



USC SEA GRANT CALL FOR PRELIMINARY PROPOSALS

PROPOSALS FOR PROJECTS BEGINNING February 1, 2020

Preliminary Proposals Due: March 8, 2019 by 5 pm PST

The University of Southern California Sea Grant Program is now soliciting preliminary proposals for projects of one or two years' duration beginning February 1, 2020. 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.

Research Priorities

USC Sea Grant's "Urban Ocean" research program is intended to develop and sponsor 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. We encourage projects from researchers in the natural sciences, social sciences, and engineering.

The **USC Sea Grant Strategic Plan for 2018-2021** outlines our research and outreach goals. It is available for download from the Sea Grant website: <http://dornsife.usc.edu/uscseagrant/strategic-plan/>

Strategic focus areas:

- Healthy Coastal Ecosystems
- Sustainable Fisheries and Aquaculture
- Resilient Communities and Economies
- Environmental Literacy and Workforce Development

Descriptions of USC Sea Grant's focus areas are also on our website: <http://dornsife.usc.edu/uscseagrant/>

Of particular interest in this funding cycle are projects that develop ideas, information and techniques in the fields of water quality and land use management, effects on human and ecosystem health, climate change and coastal community resilience, urban wetlands, urban beaches, marine transportation, aquaculture, ocean renewable energy and public education. Sea Grant's Advisory Council met early this year and provided input on some specific topics that merit investigation (these may be viewed on page 3).

The California Ocean Protection Council's Strategic Plan helps to inform our research program, providing information about California ocean management information needs. We encourage prospective researchers to consult the planning document, which was informed by other state agencies with ocean and coastal jurisdictions, to ensure that research topics respond to State needs. (<http://www.opc.ca.gov/programs/>).

Projects

Successful Sea Grant projects involve both a substantial intellectual question and the promise of useful application to real-world problems. Sea Grant emphasizes innovative research on ocean and coastal resources and processes. Sea Grant encourages interdisciplinary research that responds to current issues affecting coastal and ocean resources, physical processes and socioeconomic problems. Proposals should contain a well-developed rationale and potential for broad application, and a strong theoretical basis with a clear, testable hypothesis.



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Funding

We anticipate funding 4-6 projects with our 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. Research projects are required to provide 50% in matching funds from the PI's home institution or primary project partners. Continuation of a project beyond the first year is subject to demonstration of satisfactory progress by the project investigator.

Graduate Trainee

Applicants may request funding for a graduate student trainee(s) to work with principal investigators on Sea Grant funded projects. This is considered additional funding that goes directly to the graduate student 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 research methods and implement them, and often provide material for dissertations and theses. More details are [here](#).

Submission of Preliminary Proposals

Prospective applicants are encouraged to contact the USC Sea Grant offices (213-740-1961) 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. Applicants must use [eSeaGrant](#), an electronic proposal submission and management system, to submit the pre-proposal. Pre-proposals cannot be submitted via email, or in hard copy. If your institution has unusual issues prohibiting access to eSeaGrant, please contact USC Sea Grant 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](#) (<http://usc.eseagrant.ecsion.com/index.php>) will need to register. 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 2019" and click "Add Proposal". In order 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 e-mail each time you submit your application. Your application is not considered complete unless you have received a confirmation e-mail.

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 proposals will be reviewed by an academic coordinating committee and the Resources Agency Sea Grant Review Panel; and selected projects will be invited to submit full proposals for review.

National Sea Grant College Program

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 33 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.



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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://caseagrants.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.

Topical areas of research recommended by the USC Sea Grant Advisory Council, 2019

Drawing from their breadth of expertise across California's coastal and ocean policy, management and science landscape, the USC Sea Grant Advisory Council provided strategic guidance and recommendations for new research for our 2020 funding cycle. These recommendations outline information needs that can help advance real-world applications of scientific research to priorities across California. Topical areas are outlined within our four strategic focus areas:

1. Healthy coastal ecosystems
 - Biodiversity assessments – new methods, including eDNA
 - Human health issues associated with beach and nearshore water quality
 - Ecosystem resilience and adaptation in response to global change; urban impacts on ocean acidification and hypoxia
 - Post-fire ecosystem resilience; impacts on watersheds and restoration ecology strategies
 - Contaminants of emerging concern (including pharmaceuticals, microplastics, Per- and Polyfluoroalkyl Substances (PFAS)) - bioaccumulation and development of analytical methodology for detection
 - Antibiotic resistant bacteria
 - Invasive species related to new shipping routes (eg. Arctic shipping)
 - Airborne water pollution (atmospheric deposition of pollutants into waters)
 - Discharges from desalination plants
2. Sustainable fisheries and aquaculture
 - Food security
 - Seafood fraud/traceability
 - Aquaculture permitting and regulatory process
 - Genetically modified organisms (eg. sterility) in aquaculture to prevent invasions
 - Development of markets for invasive species and fishery bycatch
3. Resilient communities and economies
 - Alternative and renewable energy
 - Decision support tools to assist coastal communities in assessing vulnerability and adaptation to sea level rise and coastal change.
 - Role of traditional or indigenous practices in resource management
4. Environmental literacy and workforce development
 - Non-formal education (educators teaching outside the formal classroom/school)
 - Intergenerational learning
 - Identification and sharing of best management practices across schools and institutions
 - Peer-learning in classrooms
 - Citizen science