NATIONAL SEA GRANT COLLEGE PROGRAM

PROGRAM CORE FUNDING: PROCEDURES FOR THE SOLICITATION, REVIEW AND APPROVAL OF PROPOSALS

Executive Summary

The National Sea Grant Office (NSGO) will allocate a portion of the annual federal budget for the National Sea Grant College Program to its 29 component state programs for core activities. This core funding is intended to support management, advisory service/technology transfer, communications, education, and research. At least one third of the total cost of these activities must come from non-federal matching funds. This document standardizes procedures that Sea Grant institutions must implement for generating, evaluating, and selecting proposals that are subject to open competition.

The procedures to be used in determining investment of the core funding encompass five primary elements -- (1) strategic planning, (2) request for proposals, (3) pre-proposal evaluation, (4) peer review, and (5) proposal evaluation and selection. The procedures require each Sea Grant Program to have an advisory process broadly involving representatives of industry, government, and the public. Each program should have a strategic plan that sets priorities, defines opportunities, and aligns state/local needs and opportunities with national needs and opportunities. Requests for pre-proposals will be widely distributed to individuals and unit heads at all institutions of higher learning and other research institutions, within that state or region, with relevant research or educational capability. Each program director will develop a system to rank or categorize pre-proposals on the basis of rationale, innovativeness, and responsiveness to the request for proposals, and provide a written statement of the outcome to each proposing individual.

Fully-developed proposals submitted in response to encouragement from the pre-proposal process will be subjected to peer review for evaluating rationale, scientific or professional merit, and investigators' qualifications. After the peer review process is completed, each program director will convene a review panel capable of interpreting peer reviews within the fields of specialty in which proposals are under consideration for the purpose of ranking proposals on the basis of overall quality and advising the institution on which should be considered for funding. The review panel will operate under procedures to avoid conflict of interest and will include the program's NSGO program officer. Prior to notifying proposers of the outcome of the proposal process, the director will inform the NSGO of the institution's intended decisions and document the corresponding rationale for the record. Once the NSGO has approved the decision-making process, the director notifies all proposers of the decisions regarding their proposals. Anonymous copies of the corresponding peer reviews and a statement of the rationale for the decision will accompany this notification. Records of the proposal and decision-making process, including peer reviews, will be maintained for audit.

Introduction

The purpose of this document is to standardize procedures for generating, evaluating, and selecting proposals for research, education, outreach, and management[1] in Sea Grant programs under their core funding. Sea Grant legislation makes clear that the process of proposal solicitation and review is to be open and competitive. Furthermore, the National Sea Grant Office (NSGO) intends to reduce the time and effort required to process proposals, yet ensure adequate peer review and the generation of research, education, and outreach of high quality.

To accomplish these objectives the NSGO has assigned to the institutional partners comprising the Sea Grant network the primary responsibility for planning, evaluation, and selection of research, education, outreach, and management projects included under core funding. (National competitions for other funding will be administered by the NSGO.) Additionally, the NSGO has established five primary elements defining the process that each Sea Grant institution must establish for selecting projects in its omnibus proposal for core funding. The basic elements are intended to ensure that planning mechanisms reflect priorities as determined by broad constituency participation, that proposal selection reflects these plans, and that the proposal selection process is fair and clearly understood by participants and potential participants. Thus, each omnibus proposal will be judged on two primary criteria -- (1) relevance to a program's strategic objectives, and (2) professional merit of the proposed projects. It is the responsibility of all Sea Grant institutions to promulgate their plans, procedures, and schedule of proposal submission to every qualifying institution in their states or regions.

Strategic Planning

Each institution is required to use an external advisory and planning process broadly involving representatives of industry, government[2], and the public. Each Sea Grant program needs a strategic plan for research, education, and outreach that is compatible with Sea Grant's Network Plan. The plans are expected to set priorities, define opportunities, and align state/local needs and opportunities with national needs and opportunities.

Request for proposals

Each Sea Grant program will develop a request for proposals (RFP) consistent with the strategic plan. The RFP must be distributed widely to individuals and unit heads at all institutions of higher learning and other research institutions, within that state or region, with relevant research or educational capability.

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[1]Management teams should include outreach leaders.

[2]In states where NOAA or other federal agencies have significant research efforts, Sea Grant programs are encouraged to include corresponding representatives in their advisory process.

Pre-proposal evaluation

The RFP must specify a format for brief pre-proposals that are required in advance of full proposals. Each director must devise a system that ranks or categorizes the pre-proposals for research and education on the basis of rationale, innovativeness, and responsiveness to the RFP and inform each proposer of the outcome. In the context of available or anticipated funding and rankings, the director encourages or discourages investigators to develop full proposals. Where appropriate, outreach perspectives should be included in selecting pre-proposals. The director must provide each proposer the rationale for his or her advice in writing so that the process from which the advice stems is clear. At the pre-proposal stage, potential opportunities to develop multi-disciplinary, inter-disciplinary, industrial, or inter-institutional coalitions and collaborations among researchers and educators may emerge. These opportunities should be explored by Sea Grant management and corresponding proposals should be encouraged where appropriate. Each program must promulgate explicit guidelines for preparation and submission of full proposals. Pre-proposals for outreach and management activities under core funding normally are not required. However, they are required for outreach if activities in this part of the core program will be formulated through a competitive process.

