

Preliminary Proposals Due: March 1, 2023 by 5 pm PST

Research Projects begin: February 1, 2024

The University of Southern California Sea Grant Program (USCSG) is soliciting preliminary proposals for research projects of one or two years' duration beginning February 1, 2024. Projects should focus on topics pertaining to the "Urban Ocean," USC Sea Grant's primary focus. University faculty and academic staff at California academic or research institutions are eligible to apply, and we encourage interdisciplinary and inter-institutional projects.

USC Sea Grant's "Urban Ocean" research program supports projects directed at solving the particular problems associated with urbanization on and adjacent to the coastal zone. The program's overall aims are to foster the use of sound scientific information to advance our understanding of coastal and ocean resources, to examine the ways we conserve and use these resources, and to support tools for evaluating the issues and socio-economic trade-offs that comprise coastal decision making. USCSG works closely with funded researchers to ensure research results will have a broad reach to diverse California constituencies, with particular attention to underserved and underrepresented communities.

Proposal Submission Timeline

10 am PT February 3, 2023	Webinar for potential applicants
March 1, 2023	Preproposal submission deadline
May 3, 2023	Encouragement to submit full proposals sent to PIs
June 21, 2023	Full proposal submission deadline
Mid-September, 2023	Notification of funding decision sent to PIs
February 1, 2024	Project initiation (subject to the availability of funds)

Research Priorities

Successful Sea Grant projects involve both a substantial intellectual question and the promise of useful application to real-world, "Urban Ocean" problems. Proposals should contain a well-developed rationale and potential for broad application, and a strong theoretical basis with a clear, testable hypothesis. Clarity of expression and of organization are extremely important in your submission.

USCSG seeks proposals from the natural sciences, social sciences, and engineering of the highest quality and relevance to those strategic focus areas identified in the <u>USC Sea Grant</u> <u>Strategic Plan for 2024-2027</u>. USCSG supports research, extension, and education goals across



four strategic areas: Healthy Coastal Ecosystems; Sustainable Fisheries and Aquaculture; Resilient Communities and Economies; and Environmental Literacy and Workforce Development.

In line with these USCSG focus areas, input from the USC Sea Grant Advisory Council, and State needs outlined in the <u>California Ocean Protection Council's Strategic Plan</u>, the following areas have been identified as priority topical areas for this 2024 funding cycle to help advance real-world applications of scientific research to information needs across California.

If you have any questions about whether your topic of interest falls into our priority areas, please contact Phyllis Grifman (grifman@usc.edu).

1. Healthy Coastal Ecosystems

- Economic and ecological value of ecosystem resources, tools, technologies, and knowledge services (to inform decision making)
- Marine wildlife populations, health, and biodiversity assessments (e.g. new methods including eDNA, AI, remote sensing; aquatic invasive species threats in a changing climate)
- Ecosystem resilience, management, and adaptation in response to global change; urban impacts on ocean acidification, hypoxia, and ecosystem changes (e.g. HABs)
- Terrestrial-aquatic interface (e.g. post-fire and drought impacts on watersheds); restoration ecology strategies
- Water quality impacts on the coastal and marine environment or human health and wellbeing (e.g. bacteria, viruses, marine debris, contaminants, ecotoxicology, detection methods, etc)
- Legacy (e.g., DDT, PCBs) contaminants and contaminants of emerging concern (including pharmaceuticals, microplastics, Per- and Polyfluoroalkyl Substances), ecotoxicology, bioaccumulation, and development of methodology for detection
- Macro and micro plastic pollution, particularly related to pathways, prevention strategies, and effects on habitats and wildlife

2. Sustainable Fisheries and Aquaculture

• New resources, tools, and technologies to support growth in fisheries and aquaculture literacy, permitting, production, harvesting and processing

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- Assessment of social, cultural, and/or political attitudes towards fisheries and aquaculture, understanding associated gaps, risks, needs, and goals.
- Approaches to improve the safety, resilience, and equitable consumer access to domestic seafood supply

3. Resilient Communities and Economies

- Decision support tools to assist coastal communities in assessing vulnerability and adaptation to sea level rise and coastal change.
- Changing shorelines and equitable coastal access
- Nature-based adaptation
- Role of traditional/indigenous practices in resource management
- Restoration, adaptation, and/or transition of coastal habitats
- Integrated management of coastal dependent use (e.g. offshore wind, offshore wind energy, desalination, marine transportation, marine protected areas)

4. Environmental Literacy and Workforce Development

- Educational research, products, and services to better understand, advance, and implement environmental literacy and/or integrate multiple ways of learning, knowing, and understanding to support teaching opportunities (e.g., community-supported science, peer-learning, non-formal, intergenerational)
- Educational research, products, and services to better understand, advance, and implement systematic strategies to expand equity and inclusion in coastal and ocean workforce development

