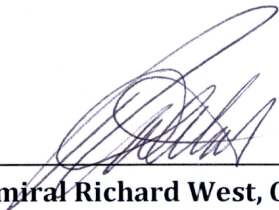


To: Chair of National Sea Grant Advisory Board

**Final Report of the
*PIE-2 Assessment Committee***

5/9/2016


5/9/16

Admiral Richard West, Chair



CC: Nikola Garber, Director (A) National Sea Grant College Program
Chris Hayes, Committee Co-Chair
Sylvain De Guise, Committee Co-Chair

National Sea Grant Advisory Board Assessment of Sea Grant's Planning, Implementation and Evaluation (PIE) Process Spring 2016

Charge:

The National Sea Grant Advisory Board (NSGAB) should assess the efficacy and implications of the PIE system - review what worked, identify weaknesses, and recommend revisions to improve and streamline the process where possible. This charge was directed by a vote of the NSGAB at its Fall 2015 meeting, and a subsequent task from the National Sea Grant Office (Appendix I).

PIE-2 Assessments Committee Members:

National Sea Grant Advisory Board (NSGAB) – Dick West (Chair), Dale Baker and Brian Helmuth
Sea Grant Association (SGA) – Sylvain De Guise (Co-Chair), Judith McDowell, Rick DeVoe
National Sea Grant Office (NSGO) – Chris Hayes (Co-Chair), Peg Brady, Joshua Brown and Sharon Aziz

Under Review:

Sea Grant's Planning, Implementation and Evaluation System

- Program and Network Planning process and results
- Implementation (e.g., Focus Teams)
- Evaluation
 - Program Annual Reports
 - Program Site Visits
 - Performance Review Panels
 - NSGO Annual Review
 - Biennial Report

Strategy:

Use legislation and previous recommendations, including the 2006 National Research Council review, the 2007 Response Integration Team report, and the 2013 PIE assessment (PIE-1) as basis to make recommendations to improve the process. This document refers to the 2016 assessment as PIE-2 for clarity. The Committee considered feedback from the SGA, participants in evaluation processes (site visits and performance review panels), and other personal communications. The primary driver for the planning and evaluation processes is the legislation: 33 USCS § 1123. For all recommendations, the committee ensured that the PIE process met standing legislative requirements:

- National Network must have a strategic plan (Legislation – 1123D2a)
- All programs must have a four year plan that establishes priorities for the National Sea Grant College Program (Legislation – 1123C1)
- All programs must implement their plans (Legislation – 1126D1)
- All programs must be evaluated (Legislation – 1123D3a)
- Every two years – the NSGAB is to report to Congress on the progress made toward meeting the priorities identified in the National Network plan (Legislation – 1128B2)

Timeline:

After a January 13, 2016 conference call, the PIE Assessment Committee met in Silver Spring on February 17-19, 2016. Chair Dick West presented the findings and recommendations to the NSGAB and SGA on March 7-9, 2016.

This report is a summary of recommendations for improving the PIE process. The complete PIE process is described in Appendix II. Other appendices include the Sea Grant Standards of Excellence (Appendix III), and the 2013 PIE Assessment Committee Report (Appendix IV).

General Finding and Recommendation:

The PIE-2 committee found that the PIE process does meet federal requirements, but it remains too costly, complex, and opaque, the evaluation components are cumbersome and not integrated, and there is a major time lag between program strategic planning and final merit funding allocation.

Recommendation: The NSGO should coordinate with the NSGAB and Program Directors on implementation of the recommendations.

Planning and Recommendations:

Background: There are no major issues with the planning process, although several minor issues were discussed where clarification would be helpful.

Recommendations:

1. NSGO should clarify guidance on preparation and evaluation of strategic plans,
2. State programs should develop plans based on the Network Plan in consultation with their state-level program advisory committees,
3. NSGO program officers should be more involved in the state Sea Grant programs planning process, and
4. NSGO should formally review and approve program plans in a timely fashion.

The committee recommends no major changes to the planning process, beyond closer and clearer collaboration with the NSGO via the program officer.

Implementation and Recommendations:

The PIE-2 committee discussed two key areas related to program implementation: (1) the state of Focus Teams and (2) the relative importance of state program RFPs.

1. Relatively large Focus Teams were once appointed with membership from NSGO and Sea Grant programs, charged with the following tasks: coordinating Sea Grant activities; identifying new opportunities; fostering external partners; and marketing Sea Grant. It was broadly agreed that the Focus Teams performed well in summarizing impacts and accomplishments within Focus Areas, but did not engage deeply in the intended tasks. Focus Teams no longer receive funding to support their activities, and are no longer active.

2. A state Sea Grant program's request for proposals (RFP) represents a significant step in strategically implementing the priorities of a program's strategic plan. Program Officers should review them to better understand a program's focus on the priority needs at both the State and Federal levels.