Proposal Evaluation and Selection

1. Peer Review Peer review is the responsibility of the Sea Grant directors. Oversight of the peer review process is the responsibility of the National Sea Grant Office. This division of responsibilities for peer review follows recommendations of the National Research Council[3].

In 1990 the National Sea Grant Office codified seven criteria for evaluating proposals - (1) rationale, (2) scientific or professional merit, (3) innovativeness, (4) professional qualifications of investigators, (5) user relationship, (6) responsiveness to Sea Grant priorities, and (7) programmatic value. Attachment A defines these criteria. A proposal's rationale (Criterion 1), scientific or professional merit (Criterion 2), innovativeness (Criterion 3), and investigators' professional qualifications (Criterion 4) are determined primarily by peer[4] review. "Briefly defined, peer review is an organized method for evaluating scientific work which is used by scientists to certify the correctness of procedures, establish the plausibility of results, and allocate

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[3]Ocean studies Board, National Research Council, 1994. A Review of NOAA National Sea Grant College Program, National Academy Press, Washington, p. 3.

[4]One that is of the same or equal standing [in a field of research] (Webster's Third new International Dictionary, Merriam-Webster, Inc., 1981). It is recognized that this is an ideal, not something that can be precisely achieved. "There is a high probability that one or several aspects of a proposal will not be appreciated by the judging 'quasi-peers'" (W.E. Stumph, 1980, 'Peer' review, *Science* 207: 822-23). "For the 'best' scientists *peer* review is unlikely" (Reference in Footnote 2, page 194).

scarce resources (such as journal space, research funds, recognition, and special honor)."[5] The statements below outline principles, responsibilities, and requirements for peer review of proposals within Sea Grant programs. They standardize the process of peer review and help ensure the highest quality projects by subjecting proposed research, education, and outreach to the national community of peers. Peer review of proposals for management is not required.

- Each proposal must receive at least three written peer reviews on a standard form (Attachment B[6]). Attachment C is an example of a letter for soliciting the kind of review that will be helpful in evaluating proposals. For outreach proposals, reviewers should include the professional outreach community as well as users of outreach services.

- Selection of peer reviewers must be guided by principles for ensuring absence of conflict of interest. Most peer reviewers should be from outside the state. A recent report of the U. S. General Accounting Office (GAO)[7] notes that in peer review as practiced in three federal agencies, junior scholars are consistently under represented among reviewers. In some programs women and minorities also are under represented. Thus, Sea Grant directors should make special efforts to ensure that these groups are appropriately represented among peer reviewers and that gender, race, and ethnic discrimination are not affecting project rankings.

- While peer review is used primarily to establish a proposal's rationale, scientific or professional merit, innovativeness, and investigators' qualifications, some peer reviewers may be able to address the other evaluation criteria (user relationships, programmatic value, and responsiveness to Sea Grant priorities).

- Letters of support from potential users of the results of proposed research also may be submitted with proposals, but they do not substitute for peer review.

- Peer review should be conducted on fully developed proposals - not preliminary proposals. If a proposal submitted to the National Sea Grant Office was changed as a result of peer review, a special section or attachment, specifying the changes, must be added to the proposal.

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[5]Chubin, D.E. and Jackett, E.J., 1990. *Peerless Science: Peer Review and U.S. Science Policy*, state University of New York Press, Albany, p.2.

[6]The NSGO will revise this form to include, in addition to an overall rating, separate ratings for rationale, scientific or professional merit, innovativeness, and investigators' qualifications.

[7]General Accounting Office, 1994. Peer Review: Reforms Needed to Ensure Fairness in Federal Agency Grant Selection (GAO/PEMD-94-1), Washington, DC

- Directors should continuously try to expand their database of peer reviewers so that researchers are solicited only infrequently for review of proposals and so that Sea Grant's peer review system does not become inbred. Most good proposals display the proposed research in the context of the latest advancements in a field of research; therefore, authors of selected papers referenced in a well-developed proposal should be ideal peer reviewers. Thus, Sea Grant directors should use a proposal's list of references as one resource for identifying peer reviewers whose expertise is closely related to the issues addressed in proposals. (The GAO report[7] identified lack of closely related expertise as one of three areas of peer review needing attention - "And although most reviewers reported expertise in the general areas of the proposals they reviewed, many were not expert on closely related questions, ...")

- The director must use a review panel(s) capable of interpreting peer reviews within the specialized fields of the proposals under consideration, for the purpose of evaluating proposals on the basis of overall quality and advising the institution on which should be considered for inclusion in the institution's omnibus proposal. These panels are expected to operate by procedures that strictly avoid conflict of interest (Attachment D.). The NSGO program officer (*ex officio)* will be included in the panels.

- Periodically the National Sea Grant Office will audit the review process as practiced by each Sea Grant program and recommend or require changes or improvements if deficiencies are identified. **The quality of a program's review process and corresponding record-keeping may affect federal funding for the program.**

2. Project Selection After considering the panel's advice, and the urgency and importance of issues addressed by proposals, program management will make decisions on the portfolio of projects to be included in the core program. Before notifying proposers of the outcome, the director must inform the NSGO program officer of the institution's intended decisions and document the corresponding rationale for the record. This documentation must be part of the omnibus proposal submitted to the NSGO for funding.