Eligibility

Proposals may be submitted by faculty of any U.S. public or private institution of higher education; the project's lead Principal Investigator (PI) must be deemed eligible by their institution to receive extramural funding. While non-academic researchers may be included among the co-principal investigators (co-PIs), awards will be made only through colleges and universities. We encourage the involvement of collaborators and researchers who are not university faculty (collaborators may be with industry, state/regional/federal agencies, tribes, non-governmental organizations, and/or other research or academic institutions). Project leads do *not* need to be located within California, although the project activities should be focused on



themes relevant to the California Urban Ocean. NOTE: Only one preliminary proposal per lead Principal Investigator may be submitted.

Duration and Funding

Proposed activities may be one or two years in duration. Continuation of a project beyond the first year is subject to demonstration of satisfactory progress by the project investigator. We anticipate funding up to 6 projects with biennial Sea Grant College Program funds. Project budgets will range from \$10,000 to \$65,000 per year, with the average approximately \$50,000 for new research. Additional funding is available for graduate trainee stipends and does not need to be included in the budget (see below).

Research projects are required to provide 50% in matching funds from the PI's home institution or primary project partners. Matching funds may not come from federal sources. Please reach out to USC Sea Grant (grifman@usc.edu) with any questions about eligible matching funds.

Direct salary support for individuals from state and federal agencies, tribal, and for-profit and foreign organizations is not allowed; however, non-federal contributions can be counted as matching or in-kind support for the project.

Graduate Trainees

Applicants may request additional funding for a graduate student trainee(s) to work with principal investigators on Sea Grant funded projects (covers research stipend, not student tuition or fees). This is considered additional funding that goes directly to the graduate student research assistant and does not need to be included in the proposed project budget. Simply check the 'Trainee Requested' box in the application form. Trainees work closely with faculty conducting Sea Grant research to formulate and implement research methods, and the research is expected to provide material for their dissertations and theses.

Diversity, Equity, and Inclusion

USC Sea Grant encourages submissions from researchers new to USCSG and those from diverse backgrounds. We champion diversity, equity, inclusion, justice, and accessibility by recruiting, retaining, and preparing a diverse workforce, and proactively engaging and serving the diverse populations of coastal communities. USC Sea Grant is committed to building inclusive research, extension, communication, and education programs that serve people with a diversity of backgrounds, circumstances, needs, perspectives, and ways of thinking. We encourage proposals



that include diverse participants with regards to age, race, ethnicities, national origins, gender identities, sexual orientations, disabilities, cultures, religions, citizenship types, marital statuses, education levels, job classifications, veteran status types, income, and socioeconomic status.

Submission via eSeaGrant Platform

Applicants must use eSeaGrant, an electronic proposal submission and management system, to submit preliminary and full proposals. Email or hard copy submissions will not be accepted. If your institution has unusual issues prohibiting access to eSeaGrant, please contact USC Sea Grant (<u>lshore@usc.edu</u>) for assistance or to arrange for an alternative submission method. Tardiness in attempting submission via eSeagrant is not an acceptable excuse for avoiding use of this system.

All new users of USC Sea Grant's eSeaGrant will need to register at https://usc.eseagrant.ecsion.com/index.php. During the registration process a six-digit confirmation code will be sent to the email address and telephone number provided to ensure correct contact information for your account. If you have newly registered and have not received a "welcome" email with login credentials, or you have already registered and need your password reset, please contact seagrant@usc.edu. To start a proposal or revisit/edit an existing proposal, under "Current Tasks," find "USC Sea Grant Preliminary Proposals 2024" and click "Add Proposal." To submit a proposal, you must work down the sequence of sections ("Start Here" through "Submission Preview") listed on the left side of the proposal window. Follow the prompts to complete your proposal submission. Make sure to click on the "Submit" button once you have previewed your application. You will receive a confirmation email each time you submit your application. Your application is not considered complete unless you have received a confirmation email. We recommend that eSeaGrant users access the system, review submission requirements within it, and start to upload necessary documents well in advance of the submission deadline. This will give users the opportunity to obtain any necessary clarification or assistance before the deadline. The submission deadline will not be extended.

PRELIMINARY PROPOSAL GUIDELINES

Prospective applicants are encouraged to contact USC Sea Grant at <u>seagrant@usc.edu</u> to discuss potential projects and funding. Our office can serve as a regional clearinghouse for the coordination of complementary project proposals, and as a resource for research and education contacts.



