

OCE | DIVISION
OF OCEAN
SCIENCES

MAKING WAVES

NEWSLETTER

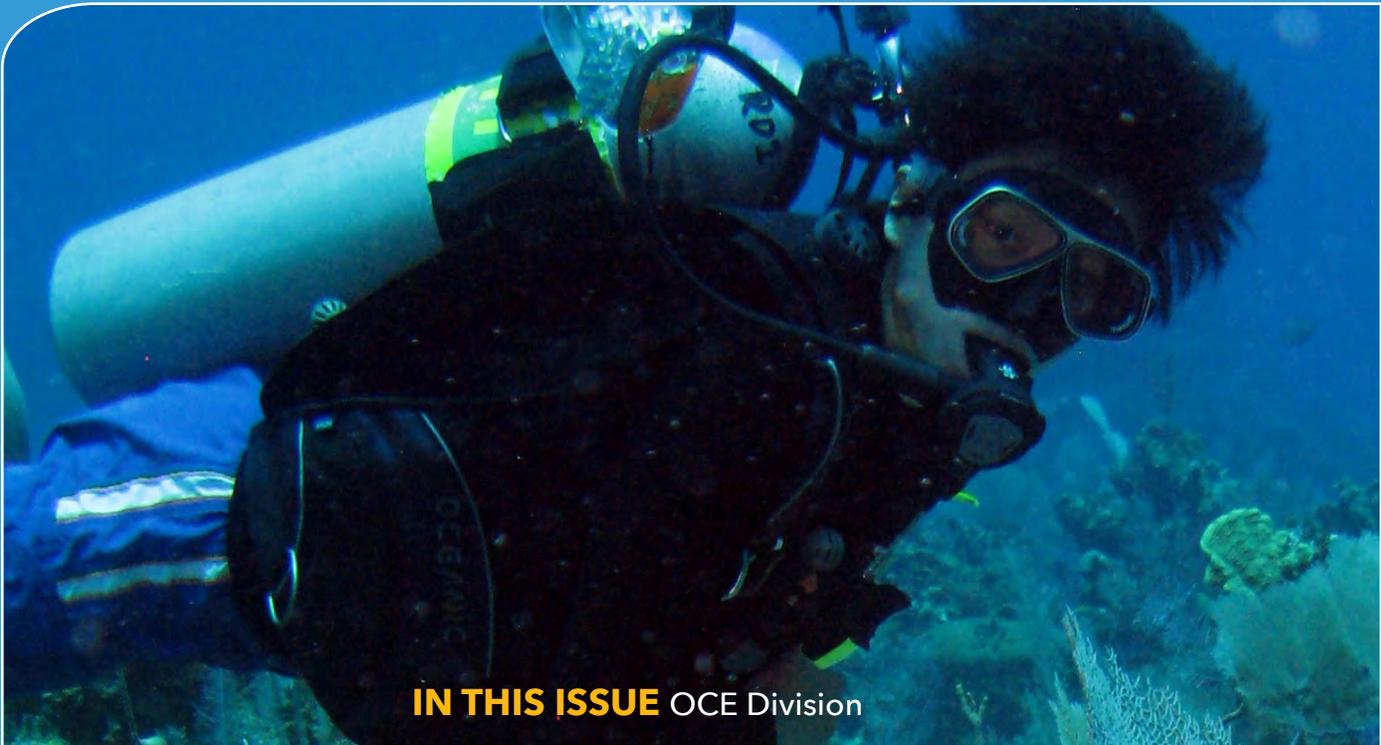
June 2013



Credit: Joe Pawlik, UNCW



National Science Foundation



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Gray tube sponge with “bite marks” from angelfish off Grand Cayman Island.
Credit: Joe Pawlik, UNCW

OCE DIVISION DIRECTOR'S MESSAGE



Dear Members of Ocean Sciences Community,

It is a pleasure to report that the Ocean Studies Board of the National Research Council recently announced the kickoff of the Decadal Survey of Ocean Sciences (see Appendix). The effort is being supported financially by NSF. The first step was the call for committee nominations, which was circulated by email on May 28th to all recipients of this Newsletter. While the deadline for nominations has passed, you may contact the National Research Council about whether late nominations are still being accepted. With the budget challenges we face in the coming years (see below), it is more important than ever to have a mechanism like the Decadal Survey to gather input broadly from the community on the long-range priorities for the ocean sciences.

