

This paper constitutes the response of the NOAA National Sea Grant Office to the recommendations contained in the report, *Sea Grant Research: a Report of the National Sea Grant Advisory Board*. This response should be considered in the context of ongoing work by the NOAA Research Council to strengthen research in all of NOAA, as well as the ongoing NOAA reorganization which, in addition to creating a NOAA Climate Service, has an additional goal to maximize the strength and effectiveness of NOAA's science portfolio. Sea Grant leadership is involved in both of these efforts.

1. Recommendation: The NSGO, the NSGAB, the SGA, and NOAA should form a Task Team to initiate detailed discussions on the approaches to developing a stronger national focus for Sea Grant such that its success, and therefore increased research and overall funding, can be achieved. Considerations should include, among other actions, efforts to align with NOAA's regionalization of its programs, increased emphasis on critical coastal research needs that serve the nation while preserving some level of research that serves local needs, and a consideration of ways to improve the mechanism for handling the research portfolio.

*Response: We agree. This has been taking place over the last two years with (a) the formation and activities of the Sea Grant focus teams, which provide a national focus to Sea Grants efforts in its four topical focus areas (healthy coastal ecosystems, sustainable coastal development, safe and sustainable seafood supply, and hazard resilient coastal communities); (b) the participation of leaders from the NSGAB, the SGA, and other NOAA programs, in the development of a new Sea Grant national strategic plan and alignment of all state programs' plans to the national plan; (c) the Sea Grant regional research and information planning initiative, which has been recognized as one of the earliest of NOAA's recent regionalization efforts to bear fruit; and (d) the recognition of Sea Grant's role in regional service delivery as part of the emerging NOAA Climate Service.*

*Strategy: Continue implementing the above efforts. Ensure that regional/ national strategic investments are truly regional/ national in scope, and that the projects supported have common regional/national performance measures and metrics to facilitate their description and reporting to the Administration and Congress.*

2. Recommendation: NOAA must find ways to better utilize the strengths of Sea Grant, such as engaging and implementing the user/clientele-oriented research, joint funding on certain cross-cutting initiatives, sharing facilities, and looking for niches to utilize Sea Grant strengths.

*Response: We agree. This recommendation is already being implemented through: (a) participation by Sea Grant in the NOAA Coastal Enterprise planning process; (b) participation by Sea Grant in NOAA Climate Service planning; (c) a leadership role for Sea Grant in the NOAA Executive Committee on Engagement; (d) active participation by Sea Grant on the NOAA Regional Teams; (e) conducting a Sea Grant regional climate*

*engagement grants competition in 2009; (f) Sea Grant participation on NOAA Ecosystem Services working group; and (g) joint planning of NOAA's marine aquaculture effort.*

*Strategy: Continue implementing the above activities, supplementing with additional efforts as opportunities are identified.*

3. Recommendation: Sea Grant needs to develop more meaningful partnerships with the NOAA laboratories and increase and improve efforts to communicate the impacts and value of Sea Grant research to the rest of NOAA. Forging partnerships would allow Sea Grant programs to be the vehicle for managing extramural research projects that are selected on a peer-reviewed competitive basis and would enhance research opportunities. Science workshops among Sea Grant and the NOAA laboratories should also be held to discuss ongoing and future research findings and collaboration.

*Response: We agree.*

*Strategy: At the national level, Sea Grant should continue its practice of coordinating national competitions with other NOAA programs and laboratories with common mission interests, as has been done with the Center for Sponsored Coastal and Ocean Research (CSCOR), the NOAA Aquaculture Program, and the NOAA Habitat Matrix. At the State level, many Sea Grant Programs are already well-integrated with field components of other NOAA programs and labs. As the new Sea Grant planning, implementation and evaluation system (the successor to the PAT review system) is developed and implemented, appropriate collaborations with other parts of NOAA in research and other areas should be encouraged and rewarded, and Best Management Practices that allow these collaborations to work effectively should be identified and shared with all Sea Grant Programs. Expanding the successful models for partnerships at GLERL and NSSL achieved through locating key specialists at other NOAA laboratories with joint support from Sea Grant and the laboratory is being explored. As the new OAR emerges from the process that is creating the NOAA Climate Service, there will be additional opportunity for collaboration.*

4. Recommendation: NSGO must be more aggressive in:

- a) promoting the contributions of Sea Grant to all levels of NOAA. One way to do this is to engage a larger number of NOAA's managers and scientists in the proposal review process for research and extension; and
- b) demonstrating that America's universities are an unequalled science, technology and human resource that, through Sea Grant, can be applied to NOAA's mission.

*Response: NSGO technical staff have responsibility in their work plans for improving relations between, and appreciation of the science resources and requirements of, Sea Grant programs and other NOAA programs. Other NOAA managers and scientists are being incorporated into Sea Grant technical review panels and as part of the Site Review Teams, and they will be included in the national Performance Review Panels as well.*

*Strategy: As resources permit, continue to increase the amount of effort the NSGO puts into promoting increased interaction and mutual appreciation between Sea Grant Programs and other parts of NOAA.*

5. Recommendation: Regional partnerships among Sea Grant programs and other entities are an appropriate approach for producing significant new results that address important regional and national issues. Increased partnerships within a state with governmental and private sources are also strongly encouraged.