The NSGO will review this letter of intent in the context of ensuring that a fair and open process was followed to reach the decisions; this review is not intended to influence programmatic decisions on individual projects. It is anticipated that approval by the Program Officer will be routine, except in exceptional cases, and that the review process will normally be completed within five working days or less. If, after discussion with the director, there are issues related to the fairness and openness of the review process that cannot be resolved, the director of NSGO will make the final decision. Upon approval by the NSGO, the program director notifies all proposers of the decision regarding their proposals in writing. Anonymous copies of the corresponding peer reviews and a statement of the rationale for the decision must accompany this notification.

Notification and Record-keeping

Records of the proposal and decision-making process are necessary for subsequent evaluations of the process. The following lists those records that should be transmitted to the National Sea Grant Office and those records that should be maintained by the Sea Grant programs:

- Directors must provide the National Sea Grant Office the name, professional affiliation, and complete address of all peer reviewers for each project.

- Directors must provide the National Sea Grant Office a summary of the rationale for the program's selection or rejection of each proposal.

- Directors must keep records of their peer review processes so that they can be reviewed and evaluated periodically. These records, which must be maintained for six years from the time of the corresponding award, and shall be made available to the National Sea Grant Office upon request, include the following:

  a. Distribution list for the request for proposals.

  b. List of titles, principal investigators, and institutional affiliations of all preproposals and proposals received in response to request for proposals.

  c. Complete copies of all peer reviews submitted in response to a solicitation, along with corresponding signed statements certifying no conflict of interest.

  d. Complete name, field of expertise, and professional address of each peer solicited to review each proposal; dates of solicitation and response if any; source for each reviewer, for example, suggested by the proposer, author of a paper referred to in the proposal, or suggested by an advisor (specified) to the Sea Grant program.

  e. Complete name, field of expertise, and professional address of each review panelist selected to consider peer reviews and advise the director on the merit of proposals with list of proposals assigned to each panelist as lead expert.

  f. A summary of the advice rendered by the review panel on the merits of proposals under consideration.

  g. A summary of the rationale for the institution's selection or rejection of each preproposal and proposal.

Attachment A

CRITERIA APPLICABLE IN EVALUATING PROPOSALS FOR PROJECTS IN THE NATIONAL SEA GRANT COLLEGE PROGRAM

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 or Professional 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. Innovativeness - 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. Qualifications and Past Record of Investigators - degree to which investigators are qualified by education, training, and/or experience to execute the proposed activity; record of achievement with previous funding.

5. User Relationships - degree to which users or potential users of the results of the proposed activity have been brought into the 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 Sea Grant Priorities - degree to which the proposed activity relates to priorities in guidance provided in documents of the National Sea Grant Office or in descriptions of special focus programs.

7. Programmatic Justification - the degree to which the proposed activity will contribute, as an essential or complementary unit to other projects, to reaching the objectives of a sub-program in a state, regional, inter-institutional, or national sea grant program or the degree to which it addresses the needs of important state, regional, or national constituencies.

Attachment B

NOAA Form 90-8
(5-79)

U.S.Department of Commerce

National Sea Grant College Program
Proposal Evaluation Form

Fax: 301-713-0799

PROPOSAL NO.: INSTITUTION: PLEASE RETURN BY:

PRINCIPAL INVESTIGATOR:

TITLE:

COMMENTS (CONTINUE ON ADDITIONAL SHEET(S) AS NECESSARY)

RATING: ( ) EXCELLENT ( ) VERY GOOD ( ) GOOD ( ) FAIR ( ) POOR

Verbatim but anonymous copies of reviews, ratings and associated correspondence will be sent only to the principal investigator upon request. Subject to this policy and applicable laws, including the Freedom of Information Act (USC 552), reviewers' comments and identities will be given maximum protection from disclosure.

REVIEWER'S SIGNATURE REVIEWER'S NAME (TYPED)

OTHER SUGGESTED REVIEWERS (OPTIONAL)

Attachment B (cont.)

NATIONAL SEA GRANT COLLEGE PROGRAM
INFORMATION FOR REVIEWERS

In meeting its statutory responsibilities the National Sea Grant College Program and its component state and regional sea grant programs seek to support the most meritorious research. Peer reviews play a key role in the evaluation of research proposals. Please provide both written comments and a summary rating on this form by employing the criteria provided below.

PROPOSAL EVALUATION CRITERIA

Sea Grant uses seven criteria for evaluating research proposals - (1) rationale, (2) scientific or professional merit, (3) innovativeness, (4) professional qualifications of investigators, (5) user relationship, (6) responsiveness to sea grant priorities, and (7) programmatic value. A proposal's rationale (Criterion 1), scientific or professional merit (Criterion 2), innovativeness (Criterion 3) and the investigators' qualifications (Criterion 4) are determined primarily by peer review. Please comment on these four qualities, which are described below, and on the proposed budget and level of effort.

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 or Professional 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. Innovativeness - 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. Qualifications and Past Record of Investigators - degree to which investigators are qualified by education, training, and/or experience to execute the proposed activity; record of achievement with previous funding.

SUMMARY RATINGS

Excellent: Probably will fall among top 10% of proposals in the area of research; highest priority for support. This category should be used only for truly outstanding proposals.
Very Good: Probably will fall among top third of proposals in the area of research; should be supported.
Good: Probably will fall among middle third of proposals in the area of research; worthy of support.
Fair: Probably will fall among lowest third of proposals in the area of research.
Poor: Proposal has serious deficiencies; should not be supported.