Not surprisingly, these challenges are highlighted by the budget situation OCE faces this fiscal year (FY 2013). The final Congressional action on NSF's budget helped to lessen the impact of sequestration, but the constraints we face are nonetheless daunting.

The purpose of this letter is to outline how we plan to meet the challenges this fiscal year (FY 2013).

The FY13 budget for OCE is \$342.82 million, which is \$9 million, or 2.6%, below the FY12 level and 5.3% below the President's FY13 request. The reductions to a number of existing programs, however, are considerably more severe. This has occurred for a number of reasons. In addition to absorbing the overall reduction of \$9 million, OCE must fulfill its commitment to increasing funds needed for operations and maintenance (O&M) of the Ocean Observatories Initiative (OOI) and the new Science, Engineering and Education for Sustainability (SEES) initiatives (Coastal and Hazards SEES). Both of these were priorities in the President's FY13 budget request but have been reduced as a result of sequestration. OOI O&M had been slated for an increase of over \$13 million in the FY13 request; that figure has since been reduced by over \$3 million to \$10 million. Similarly, OCE was planning to invest \$10.5 million in Coastal and Hazard SEES and this has been reduced to roughly \$7 million.

NSF's stated strategy in dealing with sequestration is to protect investments that support people (e.g., fellowships), fulfill commitments to existing awards, and, as necessary, reduce the number of new awards. The vast majority of new awards we make are in the core science programs. Accordingly, the base budgets for core science programs in OCE (Biological, Physical, and Chemical Oceanography, and Marine Geology and Geophysics) must be scaled back from a total of \$122 million in FY12 to \$114 million (an average reduction of 7%). Acknowledging the difficulty of scaling back facilities in mid-year, budgets for fleet operations and the Integrated Ocean Drilling Program (IODP) are reduced by about 5% compared with FY12.

OCE DIVISION DIRECTOR'S MESSAGE *Cont.*

The budget pressures faced by OCE reflect not only the reductions this year, but also the growing costs of facilities to support ocean science. Over the past decade, the percentage of the OCE budget that is invested in major infrastructure (i.e., O&M for OOI, IODP, and the Academic Research Fleet including submersibles) has risen sharply from a long-term average of 40%, to 50% in FY12, and remains at 50% in the new operating plan for FY13. Looking ahead, the annual O&M budget for OOI is slated to rise by about another \$20 million when it is in full operation, the R/V *SIKULIAQ* comes online full-time by 2015 at an estimated O&M cost of \$8 million per year, and the operation of the drilling vessel *JOIDES RESOLUTION* is currently being considered for renewal starting in 2015.

This is the second consecutive year that OCE core science programs have experienced substantial reductions (i.e., FY12 was 5% below FY11 and

FY13 will be 7% below FY12). Even if future overall budgets remain at current levels rather than being cut, this declining trend in core science budgets will continue unless we manage the rising costs of existing and additional infrastructure. Our goal must be to implement a balanced funding approach that permits us to continue needed investments in facilities while also sustaining robust programs in science and education for the benefit of the entire ocean sciences community and the Nation.

I hope this outline of the FY 13 budget reality convinces you of the importance of long-range prioritizing, which is the purpose of the Decadal Survey of Ocean Sciences. Thank you for your continued participation and engagement.

