

# California Sea Grant College Program

## Call for Preliminary Proposals - 2009



The California Sea Grant College Program is now soliciting preliminary proposals for projects to begin February 1, 2009. Faculty and academic staff members from universities and research institutions throughout California are invited to apply.

California Sea Grant is continuing to move in a strategic direction for 2006-2010. In recognition of recent and anticipated challenges and opportunities, California Sea Grant is focusing on the following integrated themes:

- Healthy Marine Ecosystems
- Sustainable Resource Use
- Sustainable Coastal Communities
- New Technologies
- Education, Training & Public Information

These themes can be addressed through one of two funding mechanisms:

- 1) CA Sea Grant Research Proposals
- 2) Special Solicitation from the CA Ocean Protection Council - Focused Research and Outreach Initiative

### 1.) California Sea Grant Research Proposals

The applicant is encouraged to look at the full 2006-2010 Strategic Plan for more information on California Sea Grant research priorities and then focus on the specific issue(s) of interest to them. Beyond what is available in the Strategic Plan, the applicant is encouraged to contact California Sea Grant personnel to receive more specific guidance concerning particular research issues.

### 2.) Special Solicitation from the California Ocean Protection Council - Focused Research and Outreach Initiative

For the first time, pending OPC approval, the California Sea Grant College Program will allocate \$600,000 (not including trainees) of OPC funding to a single research, application, and outreach initiative in an area relevant to state resource management needs in the following areas: Climate Change and Ocean Acidification, Harmful Algal Blooms (HABs), Invasive Species, Water Quality, and Wave and Tidal Energy Development. This amount will be disbursed over a three year period to one team of several researchers and manager(s). For more information regarding this special solicitation, please refer to the OPC Priorities and Guidelines (pg. 4-8) . See item #2 above right.

**Applications are due  
by 5:00 pm, March 14, 2008**

1) Preliminary proposals for **CA Sea Grant Research Proposals** may be submitted two ways: a.) online from the California Sea Grant website, or b.) a PDF form downloaded from our website and returned by email.

2.) In order to submit to the **OPC Special Solicitation**, you must first contact Russ Moll or Shauna Oh at 858-534-4440 to discuss ideas and intent to submit. Once this has happened, a specific preliminary proposal submission form will be sent to you via email. Do not use the online form.

Additional instructions for submission are provided on our website and within the pages of this document.

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**California Sea Grant's website is**

**<http://www.csg.ucsd.edu>**

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## Preliminary Proposal Guidelines

The California Sea Grant College Program emphasizes innovative research on ocean and coastal resources and processes. Work with a strong theoretical basis that encompasses clear, testable hypotheses is desirable. In contrast, low priority is given to survey or inventory studies. Research that has national or international application, and that addresses important regional issues, problems, and opportunities is appropriate.

Sea Grant is characterized by an interdisciplinary approach to problem solving that involves the social, physical, and natural sciences. Applicants are encouraged to contact the California Sea Grant Extension Advisors for information on, and coordination of, the outreach and application components of their proposal. Where appropriate, cooperative and/or collaborative application-oriented studies that involve colleagues from California or other states, industry, and government are strongly encouraged. The inclusion of an educational component is also highly encouraged (this may include K-12 students, undergraduates, graduates, and post-doctorates). Please check the "Research" section of our website at <http://www.csgc.ucsd.edu> for examples of projects currently funded.

The duration of a project is for a maximum of three years. Project extramural budgets may not exceed \$100,000 per year. The average project budget is approximately \$75,000 per year.

The California Sea Grant Committee reviews all preliminary proposals. Prospective investigators who submit preliminary proposals that are deemed promising and most likely to contribute to California Sea Grant and/or California Ocean Protection Council (OPC) objectives will be invited to submit full proposals. For guidance on topics that are of priority to California Sea Grant, please refer to the 2006-2010 Strategic Plan. For guidance on topics that are of priority to the OPC, please refer to the five page summary of priorities on pages 4-8 of this call document and the California Ocean and Coastal Information, Research, and Outreach Strategy. All of these documents are available on the California Sea Grant website. Availability of funds for OPC funded projects is contingent upon approval by the OPC.