Recommendations:

1. NSGO should, in coordination with the SGA and NSGAB, take responsibility for:
 - a. Coordinating Sea Grant activities
 - b. Identifying new opportunities
 - c. Fostering external partners
 - d. Marketing Sea Grant
2. NSGO program officers should consult with programs regarding request for proposals to better understand the degree to which the program is addressing its priority needs.

The NSGO has primary responsibility for the implementation of all the important functions previously assigned to Focus Teams, and program officers will consider the request for proposals in their qualitative annual review of the state programs.

Evaluation and Recommendations:

Principles -

The PIE-2 committee felt that the current evaluation system can be greatly improved through better coordination, more transparency, and incorporating greater efficiencies in work load. As such, the committee agreed that program evaluation should adhere to the following principles:

- Utilize and integrate all evaluation tools,
- Maximize collaboration and transparency of process and decision-making,
- Be based on the "Standards of Excellence" (Appendix III),
- Streamline to minimize costs and effort, and
- Ultimately, focus on continual program improvement.

Evaluation Elements –

The PIE-2 committee identified the following as key elements of the evaluation process:

- Site Visits
- Annual Reports
- NSGO Annual Reviews
- Independent Review Panel (IRP)
- NSGCP Director Decision on Merit Funding and Recertification

Program Site Review Visits –

Site Reviews currently evaluate program management and organization, stakeholder engagement and collaborative network activities. Site Visits provide an opportunity for team members to directly engage with state program staff and stakeholders as they

assess operational aspects of the program. The PIE-2 committee feels that site visits could also be used to assess program benefits, as many state programs already share and describe their program efforts and results to illustrate their program organization, engagements, and collaborations as part of their Site Visit exercises. Site visits could capitalize on opportunities to assess performance (at least some elements of leadership) and contribute to performance assessments (see IRP below).

Recommendations:

1. The structure of the Site Visit team should remain in its current form
2. State programs should expand the Site Visit by no more than one-half day (2 days of interaction, half day to draft and present report outline) to consider **all** of the Standards of Excellence (see Appendix III), and
3. Site review reports should include an executive summary for consideration and use by the Independent Review Panel as described below.

The results of this slightly restructured site visit would be formally considered in the overall evaluation process leading to the final rating of the state Sea Grant program and in the distribution of merit funds by the NSGO.

Annual Reports –

Annual reporting is a necessary condition of the grant process. Annual reports currently include impacts and accomplishments, metrics, and performance measures. Some are concerned that there is an incentive to provide an artificially high number of impacts and accomplishments to be reported, thus missing the opportunity to integrate impacts and accomplishments over time to make for stronger stories. The PIE-2 committee discussed limiting the number of impacts and accomplishments in the annual report, as was the case for the most recent PRP review. [Guidelines](#) already exist on the expected number and length of impact to report per year, but those guidelines were not enforced until the recent PRP.

The PIE-2 committee also felt that the state programs, the NSGO (through its program officers), and the IRP would all benefit from the preparation of a one-page narrative by the state Sea Grant director. The narrative would highlight challenges and opportunities the program has/is/will be addressing. The narrative would provide important context within which the state program is working in any given year, and would likely lead to a better understanding of what needs to be done to address them.

Recommendations:

1. The NSGO should significantly limit the number of both impacts and accomplishments submitted by state Sea Grant programs as part of the annual report process, encouraging programs to prepare and submit synthesized results where possible (quality over quantity).
2. State program directors should prepare and submit a one-page summary of challenges and opportunities.

Overall, such steps could reduce the pressure towards over-reporting (and associated time, effort and costs), and shift focus towards continued program improvement.

NSGO Annual Review and PO Visits –

The PIE-2 committee agreed that NSGO program officers should provide more informed feedback and guidance to state programs. Historically, program officers inconsistently reviewed state program annual reports with their programs and presented highlights to the NSGO; this informal assessment included little feedback to the state programs.

Recommendations:

1. NSGO program officers should visit each of their programs annually,
2. The NSGO should meet annually to qualitatively review:
 - a. State program annual reports (including progress on current strategic plan, as well as impacts emerging from past activities),
 - b. NSGO program officer annual visit reports, and
 - c. Follow-up on site review team visit report recommendations
 - d. State program requests for proposals (when applicable),
3. The NSGO program officer should provide formal feedback to the program after each annual qualitative NSGO review,
4. State program directors should have the opportunity to respond to the NSGO annual qualitative review report.
5. The state program annual qualitative review report, along with the state program director's response, should be included in the materials provided to the IRP for consideration as part of the overall quadrennial program evaluation.

Overall, honest and constructive feedback on a regular basis provides opportunity for program improvement. Further, annual feedback and an opportunity to respond provide a basis for documenting program improvement. Program improvement should be taken into account as part of the overall program evaluation.