Regards,
David O. Conover, Director
Division of Ocean Sciences



Scientists research chemical defenses in tube sponges off Little Cayman Island.
Credit: Joe Pawlik, UNCW

LETTER FROM THE BIOLOGICAL OCEANOGRAPHY PROGRAM



Giant barrel sponges off Little Cayman Island in the Caribbean dwarf researchers.
Credit: Joe Pawlik, UNCW

The Biological Oceanography Program serves a vibrant and growing community of oceanographers and marine ecologists. As a result, the number of proposals submitted to our program has steadily increased over the years and has now reached 150-160 submissions for both the February and August target dates. Taking into account additional initiatives that involve Biological Oceanography (e.g., Ocean Acidification, Coastal SEES, and Dimensions of Biodiversity) the total proposal load

now approaches 600 submissions per year. Given the implications of these numbers on proposal success rates and the need to provide appropriate evaluation of all proposals, it is imperative that the Program adjust the management of submissions to maintain a healthy success rate and a robust peer review system. We hope the following Program practices will mitigate the increased proposal pressure without undue burden to the community.

LETTER FROM THE BIOLOGICAL OCEANOGRAPHY PROGRAM Cont.

- 1 Resubmission of declined proposals.** As noted in the [Winter 2013 OCE Newsletter](#) OCE's practice regarding resubmission of recently declined proposals is to only consider those same projects one year after the initial submission date. The Program recognizes that occasionally there may be a special circumstance where an immediate resubmission may be advisable and/or necessary for time-sensitive activities, and will communicate, as appropriate, with affected PIs.
 - When proposals are resubmitted, they must be substantially revised in accordance with the policy outlined in the [NSF Grant Proposal Guide IV.E](#). "A resubmitted proposal that has not clearly taken into account the major comments or concerns resulting from the prior NSF review may be returned without review."
- 2 Cross-Foundation opportunities.** Research projects that fit within the scope of a cross foundation announcement such as Ocean Acidification, Coastal SEES, or Dimensions of Biodiversity, should be submitted to those programs rather than to the Biological Oceanography Program. This guidance is explicit in some of the solicitations. We will let you know if you submit a proposal to the Biological Oceanography Program that is better suited to a special program, and give you the opportunity to withdraw. However, the best way to avoid this issue is to contact a program officer and discuss your submission plans in advance.
- 3 Target the most appropriate NSF Program for your research.** We have become more proactive in directing proposals to the most appropriate NSF program. Proposals submitted to the Biological Oceanography Program must make a strong and well-developed case that explicitly ties the research to marine ecology or oceanography. Proposals that focus on marine organisms but primarily investigate organismal biology (physiology, sensory biology, behavior, etc.) or studies of cellular mechanisms (with or without genetic and genomic methodologies) and do not have a *strong and explicit* ecological context may be more appropriate for programs in the Directorate for Biological Sciences. Proposals submitted to the Program that do not meet this requirement may be returned without review or we may suggest the PI withdraw the proposal and submit it to the appropriate program. This takes time and effort on everyone's part, and may require significant wait time until the next submission deadline. Contacting program officers in advance of submitting proposals will help to eliminate this problem.

The program officers in Biological Oceanography are available to provide guidance on resubmissions, if there is a special program you may want to consider, or which NSF program may be the most appropriate for your research idea. We are ready to work with you at any stage of the proposal preparation process, especially in the early stages when several critical decisions must be made.

A robust peer review system must be a partnership between the funding agencies and the community. The Biological Oceanography Program considers honoring review requests and occasionally serving on review panels an essential part of participating

in this process. With increasing demands on the reviewer community, we have been going to great lengths to expand our reviewer data base to reduce requests to each of you. Beyond the satisfaction of performing an essential service to the research community, we invite you to include peer reviewing as one of the Synergistic Activities in your Biographical Sketch in NSF proposals. A segment of the community is very diligent in providing timely and informative reviews but we need this segment to expand. We thank you all for your continued efforts in strengthening the peer review process.