CONFLICT OF INTEREST

If you have an affiliation or financial connection with the institution or the person submitting this proposal that might be construed as creating a conflict of interest, please describe those affiliations or interests on a separate page and attach it to your review. Regardless of any such affiliations or interests, unless you believe you cannot be objective, we would like to have your review. If you do not attach a statement, we shall assume that you have no conflicting affiliations or interests.

CONFIDENTIALITY OF PROPOSALS AND PEER REVIEWS

Sea Grant receives proposals in confidence and is responsible for protecting the confidentiality of their contents. In addition, the identity of reviewers will be kept confidential to the maximum extent possible. For this reason please do not copy, quote, or otherwise use material from this proposal.

Attachment C

_____ Sea Grant College Program

Dr. S.G. Researcher
Department of Resource Development
University of Coastal America
Collegetown, USA

Dear Dr. Researcher:

In meeting its responsibilities, the _____ Sea Grant College Program seeks funding for the best proposals submitted to it. Peer review plays a key role in selecting proposals for projects and subprograms to be submitted to the National Sea Grant Office. The National Sea Grant Office has delegated responsibility for peer review to state and regional sea grant programs. Thus, I request your written comments on, and summary rating for, the enclosed proposal. Attached to the proposal is an evaluation form with instructions. Also enclosed is a form for a peer reviewer to certify her or his absence of conflict of interest. Please sign this form and return it with your review if you can provide this very important service.

I recognize the time and effort required to carefully review a proposal and will be very grateful for your help. Your evaluation would be most helpful if received by _____.

Sincerely,

S.G. Program
Director

Enclosures

Attachment D

NATIONAL SEA GRANT COLLEGE PROGRAM

CONFLICT-OF-INTEREST STATEMENT FOR TECHNICAL PANELISTS

1. As a technical panelist you are asked to review a research proposal or proposals for federal and/or matching funding. Your designation as a panelist requires that you be aware of potential conflicts of interest. Please read the examples of potentially biasing affiliations or relationships listed on the back of this form.

2. If your designation gives you access to information not generally available to the public, you must not use that information for your personal benefit or make it available for the personal benefit of any other individual or organization. This is to be distinguished from the entirely appropriate general benefit of learning more about Sea grant or becoming better acquainted with the state of a given discipline.

3. Sea Grant receives proposals in confidence and protects the confidentiality of their contents. For this reason, you must not copy, quote or otherwise disclose or use material from any proposal you review. The discussions of the panel are expected to remain confidential.

CERTIFICATION

I have read the list of affiliations and relationships on the back of this form that could prevent my participation in matters involving such individuals or institutions. To the best of my knowledge, I have no affiliation or relationships that would prevent my objectively executing the responsibilities of peer review. I also will not divulge any confidential information I may become aware of during my review.

Reviewer's Name:_____

Reviewer's Signature: _____ Date:_____

Title of Proposal(s)_____

_____

_____

_____

_____

CONFLICT-OF-INTEREST STATEMENT
FOR SEA GRANT TECHNICAL PANELISTS

1. Your affiliations with applicant institution(s).
   You may have a conflict if you have/hold -

- Current employment at the institution as professor adjunct professor, visiting professor, or similar position. (This includes other campuses of a multi-campus institution, but a waiver may be available. If you are in a multi-campus institution, let the program director who solicited your review know.)
- Other current employment with the institution such as consulting or an advisory arrangement, or you are being considered for employment with the institution.
- Formal or informal re-employment arrangement with the institution.
- Ownership of the institution's securities or other evidences of debt.
- Current membership on a visiting committee or similar body at the institution. (This is a conflict only for proposals or applications that originate from the department, school, or facility that the visiting committee or similar body advises.)
- Any office, governing board membership, or relevant committee chairperson in the institution. (Ordinary membership in a professional society or association is not considered an office.)
- Current enrollment as a student. (Only a conflict for proposals or applications that originate from the department or school in which one is a student.)
- Received and retained an honorarium or award from the institution within the last 12 months.

2. Your relationships with an investigator, project director, or other person who has a personal interest in the proposal or other application.

- Known family or marriage relationship. (Conflict only if the relationship is with a principal investigator or project director.)
- Business or professional partnership.
- Employment at same institution within the last 12 months.
- Past or present association as thesis advisory or thesis student.
- Your collaboration on a project or on a book, article, report, or paper within the last 48 months.

3. Your other affiliations or relationships.

- Interests of the following persons are to be treated as if they were yours: any affiliation or relationship of your spouse, of your minor child, or a relative living in your immediate household or of anyone who is legally your partner that you are aware of, that would be covered by items 1 or 2 above (except for receipt by your spouse or relative or an honorarium or award.)
- Other relationship, such as close personal friendship, that might tend to affect your judgements or be seen as doing so by a reasonable person familiar with the relationship.

CONFIDENTIALITY OF PEER REVIEWS AND REVIEWER IDENTITIES

Sea Grant policy is that reviews and reviewer identities will not be disclosed except that verbatim copies of reviews (without the name and affiliation of the reviewer) will be sent to the principal investigator. Sea Grant considers reviews and reviewer identities to be exempt from disclosure, but cannot guarantee that it will not be forced to release them under terms of the Freedom of Information Act, or other laws. It may release a listing of all reviewers used within a specified period.