Independent Review Panel (IRP) –

The Program Review Panels (PRP) from the current PIE process provides ratings that are considered to distribute merit funding. Performance in each focus area is evaluated by a different PRP. The PIE-2 committee finds that the Performance Review Panels (PRP) are inconsistent among the Focus Areas, require an excessive amount of work, and obscure the interactions across focus areas of projects.

Recommendations:

1. The PRPs should be replaced with an Independent Review Panel, which will review and rate all programs relative to Sea Grant's Standards of Excellence,
2. The IRP should consider the following materials package in its evaluation of a state Sea Grant program:
 - a. A brief written program synthesis (retrospective and prospective) provided by the state program director
 - b. The four NSGO annual qualitative review reports and program director responses

- c. The Site Visit reports of the state program (which will include an executive summary);
3. The IRP should meet over the course of five days to quantitatively evaluate the state programs.
 - a. Each review should consist of a presentation by the state Sea Grant director, followed by Q&A.
 - b. The IRP then deliberates in closed session.
 - c. The NSGO program officer should attend.

Overall, multiple focus area-specific PRPs would be replaced by a single IRP that would review each program with an opportunity for a Director's presentation and Q/A.

Conclusions

The revised PIE process would build on regular assessments and feedback. Importantly, the overall assessment process would focus more on program improvement. Finally, the new evaluation process would be decoupled from the 4-year omnibus cycle, strategic planning process, and would not require a long lag period for impacts to realize. The annual reviews would assess progress against current goals as well as emerging impacts from past investments.

When these recommendations are adopted, PIE will be more

- effective in program improvement,
- inclusive of all current evaluation tools,
- collaborative and transparent,
- based on the Sea Grant "Standards of Excellence"
- cost effective with less requisite staff time and 'paper work'.

Appendix I



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL SEA GRANT COLLEGE PROGRAM
1315 East-West Highway, Silver Spring, MD 20910

December 17, 2015

Mr. Rolland Schmitten
Chair, National Sea Grant Advisory Board
1315 East West Highway
Silver Spring, MD 20910

Dear Mr. Schmitten,

In response to the National Sea Grant Advisory Board's (NSGAB) motion at the November 2015 meeting, and with support from the Sea Grant Association (SGA), I support a second formal review of the Planning, Implementation, and Evaluation (PIE) Process. Considering the first full PIE cycle ended in 2015, a review of the entire process is timely. I propose the PIE II Committee include representation from the NSGAB, SGA, and the National Sea Grant Office. I look forward to the recommendations, as we work to support Sea Grant's dedication to strengthening programs through evaluation.

Charge: The NSGAB should assess the efficacy and implications of the PIE system - review what worked, identify weaknesses, and recommend revisions to improve and streamline the process where possible.

Timeline: The report should be available for discussion at the March 2016 NSGAB Meeting.

Sincerely,

Nikola M. Garber, Ph.D.
Acting Director
National Sea Grant College Program

cc: J. Eigen
D. Baker
R. West
S. Deguise

Appendix II

The National Sea Grant College Program's Planning, Implementation and Evaluation System (April 2014)

Overview

The National Sea Grant College Program (NSGCP) is committed to careful planning and rigorous evaluation at both the state and National Program level in order to ensure that the Program has local, state, and national impacts. The Planning, Implementation and Evaluation (PIE) Process includes three phases:

- **Planning** at both the national and state levels that is strategic and ambitious in addressing local, regional, and national needs;
- **Implementation** of the plans within each state, with coordinated and collaborative research, outreach and education activities for four years; and
- **Evaluation** of the success of those efforts in meeting the goals, measures, and objectives set forth in the plans. The evaluation component begins with a site visit to each Sea Grant program to ensure programs are well managed, connecting with stakeholders, and collaborating with other Sea Grant and NOAA programs, and other relevant partners. A Performance Review Panel then looks at the outcomes and impacts of the programs in relation to their plans. Ongoing evaluation of the program happens through program annual reports and the NSGO Annual Review.

Sections I-V below describe each component of the integrated PIE system, and how merit funds are allocated.

I. Planning

National Network Strategic Plan (every four years; next planning process begins in 2016 for the 2018-22 National Network Plan): Every four years, the NSGCP develops a new national, network-wide strategic plan. Sea Grant's national plan is completed iteratively with the development of strategic plans for the individual Sea Grant programs. NOAA's strategic plan, NOAA's Five-Year Research Plan, the National Ocean Policy and other relevant national plans provide a broad set of potential priorities for Sea Grant's national planning effort. Likewise, stakeholder input collected for individual Sea Grant planning efforts is integrated with other relevant local and regional plans to identify the most appropriate national priorities. Sea Grant's national, network-wide plan priorities serve as the foci for Sea Grant's next four-year implementation cycle and results obtained help NOAA achieve its strategic objectives.

