutional Review Board (IRB) before such research can proceed. Applicants are responsible for obtaining IRB approval from their institution and providing that documentation to NOAA once the approval is obtained and prior to any NOAA-funded human subject testing. Proposals intending to use human test subjects should specify clearly in the timeline approximately when IRB approval will be obtained and when the testing is expected to occur.
- ix. Diversity statement (suggested 1 page)
  - NSGO recognizes it has a particular and unique opportunity to support NOAA's commitment to diversity and inclusion by taking an intentional step that encourages applicants to consider diversity and inclusion as part of their scientific projects. This action has the potential to make an impact on not only the diversity and inclusion in science at NOAA, but also beyond the agency. In this section, describe how the proposed activity broadens the participation of underrepresented groups (e.g., race/ethnicity, gender identities, sexual orientation, disability, geography, socioeconomic status, etc.) and how they benefit from its outcomes. Applicants are encouraged to review the resources and best practices compiled by NSGO related to diversity, equity, and inclusion: <a href="https://seagrant.noaa.gov/insideseagrant/Implementation/Network-Visioning/DiversityInclusion">https://seagrant.noaa.gov/insideseagrant/Implementation/Network-Visioning/DiversityInclusion</a>

- x. Works cited (does not count towards page limit)
  - All in-text citations should be listed here.
- xi. Curriculum vitae (CV) for each co-PI (does not count towards page limit)
  - Each person's CV should not be longer than 2 pages. Excess pages will not be included in the review.
- xii. Letters of support (does not count towards page limit)
  - All letters of support should be included here. Required in the instance that a Sea Grant program is applying on behalf of a partnership of multiple Sea Grant programs; otherwise, recommended but optional.
- xiii. Current and pending support (does not count towards page limit)
  - Describe any current or pending sources of support if applicable.
- b. Abbreviated Environmental Compliance Questionnaire (OMB Control No. 0648-0538)
  - i. For these proposals and any future competed research, applicants <u>must</u> ensure that the questionnaire is completed in full and includes detailed information regarding project location, methodology, and permits. Copies of all permits required for project activities should be included with application materials. If a permit is pending or planned, please provide this information.
  - ii. The questionnaire can be found here: <a href="https://seagrant.noaa.gov/insideseagrant/Implementation">https://seagrant.noaa.gov/insideseagrant/Implementation</a>.
  - iii. Guidance on how to complete the questionnaire, including how to describe work that will not involve any environmental impact, can be found here: <a href="https://seagrant.noaa.gov/Portals/1/Forms/NEPA%20Questionnaire%20-%20Guidance.pdf">https://seagrant.noaa.gov/Portals/1/Forms/NEPA%20Questionnaire%20-%20Guidance.pdf</a>
- c. Data Management Plan
  - i. For these proposals and any future competed research, applications <u>must</u> include a Data Management Plan that is compliant with NOAA's <u>Public Access to Research Results</u> Plan. The Data Management Plan should not exceed 2 pages. The Data Management Plan should include descriptions of the types of metadata and data expected to be created during the course of the project, plans for disseminating the metadata and data to the broader community, and plans for long-term archiving of the metadata and data.
  - ii. If proposed activities will not generate any environmental data, such as the scoping activities and research competition, please include the following statement at the end of your proposal: "Because this project will not generate environmental data, a Data Management Plan is not required."
- **2. Budget Narrative.** The Budget Narrative <u>must</u> include the following budget documents (Sea Grant 90-4 Forms and Budget Justification) in the following order and format. Additional budget narrative guidance can be found <u>here</u>.
  - a. Sea Grant 90-4 Form (OMB Control No. 0648-0362)

Sea Grant 90-4 Forms are required to provide budget breakdowns and budget justifications by year and object class for the proposal. A completed Sea Grant 90-4 Form should be completed for each project year, as well as a total budget for the entire project duration (i.e., Year 1, Year 2, Year 3, and Years 1-3). Guidance on filling out these forms is located in the Sea Grant General

Application Guide

b. Budget Justifications

For each year of the project, a Budget Justification is required. Each Budget Justification should explain the budget items in sufficient detail to enable review

of the appropriateness of the funding requested. Each Budget Justification should be attached as a PDF to each Sea Grant 90-4 Form, as appropriate. Guidance on completing the Budget Justification is located in the <u>Sea Grant General Application Guide</u>.