NATIONAL SEA GRANT COLLEGE PROGRAM

FRAMEWORK FOR PROGRAM EVALUATION

INTRODUCTION

The National Sea Grant College Program Act (33 U.S.C. 1121 et. seq.) and proposed amendments (H.R. 1175) are specific in requiring compliance with a merit review process for member institutions based on program evaluation. The Act also sets forth requirements for certification (qualification) for Sea Grant Colleges. There is, furthermore, a requirement within the Act for "open and healthy competition." The amendments to the Act as proposed in H.R. 1175 are based on and are consistent with the recommendations of the Ocean Studies Board of the National Research Council as presented in the report *A Review of the National Sea Grant College Program* (NAS Press, 1994). In addition, various elements of the Sea Grant Community have recently considered the subject of program evaluation and there is general acceptance of the notion that programs should be rewarded in part on the basis of "fair and considered" evaluations of program quality.

The purpose of this policy statement is to set forth the principles, objectives and basic procedural framework for the evaluation of individual Sea Grant Programs.

EVALUATION FRAMEWORK

The framework is presented below in six subsections that define the various elements and objectives of the evaluation process. The actual mechanics of the process, criteria for evaluating quality and the schedule for compliance remain to be defined. It is anticipated that a program evaluation plan for Sea Grant institutions will be implemented on a trial basis in FY 98 and be fully operational in FY 99.

- Rationale for Program Evaluation in Sea Grant

  > The Sea Grant Act requires: competition among programs, compliance with a merit review process, program evaluation, and a procedure for the periodic review of designated Sea Grant institutions.

  > With limited entry of new Sea Grant Colleges and scarce resources, greater emphasis must be placed on demonstrating accomplishment, relevance, impact, i.e., for justification for expenditure of public funds.

  > Allocation of funds to individual programs based in part on program performance is a desirable mechanism for quality enhancement among programs.

  > The advice developed through program review and evaluation will be useful in improving the quality of individual programs and the network.

- Objectives of the Evaluation Process

  > Improve individual program performance through outcomes assessment.

  > Provide clear demonstration that institutional programs are achieving the goals of the Sea Grant Act through compliance with high standards of excellence.

  > Stimulate through identification of best practices improvements in performance of the Sea Grant Network as a whole.

  > Encourage new and innovative approaches to issues and problems throughout the Sea Grant Network.

  > Provide a basis for program identification of accomplishments to stakeholders and general public.

  > Provide a basis for rewarding excellence through resource allocation.

- Criteria for Evaluation -- Individual Sea Grant institutions must, prior to formal program evaluation, have in place:

  > A balanced program as defined in the eligibility requirements for Sea Grant Colleges as listed in the *Federal Register*.

  > A commitment to promote Sea Grant and to fulfill the responsibilities of a Sea Grant Institution.

  > Programmatic objectives consistent with the Sea Grant/NOAA mission, needs of the state, and goals of the institution.

  > A planning process based on programmatic objectives that through which program priorities and resource investment objectives are determined and periodically evaluated.

  > An advisory process with input from the stakeholder community, including state and federal agencies, whose responsibility is to help define program priorities and investment objectives.

  > An implementation plan or process that assures achievement of program objectives. This includes a management infrastructure consistent with achieving a fully integrated, balanced program of research and outreach.

  > A system of ongoing evaluation that demonstrates achievement of objectives and outcomes, and uses results to improve program effectiveness.

> A reporting system that communicates program objectives, priorities, and achievements to the appropriate stakeholder constituencies.

> The use of a fair and open proposal process that attracts the best available talent.

- Program Review and Evaluation

> Each program must maintain an ongoing assessment process with documented results that will be subject to evaluation on a three-year basis.

> Evidence must be given at least once every three years that the results of assessment and review are applied to the development and improvement of the Program and the use of program outcomes in furthering Sea Grant's mission.

> Each program must in the assessment process demonstrate that the outcomes important to the objectives of the Program and institution are being measured. Evidence should be as quantitative as possible and include but not be limited to a set of commonly accepted outcomes assessment measures and criteria.

- The Review Process

> The NSGO will conduct an evaluation of each individual program once every three years. Evaluations will focus on programmatic accomplishments and outcomes in the context of the resources invested.

> The program evaluation will consist of the following features:

>> a self evaluation conducted by the Sea Grant institution that:

* defines program objectives

* demonstrates that resource expenditure is aligned with objectives

* evaluates program achievements in relation to objectives

* that measures both qualitatively and quantitatively the outcomes, impact, improvements and accomplishments of the program over the reporting period

* that evaluates the effectiveness of the program in communicating achievements to state leaders and other program sponsors

* reports on corrective action taken in response to a previous program review

* identifies problem areas or issues that need improvement to enhance performance

>> a visiting evaluation committee whose purpose is:

* to review program quality/achievements as reported by the self assessment

* to audit achievement/quality through independent assessment

* to be appraised of problems and issues of concern by the upper administration of the institution

* to provide constructive input on program management through recommendations

* to develop "best practices" concepts throughout the network

* to make value judgements about program quality in relation to criteria and evaluation standards

* to report results of evaluation to National Panel, Director, NSGO, and institutional officials

- Procedural Issues

> The NSGO in consultation with the SGA and NSGRP will develop:

>> criteria, and standards of performance

>> a system for determining program quality based on review criteria

>> reporting guidelines (forms, questionnaires)

>> audit requirements

>> schedule of reviews

>> a mechanism for resource allocation based on program evaluation.