Individual Sea Grant Program Strategic Plans (every four years; next in 2016):

The national strategic plan serves as the basis for individual Sea Grant programs to complete their strategic plans. The individual program plans include performance measures and targets that align with and support national performance measures for the national priority areas. Since each program has a unique set of local and regional stakeholders, partners and priorities, the individual program plans may not address all of the national priority areas. Sea Grant program plans are developed in concert with the assigned Federal Program Officer and reviewed and approved by the NSGCP Director. Sea Grant program plans guide and inform their requests for proposals and all other, research, outreach and education activities. In addition, these plans are used as the basis for program evaluation.

These plans are living documents; programs may make changes to their plans to address *significant* emerging or unexpected issues (e.g., Hurricane Sandy, Deepwater Horizon, Fukushima debris field, etc.). The National Sea Grant Office (NSGO) must be notified of and approve any plan changes.

II. Implementation

Once their strategic plans are approved, the Sea Grant programs have the authority to implement their plans in order to achieve optimal results. They consider the local, regional and national priorities identified during the planning process as they conduct research, outreach and education activities. At the national level, focus area teams identify areas where gaps may exist for achieving the goals identified in the national, network-wide plan. National Strategic Investments are used to address gaps and help the National Program reach its goals. Implementation of Sea Grant activities happens primarily at the individual Sea Grant program level.

The PIE system contributes to improved regional and national coordination. For instance, funding competitions, omnibus grant applications and awards are synchronized to facilitate collaborative efforts among programs. Also, there is a common format for annual reports so that impacts of individual projects and Sea Grant programs can more easily be synthesized to highlight nation-wide achievements.

III. Evaluation

Sea Grant's program evaluation processes are designed to ensure the greatest benefit for the federal and state investment and are based on program annual reports. Site visits ensure that all programs are managed effectively and continue to meet the *Standards of Excellence* (see Appendix A) expected of all Sea Grant Colleges and Institutions. Performance reviews are used to evaluate each program's impacts on society, economy and environment according to the priorities set forth in the individual program plans. The NSGO Annual Review considers all aspects of the programs, and the National Sea Grant Advisory Board's Biennial Report to Congress gives an overall assessment of the National Sea Grant College Program.

The integrated components of program evaluation within Sea Grant are described below.

Annual Reports – Programs submit annual reports through an online database: Planning, Implementation and Evaluation Resources (PIER). Information provided in PIER is used by each program and the NSGO to evaluate progress relative to the program’s plan, targeted performance measures and metrics, and serves as the basis for the four-year Performance Review Panels’ evaluation. Annual Reports are also a way for the program to conduct a self-evaluation of its progress toward accomplishing the four-year plan. Information from PIER is used by the NSGO to track and report progress of the National Sea Grant College Program to NOAA.

Program Site Review Visits (every four years; begins in 2014) – Every four years, a site review team (SRT) visits each Sea Grant program to assess program operations. Programs are evaluated, on-site, in three general areas: 1) their approach to management; 2) the scope and success of their engagement with stakeholders; and (3) the degree of collaboration with other Sea Grant and NOAA programs, and other relevant partners. At the conclusion of the site visit, the SRT produces a report that describes findings and makes suggestions and recommendations to improve the Sea Grant program’s operations. Although the SRT is not responsible for providing numerical ratings for any of these three areas, the report should include a finding addressing whether the program meets the *Standards of Excellence* (i.e., addressing appropriate categories within the Sea Grant Regulations; see Appendix B). The SRT reports are used by the NSGO to determine whether the Sea Grant program: 1) is recertified, and 2) is eligible for merit funding.

Performance Review Panels (every four years; next in 2015) – Every four years, following the completion of all Sea Grant program site visits, external Performance Review Panels (PRP) conduct retrospective evaluations of each program’s overall impact on society from both an environmental and a socioeconomic perspective based on the program’s four-year plan. A numerical rating is assigned by each PRP. The results of the PRP are used to determine eligibility for and amount of merit funding; the process is described below in the section on “Rating and Allocation of Funding.”

NSGO Annual Review – The NSGO meets each year to discuss the progress of each Sea Grant program relative to its plan, and to identify aspects of the program that might be improved. Once every four years – in the year following the PRP – an expanded NSGO Review is conducted. It includes a complete program evaluation that is based on the SRT report, the PRP findings and ratings, and the Sea Grant program’s responses to the SRT recommendations and PRP findings. The NSGO Review makes the final determination of whether or not a Sea Grant program meets the *Standards of Excellence* and finalizes the rating of the PRP.

“The State of Sea Grant” (every two years; next in 2014) – Every two years, the National Sea Grant Advisory Board provides a “State of Sea Grant” report to Congress as mandated by Sea Grant legislation. The biennial report assesses the overall

progress of the National Sea Grant College Program in addressing the priority areas highlighted in the national plan. This review relies extensively on information collected through PIER from Sea Grant program annual reports and the subsequent analysis of the national focus areas. It also informs the next national strategic planning process.

