

**Site Review Report of the**

**South Carolina Sea Grant College Program**

**August 6-8, 2019**



## INTRODUCTION

The Site Review Team's (SRT) visit to the South Carolina Sea Grant Consortium (SCSGC) Program took place from August 6-8, 2019.

The SRT members included:

Rebecca Briggs, PhD (Chair) NOAA, National Sea Grant Office Silver Spring, MD	Gordon Grau, PhD (co-Chair) National Sea Grant Advisory Board Honolulu, HI
Austin Shelton Director Guam Sea Grant Mangilao, Guam	Darlene Finch NOAA's Office for Coastal Management Annapolis, MD
Susan Shipman Retired GA DNR St Simons Island, GA	Hans Paerl Professor Univ of North Carolina at Chapel Hill-IMS Morehead City, NC

The Site Review Visit took place at the College of Charleston's Stern Student Center, as well as at College of Charleston's President's Boardroom and its School of Science and Mathematics Building, and finally at the SCSGC office.

During the Site Review Visit, the SRT met with the Consortium's board that included the presidents (or their representatives) of the Consortium's partnering universities and the head of the South Carolina Department of Natural Resources. The SRT also met with a wide range of planning and engagement partners, as well as stakeholders working on the following issues: culture; environmental literacy and workforce development; resilient and sustainable ecosystems; living marine resources; resilient communities and economies; and finally with regional private, government and scientific partners.

Prior to the beginning of the Site Review Visit, and in conformance with National Sea Grant College Program guidelines, the SCSGC issued a public notice of the upcoming Site Review Visit by inviting interested parties to send written comments to the Federal Program Officer (FPO). The public notice was distributed on the SCSGC website and to their stakeholder list servers. The FPO received two comments in response to the public notice. Public comment #1 was from a stakeholder at a State university. This former grant recipient did not have issue with staff or administration at the SCSGC, but does have issue with the grant writing process and the expectation of the Consortium's staff to continue to work on the contract without being compensated or offered a formal "no-cost extension". Without providing any additional funding or contracts, the Consortium expected the PIs to continue working on the grant three years after the initial contract date. The writer strongly suggested that the review team examine the Consortium's past contract agreements. Public Comment #2 was from a

stakeholder at a County Agency. The writer stated that the Charleston County Park system depends on Sea Grant programs and products to inform our decisions and deliver thousands of programs and services to over 2.7 million visitors a year. The agency has partnered with the SCSGC to promote cultural heritage and environmental stewardship programs that benefit tourism, schools, and families in countless ways. The writer also stated that the SCSGC has a talented and committed staff that possesses a rare ability to balance vision and practical solutions to achieve results that move South Carolina forward.

This report of the Site Review Visit follows the provided guidance for 2014 – 2017 Program Site Review Visits. The SRT discussed broad issues with the Program related to the SCSGC's: 1) Organization and Management of the Program; 2) Stakeholder Engagement; 3) Collaborative Network Activities; and 4) Performance, and how effectively the program performed in each national focus area with respect to leadership and productivity to determine progress made towards each national focus area as identified in the 2014-2017 State Program Strategic Plan. Within each of these areas, each member of the SRT provided expert insights and opinions to the FPO.

With this report, the FPO presents the findings of the SRT and presents suggestions and recommendations to the Program to facilitate continued program excellence. It does not necessarily reflect the views of any specific member of the SRT.

- **Finding (1):** The FPO finds that the Program meets the *Standards of Excellence* expected of all Sea Grant programs.

## **I. ORGANIZING AND MANAGING THE PROGRAM**

The SCSGC is a university-based state agency governed by the South Carolina (SC) General Assembly and a Board of Directors. The Executive Director of the SCSGC Program, Rick DeVoe, reports to these two bodies. The Board of Directors includes the chief executive officers of the Consortium's eight member institutions: SC Department of Natural Resources, Medical University of SC, Clemson University, College of Charleston, South Carolina State University, Coastal Carolina University, University of South Carolina and The Citadel. The SCSGC is headquartered in Charleston.

The Consortium has clearly achieved its charge of optimizing the economic, social and environmental assets of South Carolina's coastal and marine resources through a transparent and integrated research, education, extension, training and communications program.

A Consortium is a non-traditional structure for a Sea Grant Program. However, this model works well for South Carolina in that there is no over-arching State university system. This structure has served the program, its member institutions, and the State's stakeholders well through its 40-year history.

A Consortium arrangement as a stand-alone state agency can also present challenges due to the administrative demands on an agency of its small size, and the understandable fiscal priorities of the Consortium partners. Nevertheless, the participation of the presidents (or their designee) of all member institutions in the site visit is a testimony to the priority the SCSGC commands across its member institutions. The Program's state appropriation increased 30% in the past 6 years, further affirming the strong support the program enjoys in the State Legislature. SCSGC enjoys robust support among its partners in terms of matching and leveraged funding. It is also effectively partnering with its Consortium institutions to utilize joint appointments to leverage SG funding. Business and industry may be explored as possible sources for future private/public partnerships.

The Program very effectively uses its overarching Advisory Board and topic-oriented sub-panels in charting its priorities for incorporation into strategic planning. This approach ensures the broadest representation of stakeholders. While the SCSGC's strategic plan is a blueprint for guiding the program's future work, there is a prudent recognition of the unpredictability of emerging issues by the Program leadership. The Program's practice of ground-truthing its RFP every two years, is particularly wise.

The RFP for Omnibus grant support is distributed only among the member institutions. The PI must be affiliated with a member institution. That would appear counter to the expressed operational principal of equal access to all constituencies. The team suggests that the RFP should be broadly advertised to all institutions in the state.

SCSGC does an exceptional job with a small staff and limited resources, proactively reaching out to an inclusive constituency. The new generation of Extension and Education specialists have taken the program to a new level. Staff turnover remains a management challenge.