UPCOMING SOLICITATION DUE DATES

Most OCE programs continue to have 2 target dates per year for unsolicited proposals: February 15 and August 15. [Ocean Technology and Interdisciplinary Coordination \(OTIC\) Program](#) has a single annual target date of February 15. For other programs under the [Oceanographic Centers, Facilities and Equipment umbrella](#) please go to the website.

We'd like to highlight the following NSF program solicitations, with their next due dates:

EPSCoR Research Infrastructure Improvement Program Track-3: Building Diverse Communities (RII Track-3)	NSF 13-553	July 10, 2013
Geobiology and Low-Temperature Geochemistry	NSF 09-552	July 16, 2013
Geomorphology and Land Use Dynamics	NSF 09-537	July 16, 2013
Sedimentary Geology and Paleobiology	NSF 12-608	July 18, 2013 for Track 1
Faculty Early Career Development (CAREER) Program see FAQs by Ocean Sciences PIs for the CAREER competition	NSF 11-690	July 24, 2013 for GEO
Instrument Development for Biological Research (IDBR)	NSF 13-561	July 31, 2013
Opportunities for Promoting Understanding through Synthesis (OPUS)	NSF 12-506	August 1, 2013
EPSCoR Research Infrastructure Improvement Program Track-1 (RII Track-1)	NSF 13-549	August 6, 2013
International Research Experiences for Students (IRES)	NSF 12-551	August 20, 2013
EarthScope	NSF 13-562	August 23, 2013
Research Experiences for Undergraduates (REU)	NSF 13-542	August 28, 2013 Note that there is May deadline for proposals requiring access to Antarctica.)

Water Sustainability and Climate	NSF 13-535	September 10, 2013
Critical Zone Observatory National Office (CZO-NO)	NSF 12-595	September 16, 2013
ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers	NSF 12-584	October 4, 2013
Arctic Research Opportunities	NSF 10-597	October 18, 2013
Integrated Earth Systems	NSF 12-613	November 14, 2013
East Asia and Pacific Summer Institutes for U.S. Graduate Students (EAPSI)	NSF 12-498	November 14, 2013
Dynamics of Coupled Natural and Human Systems (CNH)	NSF 10-612	November 19, 2013
Ecology and Evolution of Infectious Diseases (EEID) (See guidance on the Biological Oceanography webpage.)	NSF 12-587	December 4, 2013
Improvements in Facilities, Communications, and Equipment at Biological Field Stations and Marine Laboratories (FSML)	NSF 12-505	December 13, 2013

NEW GEO INNOVATION CALL NEWSLETTER

From the newly launched GEO Innovation Call Newsletter:

GEO is calling for its PIs to participate in the NSF's Innovation Call. We are looking for research ripe for commercialization, for PIs interested in having students co-advised with Industry, for PIs interested in working with their counterparts in Industry, for faculty members interested in creating new education curricula with innovation activities, and for much more. Some of these activities have been in place since the late 70s, but where are you? We know that GEO-related PIs have a lot to contribute, so please call us!

Read the [GEO Innovation Call Newsletter](#) for upcoming deadlines and opportunities, and contact Program [Raffaella Montelli](#) if you have questions.

OCE AND RELATED RESEARCH IN THE NEWS

Cheryl Dybas, NSF Science Communications Officer for Geosciences and Environmental Research

- 1 Natural Underwater Springs Show How Coral Reefs Respond to Ocean Acidification
- 2 World Oceans Month Brings Mixed News for Oysters
- 3 Expedition to the Gulf of Alaska: Scientists Study Coastal Mountains and Glaciers
- 4 Life on a Coral Reef: Insult is (Sometimes) Added to Injury
- 5 'Dark Oxidants' Form Away from Sunlight in Lake and Ocean Depths, Underground Soils
- 6 Earth Day: Big Ecosystem Changes Viewed Through the Lens of Tiny Carnivorous Plants
- 7 Where Does Charcoal, Or Black Carbon Go? From Soils to the Sea
- 8 Scientists Discover Layer of Liquified Molten Rock in Earth's Mantle
- 9 Cutting Specific Atmospheric Pollutants Would Slow Sea Level Rise
- 10 In Last Great Age of Warmth, Carbon Dioxide at Work...But Not Alone
- 11 Extreme Algae Blooms: The New Normal?
- 12 How to Thrive in Battery Acid and Among Toxic Metals
- 13 Earth Is Warmer Today Than During 70 to 80 Percent of the Past 11,300 Years
- 14 NSF Forum: The Globalization of Long Term Ecological Research