IV. Rating and Allocation of Funding

The program evaluation process results in recertification, an overall rating and a determination of merit fund eligibility for each program. Overall program ratings are assigned by the NSGO based on the PRP ratings. Merit funding eligibility is determined based on the SRT reports, the PRP rating, and the responses from the Sea Grant Program.

Site Visits

After the site visits and reporting are completed, the NSGO discusses the findings, suggestions and recommendations included in the site visit reports and assesses any response from the program during the expanded NSGO Review. Based on that discussion, the NSGO makes the final decision of whether the program is meeting the *Standards of Excellence* expected of all programs. Programs that meet the *Standards of Excellence* are eligible for merit funding.

Performance Review Panels

There is one PRP per national focus area. Each PRP is responsible for providing a rating for each program that participates within that national focus area (identified in the program's strategic plan). The PRP uses the following rating scale:

- a. *Highest Performance* – exceeds expectations by an exceptional margin in most areas/aspects (1)
- b. *Exceeds Expectations* by a substantial margin in some areas/aspects (2)
- c. *Meets Expectations* in most areas/aspects (3)
- d. *Below Expectations* in some areas/aspects (4)
- e. *Unsuccessful* in most areas/aspects (5)

For each program, the national focus area rating is weighted based on the proportion of funding resources allocated by the program to that national focus area. "Funding resources" include all NOAA federal, matching and leveraged funds that are managed by programs, and used to meet the goals and objectives of the four-year plan. Each program's national focus area PRP scores are then combined to provide an overall performance rating. For example, if a program allocated 10% of its resources to the Sustainable Coastal Development (SCD) focus area and was rated *Highest Performance* (1), and 90% of its resources to Healthy Coastal Ecosystems (HCE) with a rating of *Exceeds Expectations* (2), it would receive an overall weighted rating of 1.9, calculated as follows:

SCD	HCE
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$$[10\% * 1] + [90\% * 2] = (0.1) + (1.8) = 1.9$$

There is no requirement that a program address all national focus areas in its strategic plan. Instead, the rating process is intended to emphasize those areas that each program considers most important based on the amount of allocated resources.

If a program receives an overall rating of 4 or more, it will not be eligible for merit funding, and the program will be placed on probationary status (See Section V).

Allocation of Merit Funds

Merit funding eligibility is based on the site review and PRP, and the funds are allocated based on the overall program rating from the PRP. The merit rating is calculated by subtracting the PRP rating from 5, and then cubing that number. For instance, the program in the example above received a PRP rating of 1.9; the merit rating of this program is 29.8 ($5 - 1.9 = 3.1$; $3.1^3 = 29.8$). If the merit pool were \$10M, and the sum of all of the individual ratings for all eligible programs happened to be 1,000, each merit rating point would be worth \$10,000. In this example, the program would receive \$298,000 in merit funding. Any program that does not meet the *Sea Grant Standards of Excellence* based on the site review or is put on probation based on the PRP rating will not be eligible for merit funding. Once a program reaches the *Standards of Excellence*, they are eligible for merit funding.

V. Recertification of the Sea Grant Programs

The Office of Management and Budget, the National Sea Grant Advisory Board and other entities have recommended that the Sea Grant programs be recertified on a reasonable and regular schedule. The four-year evaluation, including the site visit, the performance review panel and the NSGO Annual Review constitutes the Sea Grant program recertification process. A successful review results in recertification of the program for the next eight years. Recertification is required for a program to maintain its federal funding.

If a program does not meet the *Standards of Excellence* based on the site visit or if the program's overall performance is *Below Expectations* or *Unsuccessful* based on the PRP rating, the program is placed on probationary status. Any Sea Grant program on probation will not be eligible for merit funding.

During each succeeding NSGO Annual Review, any program that did not meet the *Standards of Excellence* will be assessed to determine the program's progress toward meeting the *Standards of Excellence*. If progress is satisfactory, the program will be allowed to continue on probation until the next site visit. If at that time the program meets the *Standards of Excellence*, the program is considered recertified. However, if progress is found not to meet the *Standards of Excellence* expected of a Sea Grant program after two years of NSGO Annual Reviews, or if a program does not reach the *Standards of Excellence* for a second consecutive four-year review cycle, the National Sea Grant College Program Director will refer the matter to the National Sea Grant

Advisory Board for consideration of whether to recommend decertification of the program. Any Sea Grant program placed on probation as a result of the PRP review must be rated *Meets Expectations* (3) or higher in the next PRP review. If the program fails to achieve that rating, the National Sea Grant College Program Director will refer the matter to the National Sea Grant Advisory Board for consideration of whether to recommend decertification of the program.