Diversity and inclusion efforts are demonstrated in the make-up of advisory board members, the products of the communications program (Coastal Heritage), plans for a Spanish-version of its website, and a commitment to diversity added to the Consortium values in 2018. The SC SG Consortium should continue taking action to meaningfully increase diversity of staff, PIs, and graduate students through higher representation from underrepresented minority (URM) populations. Steps may include targeted recruitment at minority serving institutions (MSIs), joint faculty/extension appointments at MSIs, developing RFP requirements for diverse graduate students, and exploring workforce development opportunities in underserved communities. It may also be beneficial to strengthen participation in National Sea Grant DEI Network activities; have students, staff, and PIs participate in the *Society for the Advancement of Chicanos/Hispanics and Native Americans in Science* (SACNAS) National Diversity in STEM Conference (NSGO will have an exhibit table at the Oct 2019 conference); connecting to the ASLO Multicultural Program (coordinated by Hampton University [benjamin.cuker@hamptonu.edu](mailto:benjamin.cuker@hamptonu.edu)).

While focused on marine and coastal science, SCSGC covers a broad gamut of issues facing South Carolina. Program staff as well as PIs are cross-cutting in their approach to issues. Research outcomes are effectively translated into manuals and a myriad of educational tools which can be readily understood and applied. Program products and output underpin decision-making at all levels, from homeowner and fisheries associations to local governments to the State Legislature and beyond.

- **Finding (2):** Through meeting with 15 panels comprised of diverse partners and stakeholders, it is apparent that SCSGC is recognized as an intellectual leader within the State. SCSGC is nimble, flexible, adaptable, and relevant. The Program works seamlessly across jurisdictional boundaries to address issues of regional importance. SCSGC is recognized as an honest broker of information and assistance for coastal and ocean issues, and recognized for its non-advocacy.
- **Finding (3):** The SCSGC remains a Program of excellence in its organization, team approach, and support.
- **Finding (4):** SCSGC is effectively partnering with its Consortium institutions to utilize joint appointments to leverage SG funding.
- **Suggestion (1):** The SCSGC should continue taking action to meaningfully increase diversity of staff, PIs, and graduate students through higher representation from underrepresented minority (URM) populations.
- **Suggestion (2):** The team suggests that the Core RFP should be broadly advertised to all institutions in the state.
- **Suggestion (3):** Identify and pursue opportunities to develop and harness cross-cutting expertise, especially in social sciences, economics, and disciplines that deal with land use and structures.

## II. STAKEHOLDER ENGAGEMENT

America's coasts have changed dramatically over the last 50 years. The strong orientation of SCSGC toward coastal development and resilience can and should be a model for the national Sea Grant enterprise. Though historically and culturally important, fisheries continue to decline as an economic contributor. The economy of coastal South Carolina is dominated by tourism, the coast's largest employer, and by development and population growth, industry and Charleston's port with their concomitant impacts on flooding and environmental degradation, as well as to increased vulnerability to sea level rise and severe storms. These matters most impact the lives of coastal inhabitants. SCSGC is at the leading edge in redirecting from traditional foci toward the issues that actually challenge today's coasts. At least in part, this derives from the strongly nurtured connection that SCSGC has with constituents and partners. The approach that SCSGC uses to address the impacts of coastal development and the consequences of climate change provides a model and a path for the expansion of Sea Grant's mission throughout the network.

The SCSGC is charged with engaging internal stakeholders among its 8 member institutions, and serving the needs of external stakeholders from a diverse group of organizations, institutions, and individuals representing universities; federal, state, and local natural resource and economic development agencies; business and industry; state and local governments; community groups; non-governmental organizations; K-12 educational institutions; and the general public. Throughout the site review presentations, panelists attested to their reliance on Sea Grant expertise and partnerships. Clear linkages between research, extension, and education activities were displayed. The Consortium demonstrated that it is a leader in the State and seeks diverse stakeholder input on a regular basis using a variety of formal and informal methods to assess the needs of its stakeholders, including strategic planning; assigning specialists to live and work directly in their coastal communities; and participation in a variety of program-related, community-based committees and task forces.

In addition to the Consortium Board of Directors and the Consortium Program Advisory Board to provide input on priorities, each program specialist is also guided by a Program Specialist Advisory Committee that includes local and state government agency representatives, business owners, and representatives of community organizations. Additionally, the Consortium seeks input on its RFP process every 2 years to ensure relevance to stakeholders, going above and beyond the 4-year requirement.

- **Finding (5):** SCSGC's stakeholder engagement activities are robust and effective, connecting with a large variety of entities in the state and region.
- **Best Practice (1):** The SCSGC does an exemplary job ensuring that their work is relevant, timely, and addresses needs and priorities of their stakeholders. The SCSGC achieves this by (i) creating Program Specialist Advisory Committees, to guide each program specialists' priorities and engage stakeholders and (ii) the Consortium seeks input on its RFP process every 2 years to ensure relevance to stakeholders, going above and beyond the 4-year strategic planning requirement.

### III. COLLABORATIVE NETWORK/NOAA ACTIVITIES

The SCSGC has built and sustains a vast network of coastal and ocean partners and stakeholders in South Carolina, as well as connections to nearby states. The longevity of the program, the commitment of staff and the demand for coordination and collaboration in a relatively small state further strengthens the power and effectiveness of these collaborative network activities. The SCSGC's consistent and relentless pursuit of network opportunities (e.g., providing forums for discussion, convening around specific issues, etc.) has built trust with partners, and regularly demonstrates the value of the program. Key partners engaged in the Consortium's collaborative efforts see tremendous value in joining the established networks because of the benefits of sharing information and generating additional investments and products. There is also clear evidence that the SCSGC has effectively tapped into and engaged parts of NOAA in their endeavors.

As a multi-institutional program, the Consortium engages with academics across South Carolina, encourages collaboration, and generates a network of students and scholars focused on the future of South Carolina's coast. The Consortium's regular, structured engagement with those institutions, and their effectiveness in drawing on the expertise of those institutions has created a strong and powerful network. Bringing in students and academics early and often, even with small investments of cash, has been incredibly effective in amplifying SCSGC's effort.

The Consortium has effective mechanisms for regularly engaging governmental and non-governmental entities, and SCSGC has proven adept at responding to needs and identifying collaborative opportunities. There is clear recognition that convening and coordinating requires resources and expertise, and SCSGC has invested in both of these. Partners and stakeholder alike pointed to the effectiveness of SCSGC in this arena.