> Concerning rewards for performance, the NSGO will set aside a fixed merit pool for each three-year period. Awards for exemplary performance will be made from this merit pool to qualifying programs in the fiscal year following program review. At the end of this three year period, these funds revert to the merit pool for reallocation. Adjustments to a program's resource base for performance will only be made through the merit pool. Therefore initially, programs can only increase (be rewarded) through program review.

> Continued unsatisfactory performance reviews of a Sea Grant Program could result in loss of certification and decreases in federal funding.

NATIONAL SEA GRANT COLLEGE PROGRAM

ALLOCATIONS FOR FY 1998 AND BEYOND

BACKGROUND

Funding allocations for individual programs for FY 1996 and 1997 derive primarily from decisions set out in a series of memos from the NSGO[1] establishing a "moratorium" on changes in allocations for individual programs. A policy memo dated September 20, 1996[2], (as revised October 8, 1996) sets forth allocations for FY 1997 and important dates for proposal submission so as to establish a planning horizon for FY 1998. The purpose of this presentation is to establish guidelines and rationale for the allocation of appropriated funds for FY 1998 and subsequent years. Attached is a funding plan for FY 1998 that lists specific allocations based on these guidelines and our best estimates of FY 1998 appropriations. In each subsequent year a funding plan will be promulgated by the NSGO based on these guidelines and estimated appropriations for that fiscal year.

GUIDING PRINCIPLES

The principles listed below were developed after careful consideration of the National Sea Grant College Program Act (as proposed), the Ocean Studies Board Report, and various documents from the SGA, NSGO and NSGRP[3]. The principles represent the fundamental precepts for the rationale used to develop the funding allocation plan for FY 1998. The principles are articulated as follows:

- Sea Grant conducts research, education, and outreach to use and conserve coastal and marine resources for a sustainable economy and environment. (Mission Statement)

- Sea Grant is a university- and science-based partnership between NOAA and Sea Grant institutions.

- Long-term continuity and the presence of a locally-managed, university-based infrastructure greatly enhance "value" and are the basis for the overall strength and quality of performance of the Sea Grant Program.

- Provision of a stable funding base is essential to maintaining a sound local infrastructure. For statewide programs, the federal investment should be sufficient to maintain a balanced program of high quality.

- Mechanisms that maintain considerable open and healthy competition are essential to maintaining excellence and high levels of performance.

- Individual programs require a degree of local autonomy in order to best align local and national priorities with resource investment decisions.

- A merit review process in which programs are evaluated based on outcomes assessment is a legislative requirement and the results of that review should be reflected in funding allocations.

- Strategic investments at the national/regional (multi-program) level allow Sea Grant to address critical national issues at a much higher level of intensity and focus than is generally practical under a locally-distributed allocation scheme. Such investments also help promote research/outreach meritocracy across the network.

DESCRIPTION OF ALLOCATION PLAN

The allocation plan that follows is based on the above principles and the documents that support them[3]; the funding plan for FY 1997; a base budget of almost $51 million after costs of administration, current obligations, network-wide projects and Administration imposed reductions. The allocation plan contains two major program elements: **Program Core Funding** and **National Strategic Investments**. These elements are discussed in detail below.

PROGRAM CORE FUNDING

The individual program core funding level is a predetermined funding allocation target for each program made in advance of a fiscal year. The core funding is intended to provide a continuum of support around which individual programs can plan and develop, providing both a basis for estimating the dollars available to a program in a given year and a target amount for omnibus proposals submitted to NOAA for that year. The core funding level for a given program consists of two components: the program's **base funding** and **merit funding.** Program base funding represents NOAA's investment in local infrastructure and addresses directly the stability of funding required by the Sea Grant Act. Merit funding is intended to reward program performance and is determined every three years. More detailed explanations follow below.

It is expected that by FY 2000, as an operating guideline, approximately 50 percent of the Federal funding for the program core will be distributed for research and education projects awarded competitively. No more than 10 percent of the Federal core funding may, in any one year, be designated for program development purposes. Programs may otherwise invest their core funding in accordance with state and national strategic objectives.

A. Base Funding

The base funding allocation for a program was made based on three considerations:

- Omnibus Funding - a fixed amount specific to each program that is equal to the FY 1995 moratorium funding level. This funding level is in recognition of the NOAA investment history and cumulative performance record that is the legacy of each individual program. As such, it carries the highest weight in determining the base funding level.

- Program-Wide Adjustment - a percentage increase to support the additional costs facing all Sea Grant programs in order to carry out their core programs as envisioned under Sea Grant's new procedures.

- Small Sea Grant Program Adjustment - an amount based on an assessment of additional resources needed by the smaller Sea Grant programs in order to enhance their capability to operate a strong, balanced program of research, education and outreach.

B. Merit Funding

In addition to the base funding for a given program, there will be additional merit funding adjustments determined according to performance in merit-based competition with peer Sea Grant institutions. These distributions will be made in the year after a program has been evaluated and will continue each year until the subsequent evaluation. The merit funding may then change (or disappear) based on the evaluation. It is expected that the overall merit funding pool will remain constant over a 3-year period and not exceed 10 percent, in the aggregate, of the entire amount allocated to the core funding.

NOTE: A program of merit-based distribution based on outcomes evaluation will not be in place during FY 1998. The NSGO, NSGRP and SGA will jointly be developing evaluation criteria and program elements to be implemented in FY 1999. It is expected that the first adjustments to merit funding will not be made until FY 2000. For FY 1998 and FY 1999, the funds assigned to the merit pool will be used for the development of multi-program/regional projects.