Appendix III

Sea Grant Program *Standards of Excellence*

This section lists the *Standards of Excellence* that are expected of every Sea Grant program. This information can also be found in [Sea Grant's Federal Regulations](#) (15 CFR 918.3). The Site Visit Teams are responsible for reviewing seven of the qualifying areas plus “collaboration” (collaboration was added based on the 2006 National Research Council Report, *Evaluation of the Sea Grant Review Process*). The remaining two qualifying areas, (1) Leadership and (8) Productivity, are evaluated through Sea Grant’s PRP process. The Federal Regulations state that Sea Grant programs “must rate highly in all of the following qualifying areas”.

I. Site Review Criteria

A. Program Management and Organization

- **Organization.** The Sea Grant College under review must have created the management organization to carry on a viable and productive Sea Grant program and must have the backing of its administration at a sufficiently high level to fulfill its multidisciplinary and multifaceted mandate.
- **Programmed team approach.** The Sea Grant program under review must have a programmed team approach to the solution of ocean/coast/watershed/Great Lakes problems which includes relevant, high quality, multidisciplinary research with associated educational and advisory services capable of producing identifiable results.
- **Support.** The Sea Grant program under review must have the ability to obtain matching funds from non-Federal sources, such as state legislatures, university management, state agencies, business, and industry. A diversity of matching fund sources is encouraged as a sign of program vitality and the ability to meet the Sea Grant requirement that funds for the general programs be matched with at least one non-Federal dollar for every two Federal dollars.

B. Stakeholder Engagement

- **Relevance.** The Sea Grant program under review must be relevant to local, state, regional, or national opportunities and problems in the ocean/coast/watershed/Great Lakes environment. Important factors in evaluating relevance are the need for ocean/coast/watershed/Great Lakes resource emphasis and the extent to which capabilities have been developed to be responsive to that need.
- **Extension/Advisory services.** The Sea Grant program under review must have a strong program through which information, techniques, and research results from any reliable source, domestic or international, may be communicated to and utilized by user communities. In addition to the educational and information

dissemination role, the advisory service program must aid in the identification and communication of user communities' research and educational needs.

- **Education and training.** Education and training must be clearly relevant to national, regional, state and local needs in fields related to ocean, Great Lakes, and coastal resources. As appropriate, education may include pre-college, college, post-graduate, public and adult levels.

C. Collaborative Network Activities

- **Relationships.** The Sea Grant program under review must have close ties with Federal agencies, State agencies and administrations, local authorities, business and industry, and other educational institutions. These ties are: (i) To ensure the relevance of its programs, (ii) to give assistance to the broadest possible audience, (iii) to involve a broad pool of talent in providing this assistance (including universities and other administrative entities outside the Sea Grant College), and (iv) to assist others in developing research and management competence. The extent and quality of an institution's relationships are critical factors in evaluating the institutional program.
- **Collaboration.** The Sea Grant program under review must provide leadership in ocean/coast/watershed/Great Lakes activities including coordinated planning and cooperative work with local, state, regional, and Federal agencies, other Sea Grant programs, and non-Sea Grant universities.

II. Performance Review Criteria

- **Leadership.** The Sea Grant program under review must have achieved recognition as an intellectual and practical leader in marine science, engineering, education, and advisory service in its state and region.
- **Productivity.** The Sea Grant program under review must have demonstrated a degree of productivity (of research results, reports, employed students, service to State agencies and industry, etc.) commensurate with the length of its Sea Grant operations and the level of funding under which it has worked.

Appendix IV

National Sea Grant Advisory Board Assessment of Sea Grant's Planning, Implementation and Evaluation Process Report September 2013

I. Introduction

Charge to the National Sea Grant Advisory Board

The National Sea Grant College Program (NSGCP) Director charged the National Sea Grant Advisory Board (NSGAB) to assess the lessons-learned from the 2010-13 Planning, Implementation and Evaluation (PIE) cycle. Capitalizing on the completion of this first cycle of the PIE process, the NSGAB should base recommended revisions for the 2014-17 cycle by reviewing what worked well and what did not from the 2010-13 cycle.

The NSGAB developed a subcommittee (PIE Assessment Committee) with membership from the Advisory Board, Sea Grant Directors and the National Sea Grant Office (NSGO).

This committee reviewed all PIE guidance and informational documents, which included feedback from the Performance Review Panels and Site Visit panelists, the Sea Grant Network, and a Sea Grant Association survey on the entire PIE process. When reviewing materials and making any recommendations, the committee ensured that the PIE process met standing legislative requirements:

- National Network should have a strategic plan (Legislation – 1123D2a)
- All programs must have a four year plan that establishes priorities for the National Sea Grant College Program (Legislation – 1123C1)
- All programs must implement their plans (Legislation – 1126D1)
- All programs must be evaluated (Legislation – 1123D3a)

- Every two years – the NSGAB is to report to Congress on the progress made toward meeting the priorities identified in the National Network plan (Legislation – 1128B2)

Overarching Findings

After several weeks of document reviews and conference calls, followed by an in-person meeting, the committee agreed with the following as overall guidance for their PIE assessment:

The Planning, Implementation, and Evaluation (PIE) process has a good structure and meets the recommendations from the 2006 National Research Council Report, *Evaluation of the Sea Grant Program Review Process*. The first cycle was largely successful; however, it was too big and costly. The committee also found that all the components of the evaluation process were not well integrated into an overall assessment of the individual Sea Grant programs (programs) or the Sea Grant network.