The procedure for selection of new California Sea Grant projects involves the following four steps:

1. Evaluation of preliminary proposals.
2. Submission and evaluation of formal proposals.
3. Final adjustments to conform to budget allocation.
4. Revision, if necessary, of individual proposals for inclusion in the California Sea Grant College Program Omnibus Proposal.

Please note that although California Sea Grant welcomes multiple submissions of preliminary proposals by an investigator, only one preliminary proposal will be allowed to advance to the formal stage.

Please refer to the document "California Sea Grant Proposal Review Process" on page 10 for more information.

The National Sea Grant College Program is a partnership between the nation's universities and the National Oceanic and Atmospheric Administration, Department of Commerce, and is authorized by the United States Congress. California Sea Grant is the largest of 31 university-based programs nationwide that form the core of the National Sea Grant network. The network, in cooperation with federal and state agencies, and/or marine industries, involves some 300 universities and colleges.

## Traineeships

Sea Grant graduate student research traineeships can be requested in the space provided on the application form. A Sea Grant Research Trainee is a full-time registered graduate student who is working toward an advanced degree related to marine or coastal sciences. Often, the project provides the trainee with the basis of a thesis. The traineeship stipend of \$19,416 does not cover graduate student tuition and fees. Tuition and fees, if requested, must be included in the project budget.

## Matching Funds

A special aspect of the Sea Grant Program is the matching funds requirement. According to the 1976 legislation, the project leader is required to match each \$2 received in NOAA/Sea Grant funds with \$1 from nonfederal sources. Funds to cover research traineeship stipends for graduate students should not be included in the Sea Grant funds requested. However, the cost of each traineeship (\$19,416) requested should be added when determining matching funds.

The following example calculates the matching funds requirement including the cost of one traineeship for one year:

$\$75,000$  (Sea Grant funds) +  $\$19,416$  (cost of one traineeship) =  $\$94,416$  (total Sea Grant costs)

$\$94,416$  (total Sea Grant costs)/2 =  $\$47,208$  (matching funds requirement)

Examples of allowable items for matching funds include existing salaries and benefits of investigators and others paid from nonfederal sources, expendable supplies and equipment, ship time, industry participation, and donated supplies, service, space, or equipment. It is possible that federal funds may be used as matching funds if the proposal is funded under the OPC special solicitation.

For further information regarding matching funds, contact <http://www.ucop.edu/raohome> and select "OMB Circular A-110" from the menu options.

## Submission of Preliminary Proposals (CA Sea Grant Research Proposals Only)

Preliminary proposals may be submitted two ways: (1) Online from the California Sea Grant website, or (2) a PDF form downloaded from our website and returned by email. If you have problems with either submission please contact California Sea Grant at (858) 534-4440.

(1) ONLINE SUBMISSION – To submit a preliminary proposal via the California Sea Grant website, follow the links below to the online application form: <http://www.csgc.ucsd.edu> > Proposal > California Sea Grant Institutional Proposal > Preliminary Proposal.

Notes about online submission:

- The person that completes and submits the form is the "preparer."
- Enter only data and information that is visible in the data entry fields.
- Fields that have a red question mark have a help screen. Click on the question mark and the help screen will open in a second browser window.
- If the form submission is successful, a confirmation number and the form header will be emailed to the preparer and the investigator. Please retain the confirmation number for tracking purposes.

(2) PDF FILLABLE FORM – To submit a PDF fillable form follow the links above and download the form to your computer, fill the form out, and when complete click the submit button and the form will be sent by email to Sea Grant. **You will need either Acrobat Standard or Acrobat Professional to use the fillable form.** Acrobat Reader won't allow you to save the form or send the information. We will send you a reply indicating we received the form.

## NEW Focused Research and Outreach Initiative Priorities Ocean Protection Council and California Sea Grant College Program

This document provides guidance to research teams preparing research proposals to submit to California Sea Grant College Program for possible funding by the California Ocean Protection Council (OPC). This grant to the California Sea Grant program is part of the continuing grants made annually by the OPC for management-oriented coastal and ocean research.<sup>1</sup>

### Background

The California Ocean Protection Council (OPC) was established to improve the management and protection of ocean and coastal resources and ecosystems. One of the many ways the OPC achieves this purpose is by supporting innovative research that directly informs and improves the stewardship of ocean resources through a partnership with the two California Sea Grant programs. At its public meeting on February 29, 2008, the OPC will consider furthering this partnership by authorizing a third round of scientific research, which will address current OPC priorities. Pending approval, the OPC may disburse up to \$1,000,000 to the California Sea Grant College and University of Southern California (USC) Sea Grant programs. These priorities pertain only to the California Sea Grant College Program; details of the USC Sea Grant allocation are available through the USC Sea Grant Program.