The total core funding then for FY 1998 and 1999 will consist of the program base plus multi-program/regional initiative funds for those years. In FY 2000, the multi-program/regional funds would become part of the merit pool.

NATIONAL STRATEGIC INVESTMENTS (NSI)

There will be set aside a fixed sum of approximately $10 million that will be distributed to the Sea Grant Network on the basis of open competition among individual programs. These competitions would normally be open to proposals from all programs but competitions may also be restricted to regional initiatives in certain cases.

NSIs would be determined through several primary pathways, namely: Congress, the Administration, NOAA, and a national issues panel. The national issues panel will be established during FY 1997 with responsibility to advise the NSGO Director concerning opportunities for developing NSIs. It is expected that this panel will help establish a long-range plan and protocol for national initiatives in Sea Grant including the periodic evaluation of their effectiveness and quality.

For each NSI that is identified, the NSGO will be responsible for developing the RFP and infrastructure necessary to manage the initiative. Proposals for NSIs would be submitted to the NSGO in response to RFP's developed at the national level. It is intended that after several years there will be in place a process such that RFP's for NSIs would be promulgated at the same time as program omnibus RFP's and start dates for NSI awards would occur in the February/March time period of each fiscal year.

The rationale for NSIs is as follows:

- They promote research meritocracy, healthy competition throughout the network, and participation by the best investigators throughout the Sea Grant institutional universe.
- They allow Sea Grant to focus significant funds on high visibility, national issues.
- They provide a flexible mechanism for Sea Grant to respond to high priority issues and opportunities within NOAA and the Administration without disruption of the strategic objectives of individual programs.
- They provide a basis for demonstrating the utility of the Sea Grant model in enrolling the capability of the university community to address issues of importance to key national constituencies.
- They provide a highly visible platform of accomplishment from which to attract additional funding and promote research results.
- They provide a source of funds to enhance network-wide capabilities (e.g. research and development, education, MAS, and communications) that are generally not possible through the investment activity of individual programs.

National Strategic Investments for FY 1998

Several NSIs have been established primarily through Congressional mandate. The funding levels have been established for these programs, and they have in place a management infrastructure that will develop RFP's for FY 1997 that will continue through FY 1998. They include:

1. Nonindigenous species (including zebra mussels)

2. Oyster disease

3. Technology development and transfer (SBIR, NCRI)

There are a number of other programs that have been developed by the Sea Grant Network and will continue into FY 1998. These are specified in the funding plan for FY 1998 and include:

4. Knauss Marine Policy Fellowships and Sea Grant Industrial Fellowships

5. Historically Black Colleges and Universities Program

6. NSGO Program Development

7. Operation Pathfinder

Several new NSIs will be established in FY 1998 and continue for a period of 2 years. These will include:

8. National Outreach Program
   A revolving fund, not to exceed $500,000, will be established for network outreach initiatives. These initiatives are intended: to strengthen the Sea Grant outreach network; to enhance regional and multi-institutional network capabilities; to address new or developing regional issues and needs; to bring resources to high-visibility, high-impact issues, problems or areas; and to utilize, where appropriate innovative technologies to extend our "reach" to the public. The selection process will be RFP-driven and proposals from the network will be reviewed by a panel of outreach experts from outside Sea Grant who will advise the NSGO.

9. Sea Grant - NOAA Partnership Program
   A revolving fund, not to exceed $500,000, will be established for initiatives that are beneficial to the Sea Grant Network and also meet the identified needs of one or more NOAA line or program offices. NOAA offices will offer opportunities for joint initiatives that would be appropriate for Sea Grant to address and that would meet their

strategic needs; NOAA partners will be required to contribute a percentage of project costs.

10. National Strategic Initiatives
    There will be a modest pool of uncommitted funds (about $1.88M) to begin an additional NSI in FY 1998, to be selected according to the procedures outlined above.

OTHER CONSIDERATIONS

This allocation plan is based on the assumption of level funding by Congress and minimal recisions or reductions by the Administration at least over the three fiscal years likely to be encompassed in the next Sea Grant reauthorization bill. However, assumptions of constant funding are unlikely to be realized. The following guidelines establish a general protocol for large differences between a constant funding scenario and actual appropriations.

- In the event of a large decrease in appropriation, the first consideration is the maintenance of local programs. Therefore, the program base funding will receive first priority in allocation decisions.

- In the event of a large increase in non-specific appropriations, the first consideration is to increase the merit funding pool to an amount equal to 10 percent of the total core funding (program base plus merit funding). No distribution policy for increases beyond the above limit is being considered at this time.

Attachments

Citations

(1) Bhumralkar, C. "Proposal for a Moratorium," May 26, 1995
Bhumralkar, C. "Moratorium Decision," June 13, 1995

(2) Baird, R. "FY 1997 Allocations and Schedules," September 20, 1996
Baird, R. "Revised FY 1997 Allocations," October 8, 1996

(3) National Sea Grant College Program Act (33 USC 1121 et seq.) (including proposed amendment to H.R. 1175)

Oceans Studies Board, April 14, 1994

Bhumralkar, C. "Ideas about Allocation of Funds," March 1, 1996

Malouf, R. et. al. "Allocation of Sea Grant Funds, a Draft Model Proposed for the Sea Grant Association," March 19, 1996

Kudrna, F. et. al. "Recommendations Concerning Allocation of Sea Grant Funds," NSGRP Allocation Policy Committee, June 26, 1996

Bucklin, A. et. al. "Funding Allocation Recommendations," SGA Mission Committee, June 28, 1996

NATIONAL SEA GRANT COLLEGE PROGRAM

FY 1998 FUNDING PLAN

Fiscal Year 1998 will be the first year that the Sea Grant program is operating under "new procedures." The FY 1998 Funding Plan was prepared around several assumptions and NSGO decisions that we outline below.