- **Finding (6):** Early investments by the Consortium in students interested in coastal and ocean management issues has generated an impressive network of talented and committed individuals invested in the future of South Carolina's coast.
- **Suggestion (4):** Explore expanded engagement with a few key entities not currently part of the network (e.g., USGS), especially those that will significantly impact development along SC's coast that are not actively involved in the Consortium (e.g., U.S. Army Corps of Engineers, FEMA, and State Port Authority).
- **Suggestion (5):** Continue to invest staff time and energy in proactive networking, especially in convening and connecting those working towards a better coastal future for the state of South Carolina and the Southeast.

#### IV. PERFORMANCE REVIEW

The SCSGC is an innovative, productive and appropriately-focused program addressing key issues in estuarine and coastal resources, research and management. It has received national and international recognition for addressing local as well as regional and national issues including interactive anthropogenic and climatic drivers of ecological and economic change. It benefits from excellent leadership and expertise in intellectual and applied facets of marine science including: applied ecology and biogeochemistry (including storm water processing along the freshwater to marine continuum); wetland structure and function; fisheries (aquaculture); engineering and hydrology (e.g., addressing hazards); education; advisory service; and outreach. The program ranks superb in these categories on state-level, regional and international scales. It has a long-term focus especially as it pertains to planning aimed at protecting coastal resources in the face of anthropogenic and climatically-driven biogeochemical, ecological and closely linked socio-economic changes. Lastly, it supports a top notch cadre of academic researchers, managers, educators and outreach/advisory specialists.

The SCSGC has clearly demonstrated a high degree of productivity, in the form of diverse and extensive basic and applied research, advisory, outreach and educational products. Materials include: key peer-reviewed publications; excellent educational and outreach reports; instructional booklets; advisory materials highly pertinent to developing an in depth understanding of coastal processes, agents of environmental change, the impacts of human and climatic pressure on coastal resources; as well as “how to” advisory products aimed at protecting and appropriately managing coastal resources and ensuring sustainability of these resources. The overall peer-review publication record meets the standards for performance as far as all media are concerned. Nevertheless, given the number of funded investigators, post-docs, and students, the number of publications in peer-reviewed journals, which is a critical element in conveying research and management results to the broader academic and management communities, could be improved.

The SCSGC leadership as well as grantees and outreach personnel demonstrated highly productive and appropriately focused (on protecting coastal resources) set of collaborations with academia, State and Federal agencies, NGOs, and citizen conservation and educational groups. These collaborations have been highly productive in that they have led to an impressive set of intellectually-stimulating, highly-useful informational publications, booklets and pamphlets, posters as well as web-based presentations and educational (K-12) materials. There is clear evidence that SCSGC enjoys diverse partnerships with municipalities, county and state agencies, industry and NGO’s. SCSGC has made optimal use of its funds to support these collaborations and there is appropriate balance in the budget to reflect these activities. In particular, the program ranks superbly with regard to its use of educational resources, by having fostered the education of a very impressive, gender- and ethically-diverse set of undergraduate and graduate students who have taken on positions in education, environmental and fisheries science, private industry and management.

- **Finding (7):** Given the number of funded investigators, post-docs, and students, the number of publications in peer-reviewed journals could be improved.
- **Finding (8):** The SC Sea Grant Program is clearly a leader in the field and exemplifies excellent leadership from the Director to supporting staff levels. Grantees and outreach personnel have demonstrated highly productive and appropriately focused (on protecting coastal resources) collaborations with academia, State and Federal agencies, NGO’s, citizen’s conservation and educational groups.

## **V. PERFORMANCE RATING DETERMINATION**

After discussion with the program on progress made towards each national focus area as identified in the 2014-2017 SC Sea Grant Strategic Plan, the SRT determined a performance rating for each national focus area. The SRT used the following rating scale:

- Highest Performance - exceeds expectations by an exceptional margin in most areas/aspects (1)
- Exceeds Expectations by a substantial margin in some areas/aspects (2)
- Meets Expectations in most areas/aspects (3)



- Below Expectations in some areas/aspects (4)
- Unsuccessful in most areas/aspects (5)

Healthy Coastal Ecosystems	Sustainable Fisheries and Aquaculture	Resilience Communities and Economies	Environmental Literacy and Workforce Development
Rating: 2	Rating: 2	Rating: 2	Rating: 2

### **Healthy Coastal Ecosystems**

The SCSGC has made very efficient and effective use of its budget in ensuring Healthy Coastal Ecosystems. Funds have been appropriately utilized, commensurate with priorities in this research and management area. In particular, significant progress has been made in understanding biogeochemical and ecological processes, critical habitats and capacities for sustainable use of coastal waters for aquaculture, recreational and other human uses, which has translated into a broad understanding of the carrying capacity of estuarine and coastal habitats to support these activities. Examples include: 1) effective, collaborative storm water protection programs; 2) development and application of indicators of coastal water quality and habitat condition; 3) addressing impacts (and mitigation strategies) for protecting coastal resources from the increasing threats of tropical cyclones, increased rainfall and flooding; and 4) fostering the thriving and expanding commercial shellfish industry in harmony with healthy coastal waters.

The program has enjoyed highly productive collaborative endeavors with stakeholders in gaining a better understanding of the impacts of human and climatic pressures on water quality, the overall function and carrying capacity of critical habitats, including marshes, wetlands and intertidal estuarine and coastal waters. Clearly, there is a great deal of enthusiasm as well as tangible products displayed by collaborators and stakeholders having mutual interests in managing and protecting coastal resources. In this regard, there is an appropriate partitioning of research, extension, and educational funds to support these activities. There is good balance of funding to support research and management activities in the area of ensuring healthy coastal ecosystems and their carrying capacity, as well as other focus areas that clearly complement these objectives. The SCSGC has done an exemplary job of supporting junior faculty with seed grants and regular grants instrumental in addressing problems and solutions needed in ensuring healthy coastal ecosystems.