A preliminary proposal should include:

- A description of the Proposed Research Program that addresses the following five components. Note, each section has a limit of 400 words.
 - **Statement of Problem**: How does this question arise, how is it relevant to the "Urban Ocean" theme? Briefly summarize the situation that calls for research, specifying what has happened or is happening and the importance of the situation. Why is the research necessary?
 - Research Objectives: What are the specific goals of the project?
 - **Methods**: How will this research be conducted? Briefly summarize the proposed methods and techniques
 - **Benefits**: What are the anticipated benefits of this research, and which entities will benefit from it?
 - **Broader Impacts**: Briefly state how this research will have broader societal impacts on the coastal community including stakeholders from underrepresented or underserved communities.
- Curriculum Vitae (2-page max/person) for Principal Investigator and any Additional Personnel
- Total funding requested, by year (e.g., 2024-2025, 2025-2026)

An optional question will be provided to collect demographic information from all investigators (including all members of the research team) using the anonymous demographics question approved by the Office of Management and Budget. USC Sea Grant will not provide collected demographics information to reviewers for any purpose, including evaluation, and will not consider demographics information during selection. Demographics data will be aggregated and used by the National Sea Grant Office to assess diversity of applicants and the reach of our programming over time.

All preliminary proposal materials must be submitted via the USCSG eSeaGrant portal as described above (p. 4).

PRELIMINARY PROPOSAL EVALUATION

Preliminary proposals are reviewed by Sea Grant's panel of Academic Coordinators to assess how well they meet program priorities for Urban Ocean issues. They are also reviewed by the

State of California Resources Agency Sea Grant Advisory Panel (RASGAP), composed of delegates from agencies in the California Natural Resources Agency, for relevance to state



information needs and priorities. The USC Sea Grant leadership team makes recommendations based upon panel recommendations, diversity and balance of proposals, availability of funding, and programmatic objectives, needs and priorities.

Highly ranked preliminary proposals will be encouraged to submit a full proposal, those that do not review well will be discouraged from moving on to the full proposal stage. However, all applicants that submit a preliminary proposal are eligible to submit a full proposal.

Preliminary proposals will be reviewed and ranked according to the following criteria (*criteria are equally weighted*):

- 1. Adherence to USC Sea Grant's "Urban Ocean" theme
- 2. Relevance to Focus Areas described in USC Sea Grant's Strategic Plan for 2024-2027
- 3. Assessed capability of Principal Investigators for the research described
- 4. Appropriate budget range for proposed work

FULL PROPOSAL GUIDELINES

Only applicants who have submitted a letter of intent may submit a full proposal. Applications not meeting the full proposal requirements may be rejected without review. Only the requested materials should be submitted; additional documents will not be reviewed. All proposals will be submitted via eSeaGrant.

A full proposal should include the following components. Short descriptions of each component is provided below; please see eSeaGrant for full descriptions and forms:

- 1. Signed Institutional Cover Page: A signed cover page (blank copy downloadable from eSeaGrant) must be included with the proposal. Please provide all requested information and obtain the required signatures from your campus' Sponsored Projects Office. The completed and signed cover page must be converted to a PDF and uploaded to eSeaGrant.
- 2. Proposal Summary: A proposal summary includes the title of the project, proposed start and end dates, Sea Grant focus areas, total amount requests, whether a trainee is requested, a brief proposal summary, and a 90-2 project summary form (the form is provided in eSeaGrant)
- **3. Research Proposal:** Use the provided Research Proposal Template in eSeaGrant to complete your research proposal. It includes the project title, principle and associate investigators, funding requested, statement of the problem, investigatory question, motivation, goals and objectives, methods, related research, budget-related information,

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anticipated benefits, communication of results, broader impacts, and references. There is no formal limit to the number of pages in a proposal, but 15 pages is normally sufficient.

- 4. Principal Investigator: Information and 2-page (max) CV
- 5. Additional Personnel: Information and 2-page (max) CV
- 6. Budget Worksheet and Justification: Instructions and templates are provided in eSeaGrant.
- 7. Work Schedule: The Work Schedule form should list major tasks you intend to accomplish and their corresponding initiation and completion dates. A template is provided in eSeaGrant.
- **8.** Concurrent Grants: A listing of concurrent grants is required from all Principal and Associate Investigators on the proposed project. The form is provided in eSeaGrant.
- **9.** Trainee Request Form: If you are requesting a Sea Grant Trainee please complete the form provided in eSeaGrant and specify names and information of potential trainee(s).
- 10. Data Management Plan: Proposals must include a Data Management Plan that specifies how the project will comply with NOAA's Directive on Data Management. A typical plan is no more than two pages long, and includes the Description of data to be generated by the project, including file format, likely size, etc; A tentative date by which data will be shared; Standards to be used for data/metadata format and content; Policies on data stewardship and preservation; and Procedures for providing access, sharing, and security. If your university or institution has established data-sharing practices and policies, you may base your DMP on theirs. If your project does not generate datasets, a simple statement to that effect is all that is necessary to satisfy the DMP requirement.
- **11. Environmental Permits:** Per the requirements in the Abbreviated Environmental Questionnaire, potential PIs must include with their full proposal a list of all state and federal permits required to complete the project, including whether these permits have already been acquired. The Abbreviated Environmental Questionnaire form and associated permit forms are provided on eSeaGrant.
- 12. Letters of Support: A single PDF file containing all letters of support.
- **13. Peer Review Recommendation Form**: Provide contact information for six (6) peer reviewers.