This round of funding addresses priority issues derived from the OPC five-year strategic plan *A Vision for Our Ocean and Coast*;<sup>1</sup> the OPC FY2007/2008 Funding Priorities;<sup>2</sup> and the California Ocean and Coastal Information, Research, and Outreach Strategy.<sup>3</sup>

### Proposed Priority Issues (not in priority order)

***The following are proposed priority issues for consideration and possible adoption at the February 29, 2008 OPC meeting. These proposed priority issues are being released in advance of the meeting to provide sufficient time for research proposal preparation. However, this list of priority areas is subject to change, and a final list of priority issues will be posted immediately following the February meeting if funding is approved.***

- Climate Change and Ocean Acidification
- Harmful Algal Blooms (HABs)
- Invasive Species
- Water Quality
- Wave and Tidal Energy Development

See priority issues descriptions below.

<sup>1</sup> The proposed disbursement will be made to the Sea Grant programs (\$200,000 to USC Sea Grant Program and \$800,000 to California Sea Grant College Program) as a directed project pursuant to the OPC Funding Guidelines updated on June 14, 2007.

## **NEW Focused Research and Outreach Initiatives**

California's coastal environment is facing an increasing number of pressing environmental challenges. Experts agree that addressing these challenges will require coordinated, long-term, interdisciplinary research efforts across the state. Accordingly, the OPC seeks to develop a new approach to support interdisciplinary research and education.

For the first time, pending OPC approval, the California Sea Grant College Program will allocate \$600,000 (not including up to 3 years of funding for 2 trainees) of OPC funding to a single research, application, and outreach initiative in an area relevant to state resource management needs (see description of priority issues below). This amount will be disbursed over a 3 year period to one team of several researchers and manager(s).

Initiatives are envisioned as coherent and well-coordinated programs of applied interdisciplinary research and training focusing on one important priority issue. Each proposal should describe a coordinated program of research, application, and training that will enable real-world improvements in how California addresses a key challenge to ocean health and sustainability.

By supporting a single initiative team comprised of multidisciplinary researchers, the OPC hopes to comprehensively address challenging issues and ensure that new data and ideas are incorporated into management. By examining a single issue from a multidisciplinary perspective and by directly linking the research to managers' needs and uses, the initiative should produce effective and applied outcomes.

### **Initiative Team**

The initiative team must consist of a multidisciplinary assemblage of principle investigators (PIs) whose diverse backgrounds serve to benefit the goals of the initiative. The team must include at least one representative of a California resource management agency who should be actively involved early in the proposal development to guide the initiative towards high priority research needs to improve resource management. In addition, each proposal should provide for recruiting at least two Sea Grant Trainees as part of the initiative team. Given the required diversity of participants, the OPC anticipates that proposals may include multiple institutions.

### **State of Knowledge**

The chosen initiative must assess the current state of knowledge. The successful team will be required to write a synthesis of the current state of knowledge and information needs as well as one or more short papers aimed at a broad audience that can be used by managers and others to quickly get up-to-speed on the initiative's focal issue.

### **Applied Tools and Products**

The selected initiative will yield tangible results at the end of 3 years of funding by producing tools and products that will directly improve ocean resource management and establishing mechanisms for ensuring these tools and products reach key user groups.

Examples include:

- Identifying useful indicators
- Developing predictive models
- Developing metrics and methods for evaluating the impacts of alternative regulatory choices or management actions

## **Translation and Integration of Results**

The selected initiative will work directly with resource managers to identify needs and deliver results that improve resource management practices. Because translation and dissemination of research results is a critical component of this process, the involvement of one or more Sea Grant advisors or individuals capable of providing an outreach or extension component to the initiative is recommended. The chosen initiative team will be required to collaborate with California Sea Grant's communication office to further disseminate initiative activities and outcomes.