For additional coverage, see [Ocean Sciences \(OCE\) – News on the OCE webpage](#).

VISUALIZATION CHALLENGE



NSF invites entries to the [International Science and Engineering Visualization Challenge](#) cosponsored by NSF and the journal *Science*. Categories include photography, illustration, posters and graphics, games and apps, and videos. Winning entries will be published in a February 2014 issue of *Science*, and posted on [ScienceMag.org](#) and on the [NSF website](#). The spirit of the competition is to communicate science, engineering and technology for education and journalistic purposes. The submission deadline is September 30, 2013.

Biomineral Single Crystals

Credit: Pupa U. P. A. Gilbert and Christopher E. Killian; University of Wisconsin, Madison

NSF/OCE WORKSHOP ON SCIENCE JOURNALISM, AND TIPS ON COMMUNICATING YOUR SCIENCE

February in New Orleans. A great time and place to tell a fish tale or two over coffee and beignets—or even better, at the annual Association for the Sciences of Limnology and Oceanography (ASLO) conference. At the meeting, I organized an NSF/OCE-sponsored workshop on “Science Journalism: Out of Gulf Coast Waters and Onto News Wires.” Nancy Rabalais, Executive Director of the Louisiana Universities Marine Consortium (LUMCON), gave the opening remarks, sharing her thoughts on communicating about the ocean sciences. Workshop participants learned how to present

science in interesting ways while retaining factual accuracy, the key to good science communication and science journalism. Participants also reviewed examples of good science writing; “dissected” the structure of science news and feature articles; discussed how popular coverage of science has changed in recent years; and learned the basics of science journalism. All had the opportunity to hone their science communication skills by conveying highlights of their own research—in three minutes or less. I’d like to offer the following take-home messages from the workshop:

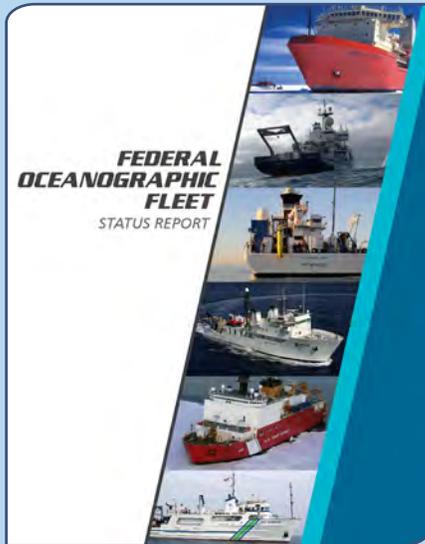
- 1 Shorter is better. In a time of ever-decreasing attention spans, telling your tale as succinctly as possible is more likely to get it read--or heard or seen.
- 2 No jargon. A reader/viewer/listener won’t “engage” if he or she can’t understand what you’re trying to convey.
- 3 Relate your story in language you would use to explain your (or others’) research to an investment banker, an attorney, a (non-science) teacher, a mechanic, a farmer, or any other non-scientist.
- 4 Place your research in a context that relates to someone’s everyday life. Use the WIIFMs, “What’s In It for Me,” as they’re known in the communications field, to relate your science.
- 5 The first question a would-be science communicator should ask is: who is my audience? Then tailor the message—and the medium—to that audience.