Abbreviated NEPA Environmental Compliance Questionnaire

Funded projects that include a research component entailing fieldwork, labwork, modeling work or socioeconomics research (essentially, all research projects) are required to complete the National Environmental Policy Act (NEPA) Environmental Compliance Questionnaire and



submit any required permits or information regarding the status of forthcoming permits. If your project is selected for funding, you must fully complete and submit this form to USCSG for review of NEPA compliance. See <u>https://seagrant.noaa.gov/insideseagrant/Implementation</u> for

NEPA Environmental Compliance Questionnaire. In addition, prior to research commencing all required state and federal permits (including IRB, IACUC, collecting permits, etc.) must be submitted to this Sea Grant office.

FULL PROPOSAL EVALUATION:

Full proposals are reviewed by mailed peer reviews and by a Technical Review Panel of technical and academic experts in fields relevant to proposed topics; reviewers may be drawn from outside of California, and may be submitted for review to managers or stakeholders. RASGAP reviews full proposals a second time for relevance to state needs and to comment on potential synergies with agency programs. The USC Sea Grant leadership team conducts a final review of the proposals and considers the recommendations of the review panels. The Sea Grant director has final discretion to select projects based on the panel recommendations, balance and diversity of proposed topics, availability of funding, and alignment with programmatic objectives, needs, and priorities.

Proposals will be evaluated according to the following criteria (criteria are equally weighted):

- 1. **Rationale** the degree to which the proposed activity addresses an important issue, problem, or opportunity in development, use, or management of marine or coastal resources.
- 2. Scientific Merit the degree to which the activity will advance the state of the science or discipline through use and extension of state-of-the-art methods.
- **3. Innovation** the degree to which new approaches to solving problems and exploiting opportunities in resource management or development, or in public outreach on such issues will be employed; alternatively, the degree to which the activity will focus on new types of important or potentially important resources and issues.
- 4. **Programmatic Justification** the degree to which the proposed activity will contribute to reaching the objectives of a subprogram in a state, regional, or national Sea Grant program or the degree to which it addresses the needs of important state, regional, or national constituencies.
- 5. User Relationships The degree, to which users or potential users of the results of the proposed activity have been brought into planning of the activity, will be brought into the



execution of the activity, or will be kept apprised of progress and results.

- 6. Relationship to USC Sea Grant Priorities the degree to which the proposed activity adheres to USC Sea Grant's "Urban Ocean" theme and is relevant to Focus Areas described in USC Sea Grant's Strategic Plan for 2024-2027.
- 7. Qualifications and Past Record of Investigators the degree to which investigators are qualified by education, training, and/or experience to execute the proposed activity; record of achievement with previous funding.
- 8. Appropriate and Cost Effective Budget Adequacy of the proposed budget to accomplish objectives and of the budget justification in explaining the need for resources. The proposed scope of work and benefits will be assessed against funding levels requested.
- **9. Data Management Plan -** Adequacy of the Data Management Plan to meet NOAA data sharing agreements.

ADDITIONAL INFORMATION:

The National Sea Grant College Program is a nationwide activity of the National Oceanic and Atmospheric Administration, Department of Commerce, authorized by Congress and conducted by universities, in cooperation with federal and state agencies and often marine industries and users. USC Sea Grant is one of 34 university-based programs that form the core of the network, involving some 300 universities and colleges. The Program's objective is to increase the understanding, assessment, development, utilization, and conservation of the nation's ocean and coastal resources by providing assistance to promote a strong educational base, responsive research and training activities, and broad and prompt dissemination of knowledge and techniques. California is one of only two states in the nation with more than one Sea Grant Program. If you have marine related research interests outside of USC Sea Grant's "Urban Ocean" emphasis, we encourage you to contact the California Sea Grant College System, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0232 (619-534-4440). The web address is: https://caseagrant.ucsd.edu/. The National Sea Grant College Program champions diversity, equity, and inclusion by recruiting, retaining and preparing a diverse workforce, and proactively engaging and serving the diverse populations of coastal communities. USC Sea Grant is committed to serving diverse Urban Ocean communities by building inclusive research, extension, communication, and education programs.