II. Findings and Recommendations

Below are recommendations to improve the efficiency of the current PIE process without compromising the ability to evaluate programs and the overall Sea Grant network.

PLANNING

Findings

The National Sea Grant College Program (NSGCP) has a rigorous and thorough planning process at both the National and program level. Currently, planning at the National and program level happens simultaneously, with programs needing to ensure their plans align with the National Network plan. This simultaneous timing of the plans can be confusing and require significant additional work to ensure this alignment.

In the current planning process, programs are required to request permission from the National Sea Grant Office (NSGO) to make changes to their strategic plans. This

requires time and effort from both the program and the NSGO for minor changes (i.e., changes in personnel and funding), and is inefficient.

Recommendation P-1: The NSCGP should continue initiating a broad National Network Strategic plan based on National Ocean Policy and NOAA top-down mission requirements. Once this national plan is complete, the programs will then develop their own plans based on this broad national strategic plan. The individual program will receive approval of their strategic plan from the NSGO.

Recommendation P-2: Minor changes in program plans do not need to be approved by the NSGO. Adjusting performance measure targets should be *strongly* discouraged. Programs should contact the NSGO for proposed changes to their individual plans to address only *significant* emerging or unexpected issues (e.g., Hurricane Sandy, Gulf Oil Spill, or irradiation of a new aquatic invasive species).

IMPLEMENTATION

Findings

Implementation happens at different levels within the National Sea Grant Program. At the National level, activities are organized into focus areas. Focus areas are managed by focus teams.

The original expectations of these Focus Teams were to:

1. Facilitate planning, implementation, synthesis and reporting of Sea Grant activities and accomplishments;
2. Identify new opportunities and directions for Sea Grant national and regional initiatives;
3. Catalyze cooperative efforts among Sea Grant programs, the NSGO, NOAA, other agencies and stakeholder organizations, and NGO's; and
4. Provide a mechanism to further solidify Sea Grant's local, regional, and national identity.

These tasks are important and should be continued. Currently, for various reasons (including budget constraints) these tasks are not being fully met. The focus teams are large (64 members) and geographically dispersed. Focus Team contributions to the

Sea Grant mission have been limited with most of the participation done by the Sea Grant Fellows and Focus Team Chairs and Vice-Chairs. Our committee recognizes that these Sea Grant mission tasks should reside within the NSGO, but the NSGO currently lacks the capacity to address all four expectations.

Recommendation I-1: The NSGCP Director should find more efficient ways to accomplish each of the four tasks currently given to the large focus teams. Examples of Teams that could perform these tasks could include:

- An external panel,
- Smaller, more narrowly directed Focus Teams,
- A NSGAB subcommittee, or
- NSGO staff (redirected from other efforts).

EVALUATION

Findings

The current evaluation process of the individual Sea Grant programs includes annual reports from the programs, an annual NSGO review, a program site visit, and performance review panels. During the annual review, the NSGO reviews the programs' annual reports, site visit reports, and performance review panel findings and any programs' responses. The site visits review the performance of the programs in three areas: 1) program management and organization, 2) stakeholder engagement, and 3) collaborative network/NOAA activities. The performance review panels evaluate the results (impacts, accomplishments and success of reaching performance measures) of the programs. The site visits and performance review panels are conducted once during the four-year evaluation cycle. These evaluation processes are compartmentalized and not fully integrated into the overall evaluation of the program.

Recommendation E-1: Integrate annual reviews, site visits, and an external evaluation panel into an overall four-year evaluation process.

Annual Reports

Findings

The committee finds the annual report a necessary part of the PIE process, and an important part of the program evaluation. On an annual basis, programs submit a report to the NSGO. These annual reports include impacts and accomplishments, and progress towards performance measures and metrics. All annual report information is currently submitted by the programs into a database known as PIER (Planning, Implementation and Evaluation Resource). Thus, the PIER outputs assume a much higher priority than simply tracking database input. Annual Reports can track progress; however, they should not be the only source of data for the overall program evaluation process.

The annual report serves as an ‘annual review of programs’ and also serves as a performance progress report for the purpose of grant renewal.

Recommendation E-2: Continue on-going, joint, NSGO/SGA efforts to improve NSGO annual reporting guidance, particularly the definitions of performance measures and metrics.

Recommendation E-3: The format of the PIER outputs should be improved to enhance usability across the various reporting and performance evaluation needs across the network.