## **Priority Issue Descriptions**

*Climate Change and Ocean Acidification*—The initiative should improve the state's understanding of the impacts of climate change and ocean acidification on California's ocean and coastal ecosystems—with a particular focus on biological resources. It should lead to the development of products, tools, and recommendations designed to allow the state to adapt management practices to address anticipated climate change impacts.

*Harmful Algal Blooms (HABs)*—The initiative should generate information that will help coordinate existing efforts and methodologies to advance California's capabilities to predict and monitor HAB events. The initiative should advance the understanding of the factors, including anthropogenic and natural drivers, which influence HABs. It should lead to the development of a HAB information network, (e.g. data sharing protocols)—coordinated with existing or planned observing systems—which will improve California's predictive capabilities to HAB events.

*Invasive Species*—The initiative should provide information that will enable more strategic and effective prevention, detection, and early intervention strategies. Examples of potential approaches include quantifying the risks posed by all vectors of marine and estuarine invasive species; developing state-wide invasive species detection protocols; and improving the state's capacity to respond to, eradicate, and control invasive species once they have been detected. Teams may consider focusing on a specific group of high impact invasive species or all possible invasive species within a particular region.

*Water Quality*—Teams should focus on developing a transparent and scientifically-valid basis for pollutant standards, water quality indicators, improved predictive models that include field verification of TMDLs and watershed functioning, or pollutant origin and dynamics.

*Wave and Tidal Energy Development*—An initiative focused on this issue should assess the potential ecological and economic impacts of wave and tidal energy development in California; identify and assess the effectiveness of methods to reduce or eliminate harmful effects; and develop indicators that can inform development and monitoring plans.

## **OPC Funding Considerations**

Proposals requesting OPC funds do not have restrictions on the source of the matching requirement, however, proposals have at least a 50% matching fund requirement. Federal sources and state resource manager salaries will be considered eligible as matching funds.

Research conducted with OPC funds must limit the indirect costs rate to 25% or less.

## **Review Process**

Proposals will undergo the same review process as all other California Sea Grant proposal submissions, including review by the Resources Agency Sea Grant Advisory Panel (RASGAP), which will review proposals for OPC priorities. The OPC will have staff involved in all stages of the review process, including the technical review and final decision-making. At its discretion, the OPC may request additional review by likely user groups of the research findings or suggest coordination of complimentary proposals. Before funds are awarded, the OPC will need to provide concurrence on the selected research projects, which will happen in the fall of 2008.

## **Proposal Submission**

In order to submit to this solicitation, you must first contact Russ Moll or Shauna Oh at 858-534-4440 to discuss ideas and intent to submit. Once this has happened, a specific preliminary proposal submission form will be sent to you via email. Do not use the online form.

## **Proposal Elements**

In order to successfully complete an OPC focused research and outreach initiative preliminary proposal, the following five elements must be addressed:

### **1. Initiative Team**

List team members and provide information on the activities to be conducted by each team member. This section should demonstrate how the initiative is designed to effectively merge the unique attributes and knowledge of each PI to reach the initiative goal. The team must include at least one PI who is a California state resource manager or scientist. The team should also include at least 2 Sea Grant trainees.

### **2. Statement of Problem**

Include a problem statement of the particular ocean issue of focus and why knowledge and management of this issue would benefit from a multidisciplinary approach.

### **3. Project Goals and Objectives**

Discuss how the proposed research will advance applied ocean resource management. This should include specific hypotheses to be tested, objectives to be achieved (i.e., product and tool development), and how the objectives relate to OPC priority issue.

### **4. Intended Approach**

Describe the approach to be used and the methodology involved in meeting the stated objectives. The approach must specify which resource managers will be involved in each step as the initiative progresses—from clarifying the problem statement to developing, testing, and disseminating tools and products.

### **5. Anticipated Results and Who Will Benefit**

Identify uses and end users for the proposed data and tools. Describe how the initiative will directly improve the effectiveness of California state agencies in their efforts to manage, protect, conserve, or restore coastal or ocean resources. Each proposal must include one or more letters of support from end users (government or non-government) identifying the anticipated value and use of the project results to the public, research community, and/or state government.

### **6. Consistency with OPC Goals and Priorities**

The proposed research must address the mandatory provisions of California Ocean Protection Act (California Public Resources Code § 35500 et seq.) and be consistent with the actions contained in the OPC five-year strategic plan.