ASSUMPTIONS

- Level Funding — Sea Grant receives an FY 1998 appropriation at the same level as in FY 1997 — $54.3M. A higher or lower appropriation will require adjustments to this plan.

- Administration Reduction — We are assuming that Sea Grant will be charged in FY 1998 with a $585K OMB-imposed reduction from Sea Grant's appropriation. This would be the same level as in FY 1997.

- NSGO Administrative Costs — These costs will remain at $2.7M.

- Network Communications — We are assuming level funding for the three network communications efforts ($367K): the National Sea Grant Depository in Rhode Island, the Maryland-based Network Media Relations project; and the South Carolina-administered *Sea Grant Abstracts* publication.

Based on the above assumptions, $50.65M will be available for program grant awards in FY 1998. These funds will be allocated approximately as follows: Program Core Funding of $40.51M; National Strategic Investment Funding of $9.95M; and a small reserve of $185K. Each of these components is explained below.

PROGRAM CORE FUNDING

Program Core Funding ($40.5M) will consist of two components: a Base Funding allocation and a Merit Funding allocation ($2.3M).

A. Base Funding

Base Funding is set at $38.2M. This is an increase of $325K from that allocated in the draft plan. This component will be the highest priority for protection in cases of funding cuts and, once set, remains fixed until overall budget considerations allow for network-wide upward adjustments.

B. Merit Funding

Merit Funding on a competitive basis will be brought on-line in FY 2000. By that time, the intent is to have procedures for programmatic review developed (FY 1997), tested (FY 1998), and formal programmatic reviews underway (FY 1999). We expect that the results of the FY 1999 programmatic reviews will be used to allocate the Merit Funding for the first time in FY 2000. The goal is to build up the pool of funds available for Merit Funding to an amount equal to about 10 percent of the Core Funding.

Meanwhile, in FY 1998 this pool of funds will be set at $2.32M and will be distributed equally among all the programs at a level of $80K per program (Col. 9). These funds are intended for continuation of Multi-Program and Regional projects initiated in FY 1997. We also expect to allocate at least the same amount, $80K per program, in FY 1999 for Multi-Program and Regional projects.

NATIONAL STRATEGIC INVESTMENT

The National Strategic Investment (NSI) Funding consists of Continuing NSIs and New NSIs with most of the funding allocated by national competitions. In FY 1998, $9.95M is being allocated for these purposes. Of this, $7.08M will be used to continue programs underway, and $2.88M will be used to initiate new programs.

B. Continuing NSIs

- Nonindigenous Species and Oyster Disease Research — Sea Grant has committed funding for nonindigenous species and oyster disease research through FY 1998. We plan to meet the Congressional intent to fund these areas at the level of $2.8M and $1.5M, respectively. We will have a national competition in FY 1997 to fund new projects and this national competition will be used to make funding commitments covering two years, FY 1997 and FY 1998.

- Technology Development and Transfer (NCRI) — We are allowing for an NCRI program in FY 1998, funded at the FY 1997 level of $950K, with funding coming directly from the Sea Grant appropriation.

- Technology Development and Transfer (SBIR) — Sea Grant will continue to benefit from the Small Business Innovation Research program in that all SBIR funds contributed by Sea Grant ($640K) will be used to support areas of interest identified by Sea Grant.

- Fellows Programs -- Both the Knauss Marine Policy Fellowships ($360K) and the Sea Grant Industrial Fellowships ($250K) will continue at approximately the same level as in FY 1997.

- Historically Black Colleges and Universities Program — FY 1998 will be the third and final year of our original investment ($250K) for programs at five HBCU institutions. We have asked that the National Review Panel form a committee with members from the SGA and DOC to advise, among other things, on opportunities for future investment of these funds competitively.

- NSGO Program Development Funds — These are funds ($275K) that were first set aside in FY 1996 to allow the NSGO staff to take advantage of opportunities that benefit Sea Grant nationally.

- Operation Pathfinder — FY 1998 is the final year of the original plan developed for Operation Pathfinder. Sea Grant supports one project directly ($53K); NOAA and other federal agencies support four or five additional Pathfinder projects on a passthrough basis.

B. New NSIs

- We will fund three new National Strategic Investment programs in FY 1998 with total funding of $2.88M. These include:

  > the Sea Grant - NOAA Partnership Program ($500K);

  > a National Outreach program ($500K);

  > and one or more National Strategic Initiatives ($1.88M) to be developed from a network-wide call for national issue proposals.

RESERVE FUNDING

As mentioned in the FY 1997 plan, we are keeping a reserve against possible contingencies, such as SBIR increases, Pennsylvania Sea Grant proposal, the Oceanic Institute claim and the possibility that we were not able to prepay in FY 1997 all the remaining FY 1998 "enhancement" awards as planned. Presently, this reserve totals $185K.