Annual Review Process

Findings

The annual review conducted by the NSGO is an important process to assess each program on an annual basis. This is an opportunity for the programs to work closely with the NSGO program officer to demonstrate annual results through their annual report. The NSGO also includes the site visit report, the performance review panels’ findings and ratings, and program responses in the year the annual review is conducted. However, the results of these NSGO reviews are not included in the four-year evaluation process that affects merit funding. There are portions of the NSGO annual review process that are closed to the programs.

Recommendation E-4: We encourage constructive feedback between the NSGO program officer and the Sea Grant program to assure continued improvement and cooperation. The committee feels this is an important step to improve the annual review process which should be included as input to the four-year evaluation. The role of the program officer should be that of a liaison (honest-broker), communicating with programs.

Recommendation E-5: The results of the annual reviews should be included in the program's four-year evaluation process.

Recommendation E-6: The program Director should be invited to all segments of the NSGO annual reviews for their program.

Site Visits

Findings

The site visit proved to be a valuable part of Sea Grant program assessment. The site visit team meets with the program management team, advisory committees, and university administration to review and discuss broad issues related to 1) program management and organization, 2) stakeholder engagement; and 3) partnerships with the Sea Grant Network and NOAA. There is network consensus on the success of the site visits; however, the site visit reports have not been adequately integrated into the overall four-year evaluation process.

Recommendation E-7: The site visit report should be included as an influential input to the program's four-year evaluation.

Recommendation E-8: With inclusion of the site visit reports in the four-year evaluation process, there should be new training and guidance developed, for the NSGAB, the NSGO and individual programs, on how the site visit will be used in the evaluation process.

Performance Review Panel

Findings

The current performance review panels (PRPs) assess the impacts of the program by focus area. The simultaneous performance review of all programs by the same panelists allow for consistent rating within panels. However, due to the amount of material provided by the programs, the review was very labor intensive. The impacts were not prioritized by the programs, which made it difficult for the reviewers to evaluate their relative importance in their program goals. Separating program results into focus areas assessed by separate PRPs was perceived as inhibiting a consistent scoring across the four focus areas. An analysis of the performance review scoring however showed no significant difference between panels.

The impacts across focus areas for the individual programs and the network were lost by separating the program results by focus areas.

Recommendation E-9: The committee recommends the PRP be replaced with the external evaluation panel.

Recommendation E-10: The committee supports the concept of all programs being evaluated simultaneously every four years by a 'National Sea Grant External Evaluation Panel' to evaluate each individual program in the following categories:

Program Director's Impact Report	50%
Site Review Team (SRT) Report	35%
Annual Review Summary	15%

- The external evaluation panel should be comprised of members from the NSGAB, NOAA, other State/Federal Agency Officials, and leaders from academia/industry.
- The NSGCP Director, in consultation with the NSGAB and Sea Grant Directors, shall develop guidance for producing the three documents as well as evaluation/rating criteria to be used by the external evaluation panel.

- Limitations should be set on the volume of material presented to the National Sea Grant External Evaluation Panel:
 - Program Director's Impact Report should not exceed 15 pages.
 - Directors should explain how their program accomplished their individual Sea Grant program plans.
 - The SRT Report should not exceed 10 pages.
 - The NSGO program officer Annual Review Summary:
 - A brief presentation, and
 - Annual review summary memorandums (should not exceed 6 pages).

Recommendation E-11: The External Evaluation Panel will give each program a rating, which should be used by the NSGCP Director to determine merit funds.

Timing of the External Evaluation Panel

Finding: The committee recognizes there are two guiding principles in a conceptual review framework:

1. A Sea Grant program should be evaluated based on its success over a full four-year strategic planning window.
2. A Sea Grant director needs to be informed about his/her projected funding level prior to planning for the next four-year Omnibus program.

Due to time restraints, it is impossible for a full review of a four-year Omnibus (strategic plan cycle) to occur immediately following a cycle and a determination of base/merit funding by the NSGCP Director prior to beginning of the next four-year cycle. It is more important for a program Director to know future funding levels for research, outreach and education work plan development, than to have an exclusive review of only a specific strategic plan window.

Recommendation E-12: The committee feels that a mid-cycle review (year three) is the best option to allow proper time for the previous cycle's research accomplishments to become impacts and External Evaluation Panel results to be synthesized by the start of the next cycle. Site visits should occur in years one and two.

III. General Recommendation

The NSGAB PIE Assessment committee recommends, with implementation of any or all of the NSGAB recommendations contained in this report, the NSGCP Director coordinate evaluation guidance with the Sea Grant Directors and the National Sea Grant Advisory Board.

NSGAB PIE Assessment Committee

NSGAB

Dick West - Chair

Dale Baker

Amber Mace

Bill Stubblefield

NSGO

Sami Grimes - co-Chair

Chris Hayes

SGA

Sylvain De Guise, CT Program Director

Jim Hurley, WI Program Director