Ever-increasing human activities, including urban and rural development, agricultural and industrial expansion in SC watersheds as well as climatic changes taking place (increasing extremes in rainfall associated with tropical cyclones, thunderstorms and nor'easters as well as more protracted droughts) is accelerating nutrient-, other pollutant-, and sediment-laden runoff to estuarine and coastal waters and creating more extreme hydrologic conditions (more extreme wet/dry cycles). In response to an increase in extreme hydrologic events, there is increased pressure to manage reservoir discharge in response to these events; with often unpredictable hydrologic and biogeochemical ramifications

downstream. Lastly, groundwater discharge is also altered given changing anthropogenic and climatic pressures. In concert, all these changes are increasing focus and concern on the entire freshwater- to marine “continuum” with regard to water and habitat quality (e.g., harmful algal blooms, hypoxia), resourcefulness and sustainability of South Carolina’s watersheds and downstream coastal waters. There is a sense of urgency to address these issues on the continuum scale.

- **Finding (9):** It is evident that stakeholders and collaborators are enthusiastic partners, helping in fulfilling SCSGC’s mission of understanding biogeochemical and ecological processes involved in protecting healthy coastal ecosystems, while ensuring valuable marine products.
- **Suggestion (6):** The SC Water Resources Research Institute and USGS Water Sciences Centers have traditionally addressed these issues in upstream freshwater environments/habitats (including surface and groundwater), while the SCSGC has addressed these issues in the estuarine and coastal components of the continuum. Because of the expanding scale of source to sink drivers and responses along the continuum, it seems logical and essential to combine the traditional research and management foci of these institutions under one umbrella, in order to most effectively address SC water and habitat quality, resource and sustainability issues in a cross disciplinary, process- and management-integrated fashion across the continuum. The team suggests that this collaboration be explored, making optimal use of SC’s academic, state agency, NGO and private resources.

### **Resilient Communities and Economies**

Resilience communities and economies are clearly at the forefront of challenges in coastal South Carolina, and the SCSGC has done an outstanding job of rising to the challenge. While not a new issue for the region, it gained significant prominence after a slate of recent storms and flooding events that highlighted the vulnerability of South Carolina’s coast and the importance of hazard resilient communities. The escalating pressure from ongoing coastal development in SC has further increased the urgency to make progress on more resilient communities and economies.

Resilience is a cross-cutting issue, and the Consortium has done an excellent job leveraging its broad network, connections and expertise to help communities in SC address current challenges. The public perception of the risks from a changing climate have shifted in recent years, resulting in enhanced understanding of the need for action. While the challenge is daunting, SCSGC has found ways to respond to communities looking for assistance through pursuing scientific answers, developing guidance, building and facilitating networks, and providing direct technical assistance. The SCSGC has done a great job initiating important conversations and supporting opportunities for communities of practice. The Consortium has supported a broad range of technical assistance efforts, from developing tools with very specific information that is extremely relevant to residents (e.g., flood disruption and recovery) , to generating data that can be applied to decisions, to process and substantive support to community planning efforts. There remains a real need for finding ways to help communities commit to and implement actions that will make them more resilient.

Overall, the Consortium does a first-rate job pulling together scientific information to address on-the-ground issues. It has conducted timely and essential work collecting and compiling scientific information on the impacts of development on natural resources (e.g., LUCES, tidal creek study). The Consortium has also compiled highly useful information that helps communities to understand the implications of specific actions (e.g., poorly functioning storm water ponds) and suggest approaches to development can help reduce impacts. The Consortium has been particularly effective at bringing that information to potential users of this information – from involving them in technical advisory committees to pursuing targeted outreach activities (e.g., focused on realtors).

The Consortium engages with academics from across South Carolina, encourages collaboration, and generates a network of students and scholars focused on the future of South Carolina's coast.

- **Finding (10):** Clearly a significant issue for the state of SC and the SCSGC has found innovative ways to engage with a range of communities across the state.
- **Finding (11):** The Consortium engages with academics from across South Carolina, encourages collaboration, and generates a network of students and scholars focused on the future of South Carolina's coast.
- **Suggestion (7):** Explore opportunities to develop resilience metrics that can inform future resilience investments and measure progress.
- **Suggestion (8):** SCSGC should actively pursue opportunities to share lessons learned from its resilience activities with other adaptation and resilience practitioners.
- **Suggestion (9):** Pursue opportunities to support communities with little to no capacity for community planning, especially with an eye towards equity and inclusiveness.

### **Sustainable Fisheries and Aquaculture**

Through research, education, and extension, SCSGC has generated and disseminated information essential to the sustainability and expansion of the State's marine fisheries heritage. The SCSGC has assisted the commercial fishery in adapting to changing demographics, environment, and marketplaces, including the loss of working waterfronts. SCSGC has been supportive of existing and emerging industries including the state's crab fisheries (blue crab and horseshoe crabs).

Since 2014, SCSGC has most actively focused on oyster mariculture, enabling its expansion and positioning single oysters as a viable business model in South Carolina. The prospect for economic growth of that industry is exponential. SCSGC's ability to enhance fishery resources and the industries that depend on these resources is limited only by time, resources, and staff.

The Program is making significant strides in sustainable marine fisheries methodology, especially with in-water shellfish aquaculture, and in genetic research applicable to restoration and sustainable management of fisheries populations of particular management interest (cobia, black seabass, and red

drum). Program partners are researching the environmental and economic feasibility of stocking these fin fisheries of commercial and recreational economic importance to the state and the region.

Non-traditional coastal businesses are emerging to meet growing coastal recreational demands. This expanding constituency is benefitting from research, education, and extension which inform and educate this demographic about coastal and marine resource conservation and management. The intersection of tourism and sustainability of marine resources is ripe for further work.

- **Finding (12):** SCSGC's contributions to revitalization of their oyster industry has been crucial to the future for this important coastal heritage. The Consortium has provided valuable technical assistance resources for establishing and expanding SC's oyster mariculture industry.
- **Suggestion (10):** Consortium partners are conducting innovative genetics research with commercially and recreationally important species. SCSGC should encourage and support interstate and federal fisheries management applications related to the cutting edge research they support. Continue this foundational work.

### **Environmental Literacy and Workforce Development**

The Consortium demonstrated a strong Environmental Literacy Program. During the reporting period, 77,536 K-12 students were reached through SG trained educators or directly. The "From Seeds to Shorelines" is a commendable program and an excellent case study of how to scale up a successful project to other communities using external funds. To ensure that educational products and curricula are used following workshop trainings, teachers are responsible for documenting activities through pictures and maintaining a calendar of events. A Facebook group allows teachers to post, collaborate, and encourage each other. The SGSC Marine Education Specialist stays in communication with teachers, continually provides advice and resources, and serves as their cheerleader. Teachers submit a report at the end of the year. Metrics and reflections are tracked. Incentives (i.e., new products, supplies) are provided to encourage continued participation and engagement.