## **Useful Websites**

1. The OPC 5-year strategic plan *A Vision for Our Ocean and Coast*  
[http://resources.ca.gov/copc/docs/OPC\\_Strategic\\_Plan\\_2006.pdf](http://resources.ca.gov/copc/docs/OPC_Strategic_Plan_2006.pdf)
2. OPC FY2007/2008 Funding Priorities  
[http://resources.ca.gov/copc/docs/FinalFundingPriorities2008\\_amended.pdf](http://resources.ca.gov/copc/docs/FinalFundingPriorities2008_amended.pdf)
3. California Ocean and Coastal Information, Research, and Outreach Strategy  
[http://resources.ca.gov/copc/InfoResOut\\_Strategy\\_final.pdf](http://resources.ca.gov/copc/InfoResOut_Strategy_final.pdf)



### **Proposal Questions?**

Proposal Coordinator  
proposaladmin@seamail.ucsd.edu  
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### **Web Submission Questions?**

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### **Budget Questions?**

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### **California Sea Grant Extension Advisors**

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If your county is not represented in the  
above list, and you wish to speak to an  
advisor, please call the Proposal Coordi-  
nator at (858) 534-4440 for guidance.

## California Sea Grant College Program Proposal Review Process

The California Sea Grant College Program solicits proposals for a variety of funding opportunities. The process described below is for submission to the annual omnibus competition, which this year includes the CA Ocean Protection Council funds. In addition to the omnibus competition, the program administers National Sea Grant College Program competitions that include a variety of fellowships, National Strategic Investments, and special one-time funding opportunities; the process described below does not pertain to these other special competitions.

Each year a call for preliminary project proposals is widely distributed throughout California. Of the nearly 100 preliminary proposals received annually, approximately 30% advance to the full proposal stage, of which half will be approved for funding.

The Resources Agency Sea Grant Advisory Panel (RASGAP) conducts the initial review of preliminary proposals. Input from RASGAP is directed toward identifying and meeting priorities for state funding according to the needs identified in the document entitled "California Ocean and Coastal Information, Research, and Outreach Strategy" (IRO) and "OPC Five-Year Strategic Plan" located on the California Sea Grant website (<http://www.csgc.ucsd.edu>) or on the California Ocean Protection Council website (<http://resources.ca.gov/copc>).

The California Sea Grant Advisors review the preliminary proposals for potential application to California's problems and opportunities in coastal/marine science, education, and outreach.

The California Sea Grant Committee, comprised of academic scientists with expertise in the areas funded by the program, conducts the final review of preliminary proposals. At this stage, screening is based on the project's innovative approach, uniqueness of the idea, importance and appropriateness to Sea Grant. Each proposal is considered on its own merits without regard for campus or institutional affiliation. Full proposals are requested on those topics that rate highly on these criteria.

Full proposals are mailed to external merit reviewers. The RASGAP prioritizes full proposals based on specific interest to the State of California as identified in the IRO and in the "OPC Five-Year Strategic Plan". The California Sea Grant Committee meets a second time to evaluate full proposals with the benefit of the written merit reviews. Criteria for selection at this step include: (1) rationale; (2) scientific merit and impact or outreach quality; (3) innovativeness; (4) programmatic justification; (5) practical impact and user relationships; (6) relationship to Sea Grant priorities; and (7) qualifications and past record of investigators or past record of program components. Merit reviews, user collaboration, expected impact (scientific and practical), and letters of support from potential users help determine whether these criteria are met.

When all the input from the external merit reviewers, the California Sea Grant Committee, and RASGAP is received, the California Sea Grant Management Team makes the final decisions regarding approval of proposals for funding. The National Sea Grant Office is then notified of those decisions.

Proposals selected for funding may be returned to the authors for revision. After revisions are made, new and continuing proposals are compiled by the California Sea Grant College Program into an institutional proposal containing project and program summaries, budget pages, full proposal narratives, curricula vitae, and letters of support. The institutional proposal, called the California Sea Grant College Program Omnibus, is submitted to the National Sea Grant College Program for funding and implementation on February 1 of the following year.

Declined preliminary proposals may be appealed in writing to the California Sea Grant Director at the preliminary stage only and within two weeks of notification. If you have any questions, or desire more information about this process, please do not hesitate to call the California Sea Grant office at (858) 534-4440.

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