Related and well-regarded articles that may be helpful are: “[Nine ways scientists demonstrate they don’t understand journalism](#)” and “[Nine ways scientists can help improve science journalism.](#)” They were published last year in the U.K. newspaper The Guardian.

Please contact me with any questions or suggestions: cdybas@nsf.gov

Cheryl Dybas, NSF Science Communications Officer for Geosciences and Environmental Research

REPORTS OF INTEREST



A May 28, 2013 posting on the [White House blog](#) noted that “the Administration released the *Federal Oceanographic Fleet Status Report*, a comprehensive Federal review of the Nation’s fleet of oceanographic survey and research vessels. These 47 ships are part of our Nation’s critical infrastructure, collecting vital information to help protect lives and property from marine hazards; measure and project global climate change and ocean acidification; enhance safety and security; and more.” (Many of the research vessels described are NSF owned or supported.)

NSF participated in the development of the new *National Strategy for the Arctic Region*. See the press release for a statement by NSF Acting Director Cora Marrett.

The *National Fish, Wildlife, and Plants Climate Adaptation Strategy* that was released in March provides a roadmap of key steps needed over the next five years to reduce the current and expected impacts of climate change on natural resources. See details at the [Department of the Interior website](#)

OCE STAFF CHANGES



Anna Manyak

Anna joined OCE in March as a Science Assistant in Chemical Oceanography. Prior to NSF, she worked as a Knauss Sea Grant Fellow with the NOAA Marine Debris Program, focusing on communications and public education. Anna has a master of science in marine biology from the College of Charleston, with a focus in marine evolutionary ecology.

APPENDIX 1 (From National Research Council)

Decadal Survey of Ocean Sciences: Guidance for NSF on National Ocean Research Priorities

The Ocean Studies Board of the National Research Council requests your nominations for potential committee members for the Decadal Survey of Ocean Sciences. We are seeking a broad range of nominees in the ocean sciences and related fields, including international experts.

Please enter your suggestions for potential committee members via the online form (<http://www.surveygizmo.com/s3/1260708/Nominations-for-OSB-Decadal-Survey>) by June 17, 2013. In submitting names for consideration, please provide the individual's name, institution, contact information, expertise and other comments about their suitability for serving on this committee.

Contact Deb Glickson (dglickson@nas.edu) or Susan Roberts (sroberts@nas.edu) for more information about the study. (Note from NSF: While the deadline for nominations has passed, you may contact the NRC about whether late nominations are still being accepted.)

On behalf of the Ocean Studies Board, thank you in advance for your contribution to this important activity. Although not all suggestions will result in membership on the committee, this process helps ensure that the committee is drawn from a broad pool of qualified experts

DESCRIPTION OF THE STUDY

Context

Within the past decade, new science and technologies have led to breakthroughs and discoveries that have fundamentally altered our basic understanding of the oceans and their relationship to human populations. The value of the ocean to society has been highlighted by multiple commissions (the Pew Oceans Commission; the U.S. Commission on Ocean Policy) and a science-based National Ocean Policy has been developed. These reports highlight ongoing changes to oceanic environments that threaten the societal benefits derived from the sea, yet much of the ocean remains unexplored and poorly understood. Better understanding of the role of the oceans in earth system dynamics is also greatly needed.

The National Science Foundation is the principal federal agency that funds basic research in the ocean sciences at academic institutions throughout the U.S. Our increasing knowledge of the oceans has been supported by the advent of new technologies and facilities that enable new frontiers to be

explored. The operational cost of these new forms of infrastructure and the rising costs associated with existing facilities have created budgetary challenges for NSF. In particular, the fraction of the NSF budget devoted to support for ocean infrastructure has been increasing in recent years while total funds available have flattened.