The Consortium's Communications and Information Services (CIS) uses quarterly magazines (Coastal Heritage), e-newsletters, topic-specific publications, social media (Facebook and Twitter), organizes special events, and manages booths at festivals and conferences. These resources not only engage stakeholders, but also create a wealth of information services that increase environmental literacy in the state of South Carolina. In particular, the quarterly, "Coastal Heritage," provides a superb resource to the community, in South Carolina and beyond. The integration of science and scholarship with history and culture is a model of excellence. Its stories are fascinating, and the writing is both lively and compelling, and the text is enhanced by outstanding photography.

The Consortium invests in graduate and undergraduate students (both graduate and undergraduate). This investment supports students' passions and their academic pursuits, and helps to develop future coastal and ocean leaders for SC and the nation. The SCSGC excels at placing students into regional

and national graduate fellowship positions; however the program does not currently host a state level graduate or undergraduate fellowships or traineeships. To further workforce development and capacity building efforts in the state, the team suggests the creation of undergraduate and graduate state fellowship programs. Additionally, the principal investigators on SCSGC research projects ultimately control the workforce development and engagement of the graduate and undergraduate research students. The SCSGC should play a more involved role in training and developing their graduate and undergraduate researchers and creating a cohort identity. This could be through a variety of different models that engage students throughout the duration of the research project. Examples include providing communication support and training to students, providing opportunities for students to network with SG Extension and partners, requiring student outreach hours, connecting students with other SG researchers through a culminating experience (i.e., symposium), and other options as demonstrated across the SG network by other state programs.

- **Suggestion (11):** To further workforce development and capacity building efforts in the state, the team suggests the creation of undergraduate and graduate state fellowship programs.
- **Suggestion (12):** The Consortium should explore opportunities for establishing traineeships providing professional development opportunities for their state-funded graduate and undergraduate researchers and help create a cohort identity among students.
- **Best Practice (2):** A challenge in Sea Grant education programs is ensuring that teachers incorporate lessons and tools into their curricula. The SCSGC overcomes this challenge by ensuring that all educational lessons and products are linked to state science standards and providing that information on its website.
- **Best Practice (3):** The quarterly, “Coastal Heritage,” provides a superb resource to the community, in South Carolina and beyond. The integration of science and scholarship with history and culture is a model of excellence and is a tradition well worth preserving.

## V.I. FINDINGS, RECOMMENDATIONS and SUGGESTIONS

### Findings

- **Finding (1):** The FPO finds that the Program meets the *Standards of Excellence* expected of all Sea Grant programs.
- **Finding (2):** Through meeting with 15 panels comprised of diverse partners and stakeholders, it is apparent that SCSGC is recognized as an intellectual leader within the State. SCSGC is nimble, flexible, adaptable, and relevant. The Program works seamlessly across jurisdictional boundaries to address issues of regional importance. SCSGC is recognized as an honest broker of information and assistance for coastal and ocean issues, and recognized for its non-advocacy.
- **Finding (3):** The SCSGC remains a Program of excellence in its organization, team approach, and support.

- **Finding (4):** SCSGC is effectively partnering with its Consortium institutions to utilize joint appointments to leverage SG funding.
- **Finding (5):** SCSGC's stakeholder engagement activities are robust and effective, connecting with a large variety of entities in the state and region.
- **Finding (6):** Early investments by the Consortium in students interested in coastal and ocean management issues has generated an impressive network of talented and committed individuals invested in the future of South Carolina's coast.
- **Finding (7):** Given the number of funded investigators, post-docs, and students, the number of publications in peer-reviewed journals could be improved.
- **Finding (8):** The SC Sea Grant Program is clearly a leader in the field and exemplifies excellent leadership from the Director to supporting staff levels. Grantees and outreach personnel have demonstrated highly productive and appropriately focused (on protecting coastal resources) collaborations with academia, State and Federal agencies, NGO's, citizen's conservation and educational groups.
- **Finding (9):** It is evident that stakeholders and collaborators are enthusiastic partners, helping in fulfilling SCSGC's mission of understanding biogeochemical and ecological processes involved in protecting healthy coastal ecosystems, while ensuring valuable marine products.
- **Finding (10):** Clearly a significant issue for the state of SC and the SCSGC has found innovative ways to engage with a range of communities across the state.
- **Finding (11):** The Consortium engages with academics from across South Carolina, encourages collaboration, and generates a network of students and scholars focused on the future of South Carolina's coast.
- **Finding (12):** SCSGC's contributions to revitalization of their oyster industry has been crucial to the future for this important coastal heritage. The Consortium has provided valuable technical assistance resources for establishing and expanding SC's oyster mariculture industry.

#### Recommendations (items the Program must consider)

- **None**

#### Suggestions (ideas the Program may want to consider)

- **Suggestion (1):** The SCSGC should continue taking action to meaningfully increase diversity of staff, PIs, and graduate students through higher representation from underrepresented minority (URM) populations.
- **Suggestion (2):** The team suggests that the Core RFP should be broadly advertised to all institutions in the state.
- **Suggestion (3):** Identify and pursue opportunities to develop and harness cross-cutting expertise, especially in social sciences, economics, and disciplines that deal with land use and structures.
- **Suggestion (4):** Explore expanded engagement with a few key entities not currently part of the network (e.g., USGS), especially those that will significantly impact development along SC's

coast that are not actively involved in the Consortium (e.g., U.S. Army Corps of Engineers, FEMA, and State Port Authority).