- **3. Overall Application.** In addition to the forms required above, standard Federal Forms and Assurances are required for the overall application and can be found with the application package on Grants.gov or on the Sea Grant website (links found below). These include:
  - a. SF-424 Form (Grants.gov, OMB Control No. 4040-0004)

This form, titled "Application for Federal Assistance," <u>must</u> identify the entire funding period, as well as the federal funding amount being requested by the applicant and the non-federal matching fund amount. The form must be completed with the institution's accurate EIN and DUNS and Point of Contact, and signed by the institution's authorized representative or designee.

b. SF-424A Form (<u>Grants.gov</u>, OMB Control No. 4040-0006)

This form, titled "Budget Information - Non-Construction Programs," should describe the entire funding period in federal and non-federal dollars, for the entire application. Fill out Section B of this SF-424A form to show the overall budget breakdown by object class by year. Each federal and match year should have its own column. If there is insufficient space, an additional SF-424A Form, Extra Section B should be used (see below).

c. Additional SF-424A Form, Extra Section B (<a href="https://seagrant.noaa.gov/insideseagrant/Implementation">https://seagrant.noaa.gov/insideseagrant/Implementation</a>, OMB Control No. 4060-0006)

The SF-424A Form described above only includes space to report the applicant's yearly federal and non-federal dollars over two years. If the application covers more than two years of federal and non-federal dollars, then please complete the Additional SF-424A, Extra Section B to report the yearly non-federal matching fund budget of the grant. Guidance on filling out the form is located in the Sea Grant How to Use Form "424A Extra Section B" Document.

This form is an outlier and will be added to the "Budget Narrative Attachment" section on Grants.gov, as described in Section IV. C. 2 of the NOFO.

- d. SF-424B Assurances (<u>Grants.gov</u>, OMB Control No. 4040-0007)

  The form, titled "Assurances Non-Construction Programs," should be completed and signed by the institution's authorized representative or designee.
- e. CD-511 (Grants.gov, US Department of Commerce)

The form, titled "Certification Regarding Lobbying," should be completed and signed by the institution's authorized representative or designee. In some instances, the SF-LLL Disclosure of Lobbying Activities form may also be required. See the instructions on the CD-511 for further information.

f. SF-LLL (<u>Grants.gov</u>, OMB Control No. 0348-0046) if applicable

The form, titled "Disclosure of Lobbying Activities," should be completed and signed by the institution's authorized representative or designee, if appropriate.

#### **Application Evaluation Criteria:**

The following criteria will be used to evaluate proposals. Note that the weights of each criteria are different from the Evaluation Criteria laid out in the Special Projects NOFO announcement. Proposals

submitted to this competition will be evaluated by at least three independent written reviews based on:

- 1. Importance/relevance and applicability of proposed projects to the program goals (30%). This criterion ascertains whether the proposed work is relevant to the priorities set out in this announcement.
- 2. Technical/scientific merit (25%). This criterion assesses whether the proposal is technically sound, employs appropriate methods, and outlines clear objectives. Applications will be evaluated based on the following:
  - a. Whether the proposal clearly identifies goals and objectives, and whether the timeline for the project is reasonable and in line with the award period guidelines;
  - b. Whether the project will deliver tangible, specific results that are attainable and measurable within the proposed time frame.
  - c. Whether the proposed methods and approaches to be used in the project are valid to achieve project goals.
- 3. Overall qualifications of applicants (15%). This criterion ascertains whether the applicant possesses the necessary education, experience, training, facilities, and administrative resources to accomplish the project.
- 4. Project costs (5%). This criterion evaluates the budget to determine if it is realistic and commensurate with the project needs and time frame.
- 5. Outreach and Education (25%). This criterion reviews whether the project provides a focused and effective education and outreach strategy regarding NOAA's mission to protect the Nation's natural resources, Sea Grant's strategic focus areas, and the goals of the individual competition announcement to target audiences, including underserved and underrepresented audiences.

### **Other Information:**

### Reporting:

This will be a stand-alone (i.e., non-omnibus) award for which annual progress reporting will be required.

# **Agency Contacts:**

Questions about this competition or the Special Projects Notice of Funding Opportunity (NOFO) may be sent to <a href="mailto:oar.hq.sg.competitions@noaa.gov">oar.hq.sg.competitions@noaa.gov</a>. Please specify that your question is related to the Emerging Contaminants Competition in the subject line.

Fillable versions of required Sea Grant forms can be found here: <a href="https://seagrant.noaa.gov/insideseagrant/Implementation">https://seagrant.noaa.gov/insideseagrant/Implementation</a>

Guidance for completing these forms is located in the Sea Grant General Application Guidance Document: https://seagrant.noaa.gov/Portals/1/Guidance/SeaGrantGeneralApplicationGuide.pdf