NSF would benefit from guidance from the ocean sciences community on research and facilities priorities for the coming decade aligned with reasonable expectation of the level of resources to be made available. NSF seeks input on: appropriate levels of investment in infrastructure, individual investigator-based science, and multi-investigator large research programs; the relative value of investments in targeted, interdisciplinary, cross-directorate initiatives like NSF's Science, Engineering, and Education for Sustainability (SEES) portfolio; and development of ideas for new initiatives including their estimated costs and impact on the overall portfolio. In addition,

the priorities and investments of the other federal agencies that conduct mission-driven research or support facilities in the ocean sciences, must also be considered so as to avoid redundancies and gain synergies.

NSF would benefit from enhanced community engagement and input on long range research priorities and strategies to optimize investments in the ocean sciences. Other disciplines and federal agencies have successfully used a decadal survey process to obtain strategic guidance on priorities relative to current costs and projections of resource availability, thereby enabling limited resources to be used more effectively. While there have been

previous well-conducted, community-based efforts to define overall research priorities for the ocean sciences (e.g., Ocean Research Priorities Plan, 2007; updated in 2013) and numerous National Research Council reports that develop priorities for various segments of the ocean sciences, these have not been constrained by resource availability or tradeoffs among competing investments. Hence, they do not address the broader issue of how to balance the full portfolio of NSF's ocean research investments. The goal of this study is to begin a community-based, regularly recurring, decadal survey approach to the visioning and setting of NSF-funded research priorities in the ocean sciences within the context of likely available resources.

Scope

The scope of this study includes all areas of NSF-funded research and infrastructure related to our understanding of the oceans and their interaction with human populations and their role in earth system dynamics including: biological, chemical, and physical oceanography; marine geology and geophysics; marine ecology and conservation, ecosystem science, ocean-related climate science, remote sensing; ocean engineering; the social sciences as applied to the oceans; ocean informatics/data science; highly interdisciplinary

areas of research that cross multiple NSF Directorates. Infrastructure includes the academic fleet (surface and submersible platforms), ocean drilling platforms, ocean observing sensors and platforms, major shared-use instrumentation, cyber-infrastructure, and the development of new technological innovations. The geographic context includes all oceans of the world including the polar regions, the sea floor, estuaries, the coastal zone, and the Great Lakes.

Audience

The primary audiences for this report are senior agency officials at NSF and other relevant agencies, the National Ocean Council, examiners at the Office of Management and Budget, the White House Office of Science and Technology Policy, Congressional staff and committees, the academic community, and non-governmental organizations and members of industry with an interest in ocean science and policy.

Statement of Task

The committee for the Decadal Survey of Ocean Sciences 2015 (DSOS) will develop a list of the top ocean science priorities for the next decade in the context of the current state of knowledge, ongoing research activities, and resource availability. The DSOS committee's report will present a compelling research strategy for increased understanding of the oceans over the decade 2015-2025

The report will include the following elements:

- 1 A review of the current state of knowledge that highlights findings and technologies over the past decade that have advanced our basic understanding of the oceans, driven new discoveries, created new paradigms; or established new societal imperatives. The review should also consider new science and technologies emerging from other disciplines that could be applied to the ocean sciences.
- 2 A concise set of compelling, high level scientific questions that will be central to the ocean sciences over the coming decade and, if answered, could transform our scientific knowledge of the oceans. Prioritization may be derived from relevance to societal benefits, new technological breakthroughs, emerging or underdeveloped yet vital subjects poised for rapid development, or other drivers. The scientific questions and related priorities need not be all-inclusive and should be limited to ten or fewer. The goal is to identify areas of strategic investment with the highest potential payoff.
- 3 An analysis of the research infrastructure needed to address the priority research topics or questions. This will include an assessment of the current portfolio of facilities investments funded by NSF and their operational costs (information to be provided by NSF) as well as proposed new facilities. If new facilities are proposed, the committee will provide a range of estimates for the cost (upper and lower bounds) and include not only construction but also the full life cycle costs for operations and maintenance. The analysis should also consider capacity to respond to unexpected events.
- 4 An analysis of the current portfolio of investments in ocean science programs at NSF with recommendations for changes necessary, if any, to align resources so as to achieve the priorities established in #2. The current portfolio includes programs within the Division of Ocean Sciences and allied program areas (e.g., Polar Programs, Biodiversity) as well as NSF-wide cross-divisional/cross-directorate initiatives that target highly interdisciplinary themes involving the ocean (e.g., SEES).
- 5 Identify opportunities for NSF to complement the capabilities, expertise, and strategic plans of other federal agencies so as to avoid duplication of effort, encourage collaboration and shared use of research assets where appropriate, and maximize the value of NSF investments in the ocean sciences. This will be based on a brief survey of major ocean research programs funded by other Federal agencies.