- **Suggestion (5):** Continue to invest staff time and energy in proactive networking, especially in convening and connecting those working towards a better coastal future for the state of South Carolina and the Southeast.
- **Suggestion (6):** The SC Water Resources Research Institute and USGS Water Sciences Centers have traditionally addressed these issues in upstream freshwater environments/habitats (including surface and groundwater), while the SCSGC has addressed these issues in the estuarine and coastal components of the continuum. Because of the expanding scale of source to sink drivers and responses along the continuum, it seems logical and essential to combine the traditional research and management foci of these institutions under one umbrella, in order to most effectively address SC water and habitat quality, resource and sustainability issues in a cross disciplinary, process- and management-integrated fashion across the continuum. The team suggests that this collaboration be explored, making optimal use of SC's academic, state agency, NGO and private resources.
- **Suggestion (7):** Explore opportunities to develop resilience metrics that can inform future resilience investments and measure progress.
- **Suggestion (8):** SCSGC should actively pursue opportunities to share lessons learned from its resilience activities with other adaptation and resilience practitioners.
- **Suggestion (9):** Pursue opportunities to support communities with little to no capacity for community planning, especially with an eye towards equity and inclusiveness.
- **Suggestion (10):** Consortium partners are conducting innovative genetics research with commercially and recreationally important species. SCSGC should encourage and support interstate and federal fisheries management applications related to the cutting edge research they support. Continue this foundational work.
- **Suggestion (11):** To further workforce development and capacity building efforts in the state, the team suggests the creation of undergraduate and graduate state fellowship programs.
- **Suggestion (12):** The Consortium should explore opportunities for establishing traineeships providing professional development opportunities for their state-funded graduate and undergraduate researchers and help create a cohort identity among students.

## V. BEST MANAGEMENT PRACTICES

- **Best Practice (1):** The SCSGC does an exemplary job ensuring that their work is relevant, timely, and addresses needs and priorities of their stakeholders. The SCSGC achieves this by (i) creating Program Specialist Advisory Committees, to guide each program specialists' priorities and engage stakeholders and (ii) the Consortium seeks input on its RFP process every 2 years to ensure relevance to stakeholders, going above and beyond the 4-year strategic planning requirement.
- **Best Practice (2):** A challenge in Sea Grant education programs is ensuring that teachers incorporate lessons and tools into their curricula. The SCSGC overcomes this challenge by

ensuring that all educational lessons and products are linked to state science standards and providing that information on its website.

- **Best Practice (3):** The quarterly, “Coastal Heritage,” provides a superb resource to the community, in South Carolina and beyond. The integration of science and scholarship with history and culture is a model of excellence and is a tradition well worth preserving.

**VI. SRT AGENDA (see next page):**



**S.C. Sea Grant Consortium**  
**National Sea Grant Site Review Visit**  
**Final Agenda – Day One**

<b>Tuesday August 6, 2019</b>	<b>College of Charleston Stern Student Center, Room 416 71 George Street</b>
0710 – 0730	<b>Site Review Visit Team Walk to Stern Student Center</b>
0730 – 0800	<b>Coffee and Refreshments</b>
0800 – 0810	<p><b>“Welcome to the College of Charleston Campus”</b>  <i>Andrew T. Hsu, Ph.D., President</i>  College of Charleston</p>
0810 – 0830	<p><b>Introductions and Purpose of the Site Review Visit</b>  <i>Rebecca Briggs, Ph.D., Sea Grant Regional Program Officer and  National Research Coordinator</i>  NOAA National Sea Grant College Program</p>
0830 – 1000	<p><b>Program Organization and Management</b> – S.C. Sea Grant Consortium;  Strategic Planning; Partnerships and Stakeholder Engagement; Budget and  Funding; Extension, Education, and Communications; Administration</p> <p><u>Overview Presentation</u> – “The ‘Changing Face’ of Coastal South Carolina and the  S.C. Sea Grant Consortium” – <i>M. Richard DeVoe</i></p> <p><u>Panel #1</u> – Consortium “Core Group” Discussion (<i>DeVoe</i>)  <i>Annette Dunmeyer</i>, Executive Assistant/Office Manager  <i>Susan Lovelace, Ph.D.</i>, Assistant Director for Development and Extension  <i>Ryan Bradley</i>, Assistant Director for Administration  <i>Susannah Sheldon</i>, Research and Fellowships Manager  <i>Susan Ferris Hill</i>, Director of Communications  <i>Elizabeth Vernon (E.V.) Bell</i>, Marine Education Specialist</p>
1000 – 1020	<b>Break and Discussion with Staff</b>
1020 – 1200	<p><b>Collaborative Network Activities</b> – Planning and Engagement Panel (<i>DeVoe</i>)</p> <p><u>Panel #2</u> – Partners in Planning and Engagement  <i>A. Frederick Holland, Ph.D.</i>, Director (ret.), NOAA NCCOS Hollings  Marine Laboratory  <i>Ginger Hinchcliff</i>, Chief, Learning Services Division, NOAA Office for  Coastal Management  <i>Sherri Fields</i>, Director, NCCOS Charleston Marine Labs, NOAA Center for  Coastal Environmental Health and Biomolecular Research and NOAA  Hollings Marine Laboratory  <i>Michael Allen</i>, Community Partnership Specialist (ret.), U.S. National Park  Service  <i>Gregg Waugh</i>, Executive Director, South Atlantic Fishery Management  Council  <i>Clark Alexander, Ph.D.</i>, Director and Professor, Skidaway Institute of  Oceanography  <i>Paul A. Sandifer, Ph.D.</i>, Director, Center for Coastal Environmental and  Human Health, School of Sciences and Mathematics, College of  Charleston  <i>Paul T. Gayes, Ph.D.</i>, Executive Director, Burroughs and Chapin Center for  Marine and Wetland Studies, Coastal Carolina University</p>