*Response: Agree. Regional partnerships among programs, and between programs and governmental and private sector sources are being aggressively encouraged. One challenge being reported back by the programs is the lack of any significant incentives for this kind of partnership development in the Planning, Implementation and Evaluation system.*

*Strategy: During the upcoming site reviews, the efforts of the state programs in establishing and maintaining effective, working partnerships is one of the criteria that will be evaluated as a basis for judging the performance of program management. Best Management Practices that facilitate partnerships among programs, and between programs and governmental and private sectors, to work effectively are being identified and shared with all Sea Grant Programs.*

6. Recommendation: Research programs should be aligned to address critical issues that will arise in the future.

*Response: The new strategic plan and Planning, Implementation and Evaluation system is intended to encourage this.*

*Strategy: The focus teams are expected to review the research project portfolio each year and assess the extent to which emerging issues are addressed. If there are critical gaps, there should be recommendations for corrective actions.*

7. Recommendation: The percentage of a particular program's funding devoted to research should be flexible, although a target of 50% is appropriate for most programs. However, the particular goals of an individual program must be considered. Given this flexibility, there must be realistic, tractable and understandable metrics for research performance.

*Response: We agree that there should be room for flexibility in the percent of its resources a Sea Grant Program invests in research, and that research metrics should be realistic, tractable and understandable. NOAA is studying appropriate ways to monitor and assess all of its research efforts, and may propose metrics for research performance that will apply to Sea Grant as well as the rest of NOAA.*

*Strategy: The NSGO should participate in the NOAA research review process to the extent permitted. Informed by NOAA efforts as well as ongoing programs' research metrics as provided in Programs current strategic plans, NSGO and the state programs should form a working group to evaluate appropriate metrics, outcomes and performance measures for Sea Grant research. If improved metrics are found, we will revisit programs' plans to assess if there is value added by incorporating these metrics. Until further analysis is done, the competitive (research and education) guideline for programs will remain at 45-60%, with the understanding that it continues to be a guideline, not a requirement, and that it may change when the analysis is complete.*

8. Recommendation: Because some programs are too small to be able to designate a significant fraction of their funding to research, consideration should be given to combining the research activities of these smaller programs with neighboring or related programs so that all state programs can realize the research benefit.

*Response: It could make sense for smaller state programs to consider combining their research efforts with their neighbors to increase efficiency of efforts, as one of the management strategies available to them. But the role of the NSGO at this point should be limited to removing barriers to this type of collaboration if programs decide it is to their advantage. In fact, increasing the ability of programs to collaborate was one of the primary reasons we made the decision to synchronize the start dates for all the omnibus awards.*

*Strategy: The NSGO should seek input from programs on under what conditions a combining of research across programs would be feasible, would improve program effectiveness, or would improve the overall research portfolio. The NSGO should develop guidelines to facilitate joint research efforts among programs that wish to engage in them. As we update the guidelines for soliciting and selecting research projects, we should identify and remove any language that unnecessarily limits the ability of programs to collaborate in this way. The NSGO should also work to ensure that our mechanisms to report metrics, impacts and success stories can accommodate multiple Sea Grant programs all reporting on a single project for which they share the credit.*

9. Recommendation: Assessing the impact of Sea Grant research, e.g., contributions to sustainability, improving regulatory policies, changing behavior, creating industries, etc. should have a high priority in future evaluation of Sea Grant research. In addition, the human resources, together with all publications and other research products deriving from funds administered by the Sea Grant Program, regardless of whether or not some of the funding came from sources other than Sea Grant core funding, should be considered in this evaluation. The contribution of core Sea Grant funding relative to other sources should also be monitored and reported.

*Response: We agree and these considerations are built into the new planning, implementation and evaluation system.*

*Strategy: The NSGO should actively encourage all Programs to report research impacts through established reporting mechanisms. As part of their annual focus area review, Focus Teams should be given a specific charge to identify trends, successes, or gaps in Sea Grant research's ability to produce relevant impacts. As appropriate research metrics are discussed in response to recommendation 7, include consideration of the most effective ways of capturing the impact of research.*

10. Recommendation: Individual Sea Grant Programs should continue to submit peer-reviewed publications to the Sea Grant Library so that an up-to-date record of these publications is constantly available. Some mechanism should be devised to evaluate the relative contribution of Sea Grant vs. other funds obtained by state programs to the overall productivity of Sea Grant researchers.

*Response: To provide an incentive, the panels evaluating the performance of the state programs will have available to them the lists of publications submitted to the Library. Only those publications will be considered during their review.*

*Strategy: Include an examination of measures of value and productivity of Sea Grant peer reviewed publications as a charge of the group studying appropriate metrics for Sea Grant research (recommendation 7).*

11. Recommendation: Every effort should be made to minimize and reduce duplicative and unnecessary reporting requirements.

*Response: This has been and continues to be one of the underlying principles in the development of NIMS and the integration of all data gathering efforts.*

*Strategy: NIMS development requirements should preclude any double manual reporting of information into NIMS and other databases such as grants online, to the extent technically feasible.*