Work Plan

The final report will recommend a strategy to optimize investments that will advance knowledge in the most critical and/or opportune areas of investigation while also continuing to support core disciplinary science and infrastructure. The recommendations of the committee should include guidance on the most effective portfolio of investments achievable at the current funding level that will support both the research infrastructure (#3) and programmatic science (#4) necessary to address the most significant priorities. This should

include assessing trade-offs among options and identifying potential cost saving mechanisms; assessing the impact of new initiatives and /or modification of existing programs on the overall portfolio as well as identifying opportunities for collaboration among the federal agencies that would leverage investments, optimize use of infrastructure assets, and foster multidisciplinary research. The report will include decision rules on how the program could be adjusted if future funding levels increase or decrease relative to the current level.

Work Plan cont.

A committee of 20 members will be assembled to reflect the diversity of topics covered by the ocean sciences as defined in the scope section. In addition to discipline-specific expertise, the committee will include members with expertise in education, engineering and technology, research program management, and those with broad knowledge of the ocean sciences and its connections to other disciplines. The composition of the committee should also reflect diversity with respect to the geography and nature of the home institutions of its members (e.g., public, private, 4-year; M.S., doctoral), the inclusion of early-career as well as distinguished senior scientists, and historically under-represented groups.

The committee will convene six meetings to gather information and prepare the report. A final, seventh meeting will be reserved for responding to the comments of the external reviewers and finalizing the report. The committee will focus first on developing the retrospective assessment of key advancements and the projected research priorities and questions for the coming decade. Subsequent work will identify the required portfolios of facilities and infrastructure and science programs in the context of present NSF organizational structure. The committee may establish subcommittees to carry out its tasks and these will be organized at the first committee meeting. Subcommittees may convene virtual meetings electronically in between those of the full committee. The committee may also, at its discretion, enlist the advice of experts outside of the membership of the committee to provide additional

expertise and/or advice on topics of special interest. The success of this effort depends heavily upon broad community engagement. The committee will develop a plan for community continuing and regular input and engagement at its first meeting. It is expected that the committee will make full use of existing recent reports, plans, and strategies that were developed by prior community-based efforts. These documents include but are not limited to: the updated Ocean Research Priorities Plan, the National Ocean Policy and Implementation Plan, recent NRC reports on ocean science and infrastructure, strategic plans from other federal agencies, and decadal surveys or research plans from allied disciplines. In addition, it is expected that the committee will hold town halls or workshops at national societal meetings or other venues, solicit community white papers, and create a website and/or other electronic means to facilitate community input.

The committee will prepare and deliver a prepublication copy of its final report within 20 months of receipt of funds. Sponsor(s) will be briefed upon completion of the report and briefings will be offered to congressional offices and committees. The last 4 months of the project will cover report publication and dissemination activities. Additional dissemination of the report may include presentations at professional society meetings and derivative products such as a report-in-brief, summary sheet of key findings, or a web page.



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This newsletter is designed to share timely information about the National Science Foundation's Division of Ocean Sciences. If you have comments or questions, please communicate with the relevant OCE program officer, or with Larry Weber (lweber@nsf.gov), who serves as newsletter editor. The newsletter will be distributed by email and posted on the OCE homepage. Please feel free to forward to colleagues.

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