**S.C. Sea Grant Consortium**  
**National Sea Grant Site Review Visit**

	<p><i>Jeffrey S. Allen, Ph.D., Executive Director, South Carolina Water Resources Center, Clemson University</i></p> <p><i>Jannie Harriot, Executive Director, S.C. African American Heritage Foundation, and Chairperson, S.C. African American Heritage Commission</i></p> <p><i>Robert H. Boyles, Jr., Interim Director, S.C. Department of Natural Resources</i></p> <p><i>Elizabeth B. von Kolnitz, Chief, Ocean and Coastal Resource Management, S.C. Department of Health and Environmental Control</i></p>
1200 – 1300	<b>Lunch and Discussion with Panelists</b>
1300 – 1530	<p><b>Stakeholder Engagement/Performance</b> – Environmental Literacy and Workforce Development (<i>Bell</i>)</p> <p><u>Panel #3</u> – Enhancing Formal and Non-Formal Science Education (<i>Bell</i>)</p> <p><i>Julie Binz, Marine Education Coordinator, S.C. Department of Natural Resources (Teacher professional and workforce development)</i></p> <p><i>Cindy Lilly, 7<sup>th</sup> Grade Science Teacher, Ocean Bay Middle School (Incorporation of stewardship and citizen science projects within formal education)</i></p> <p><i>Michelle Harrison, Elementary School Teacher, Holy Trinity Catholic School (Implementation of S.C. Sea Grant Consortium programs and educational products in formal education)</i></p> <p><i>Lindsay Patterson, Environmental Education Coordinator, Charleston County Park and Recreation Commission (Increasing scientific literacy through nonformal partnerships and professional organizations)</i></p> <p><i>Taylor Brockman, Owner, Magic Number (BOBino Data Sensors: Private sector partnerships with STEM education)</i></p> <p><u>Panel #4</u> – Increasing Awareness of Coastal Environment, History, and Culture (<i>Joey Holleman/Ferris Hill</i>)</p> <p><i>Ginger Rosenberg, Marketing Professional (ret.), Charleston, S.C. (How Coastal Heritage addresses community issues, such as flooding and ponds)</i></p> <p><i>Sue Morrison, James Island Charter High School Teacher (ret.), James Island, S.C. (Coastal Heritage “Curriculum Connection” in the science classroom)</i></p> <p><i>Lee G. Brockington, Senior Interpreter, Hobcaw Barony, Georgetown, S.C. (Coastal South Carolina history)</i></p> <p><i>Michael Allen, Community Partnership Specialist (ret.), U.S. National Park Service, Charleston, S.C. (Coastal S.C. history and culture)</i></p> <p><u>Panel #5</u> – Nurturing Graduate Research and Fellowship Opportunities (<i>Sheldon</i>)</p> <p><i>Peter van den Hurk, Ph.D., Associate Professor, Biological Sciences, Clemson University (Student research on microplastic contamination in coastal South Carolina)</i></p> <p><i>Sarah Kell, Teaching Assistant, College of Charleston (Identifying sources of tire wear particles in Charleston Harbor)</i></p> <p><i>Doug Bell, Ph.D., ORISE Fellow, Office of Water, U.S. Environmental Protection Agency, Washington, D.C. (Kathryn D. Sullivan Award recipient and Knauss fellow) – Remote</i></p> <p><i>Alex Braud, Resilience Research Associate, College of Charleston (Coastal Management fellow)</i></p>

**S.C. Sea Grant Consortium**  
**National Sea Grant Site Review Visit**

1530 – 1550	Break and Brief Discussion with Panelists
1550 – 1600	Site Review Visit Team Walk to President's Boardroom, College of Charleston
	<b>College of Charleston</b> <b>President's Boardroom, Randolph Hall (2<sup>nd</sup> Floor)</b> <b>66 George Street (between Coming and St. Philip streets)</b>
1600 – 1700	<b>Program Organization and Management</b> – Governance and Oversight <u>Joint Meeting</u> – National Sea Grant Site Review Visit Team and S.C. Sea Grant Consortium Board of Directors <i>Harris Pastides, Ph.D., President Emeritus, University of South Carolina, and</i> Chair, Consortium Board of Directors, presiding
1700	Joint Meeting Adjourns
1700 – 1710	Break and Stretch
1710 – 1800	<b>Site Review Visit Team Executive Session</b>
	Walk to TD Arena
	<b>College of Charleston</b> <b>TD Arena, McAlister Hospitality Suite, 3<sup>rd</sup> Floor, Room 321 301</b> <b>Meeting Street</b>
1800 – 2000	<b>Stakeholder Engagement/Performance</b> – Meet our Colleagues and Partners <u>“Networking with Stakeholders” Event</u>
2000	Site Review Visit Team Walk Back to Hotel

**S.C. Sea Grant Consortium**  
**National Sea Grant Site Review Visit**  
**Final Agenda – Day Two**

<b>Wednesday</b> <b>August 7, 2019</b>	<b>College of Charleston</b> <b>Stern Student Center, Room 416</b> <b>71 George Street</b>
0710 – 0730	<b>Site Review Visit Team Walk to Stern Student Center</b>
0730 – 0800	<b>Coffee and Refreshments</b>
0800 – 0945	<p><b>Stakeholder Engagement/Performance</b> – Resilient and Sustainable Ecosystems</p> <p><u>Panel #6</u> – Enhancing Sustainable Living Marine Resources (<i>Julie Davis/Lovelace</i>)</p> <p><i>Michael Denson</i>, Ph.D., Director, Marine Resources Research Institute, Marine Resources Division, S.C. Department of Natural Resources (Finfish research and management)</p> <p><i>Ben Dyar</i>, Manager, Shellfish Management Program, Marine Resources Division, S.C. Department of Natural Resources (Applying research to fisheries management)</p> <p><i>Frank Roberts</i>, Owner, Lady’s Island Oysters Inc. (Hatchery development for a resilient oyster mariculture industry)</p> <p><i>Jared Hulteen</i>, Co-Owner, Barrier Island Oyster Company (S.C. Shellfish Growers Association)</p> <p><i>Caitlyn Mayer</i>, Marketing and Business Manager, Charleston Oyster Farm (New farmers and growing industry; oyster mariculture)</p> <p><u>Panel #7</u> – Relationships between Development and Tidal Creek/Salt Marsh Ecosystems (<i>April Turner</i>)</p> <p><i>Chris Marsh</i>, Ph.D., Executive Director, Lowcountry Institute, Spring Island, S.C. (Advising and using S.C. Sea Grant research for conservation)</p> <p><i>Andrew Tweel</i>, Ph.D., Assistant Marine Scientist, Marine Resources Research Institute (MRRI), S.C. Department of Natural Resources, Charleston, S.C. (Tidal creeks research and collaboration)</p> <p><i>Kim Jones</i>, Watershed Management Division Manager, Town of Bluffton, S.C. (Resource manager collaboration in research and extension)</p> <p><i>Catharine Parker</i>, Biologist II, Environmental Research Section, MRRI, S.C. Department of Natural Resources, Charleston, S.C. (Engagement and professional growth in S.C. Sea Grant research and outreach)</p>
0945-1015	<b>Break and Discussion with Panelists</b>
1015-1200	<p><b>Stakeholder Engagement/Performance</b> – Resilient Communities and Economies</p> <p><u>Panel #8</u> – Characterization and Management of Stormwater Ponds (<i>Hamed Majidzadeh</i>, Ph.D.)</p> <p><i>Denise M. Sanger</i>, Ph.D., Associate Marine Scientist and ACE Basin NERR Research Coordinator, MRRI, S.C. Department of Natural Resources (Stormwater ponds and tidal creeks research and management)</p> <p><i>Edward G. Oswald</i>, Broker/Owner, Oswald Cooke &amp; Associates (Member, S.C. Sea Grant’s Stormwater Pond Advisory Council)</p> <p><i>Hillary C. Repik</i>, Stormwater Manager, Town of Mount Pleasant (Value of stormwater research and outreach efforts to local government) - <u>Remote</u></p> <p><i>Guinn Wallover</i>, Water Resources Extension Agent, Clemson University (Informing statewide stormwater pond outreach efforts)</p>

**S.C. Sea Grant Consortium**  
**National Sea Grant Site Review Visit**

	<p><u>Panel #9</u> – Marine Debris and Microplastics in the Environment (<i>Sheldon/Bell</i>)  <i>Sarah Latshaw</i>, Regional Coordinator, NOAA Southeast Marine Debris Program (Regional marine debris collaborative efforts)  <i>Sean Briggs</i>, Manager, Compliance and Enforcement Section, SCDHEC-Ocean and Coastal Resource Management (Abandoned and derelict vessel efforts)  <i>Edward Evans</i>, Project Manager, S+ME, Inc. (Beach Sweep/River Sweep long-time volunteer)  <i>John Weinstein</i>, Ph.D., Chair, Department of Biology, The Citadel (Microplastics research)</p>
1200 – 1300	<b>Lunch and Discussion with Panelists</b>
1300 – 1445	<p><b>Stakeholder Engagement/Performance</b> – Resilient Communities and Economies</p> <p><u>Panel #10</u> – Addressing Flooding Issues in the Charleston, S.C. Area (<i>Sarah Watson</i>)  <i>Norm Levine</i>, Ph.D., Associate Professor and Director, Santee Cooper GIS Laboratory and Lowcountry Hazards Center, College of Charleston (The science underpinning community resilience)  <i>Dan Burger</i>, Co-Chair, Charleston Resilience Network (Fostering collaborative efforts to strengthen resilience)  <i>Mark Wilbert</i>, Chief Resilience Officer, City of Charleston, S.C. (Value of science-based hazards information to local government action)  <i>Spencer Wetmore</i>, City Administrator, City of Folly Beach, S.C. (Climate impacts planning and conservation of natural resources)</p> <p><u>Panel #11</u> – Community Hazards Planning and Adaptation Efforts (<i>Watson</i>)  <i>Kirstin Dow</i>, Ph.D., Carolina Trustees Professor, University of South Carolina, and Director, Carolinas Integrated Sciences and Assessments (Climate and community resilience partner)  <i>Billy Keyserling</i>, Mayor, City of Beaufort, S.C. (Sea-level rise planning at the local level)  <i>Susan Lovelace</i>, Ph.D., Assistant Director for Development and Extension, S.C. Sea Grant Consortium (Community-wide public health risk assessment of vulnerable water infrastructure)  <i>Armon Hanks</i>, Sustainability Analyst, Seattle Housing Authority (Tool development for community-wide public health risk assessment) – <u>Remote</u></p>
1445 – 1515	<b>Break and Discussion with Panelists</b>
1515 – 1700	<p><b>Stakeholder Engagement/Performance</b> – Resilient Communities and Economies</p> <p><u>Panel #12</u> – Natural Asset Planning in South Carolina (<i>Turner</i>)  <i>Blaik Keppler</i>, Manager, ACE Basin National Estuarine Research Reserve, S.C. Department of Natural Resources, Charleston, S.C. (The South Carolina Coastal Information Network)  <i>Alex Smith</i>, Stewardship Specialist, Virginia Outdoors Foundation, Richmond, VA (Natural asset planning for the East Cooper) - <u>Remote</u>  <i>Catherine Main</i>, President, Lowcountry Style, LLC, Mount Pleasant, S.C. (Natural asset planning for the East Cooper)  <i>Leigh Kane</i>, Principal Planner, Horry County Planning and Zoning Department, Conway, S.C. (S.C. Coastal Communities Initiative mini-grants) – <u>Remote</u></p>

**S.C. Sea Grant Consortium**  
**National Sea Grant Site Review Visit**

	<p><i>Peach Morrison</i>, Executive Director, S.C. Lowcountry and Resort Islands Tourism Commission, Yemassee, S.C. (S.C. Nature-Based Tourism Association)</p> <p><u>Panel #13</u> – Deliberating Priority Issues – Our Coastal Future Forum (<i>Lovelace</i>)</p> <p><i>Matt Nowlin</i>, Ph.D., Associate Professor, Department of Political Science, College of Charleston (Connecting citizens with decision-makers to shape our future)</p> <p><i>Lee Bundrick</i>, Land Preservation Coordinator, Kiawah Conservancy (Participant experience and application)</p> <p><i>Rocky Browder</i>, Environmental Planner, Town of Hilton Head Island (Engaging citizens with planners)</p> <p><i>Sandra Bundy</i>, Broker-in-Charge, e-PRO, REALTOR®, B&amp;P, Inc., Murrells Inlet (What new residents need to know)</p>
1700 – 1730	Break and Discussion with Panelists
1730 – 1830	Site Review Visit Team Executive Session
1830	Adjourn for Day
Evening	Open

**S.C. Sea Grant Consortium**  
**National Sea Grant Site Review Visit**  
**Final Agenda – Day Three**

Thursday August 8, 2019	College of Charleston School of Science and Mathematics Building (SSMB), Room 200 202 Calhoun Street
0740 – 0800	Site Review Visit Team Walk to SSMB
0800 – 0830	Coffee and Refreshments
0830 – 0940	<p><b>Collaborative Network Activities/Performance</b> – Regional Partnerships in Action</p> <p><u>Panel #14</u> – Southeast Regional Collaborative Activities (<i>DeVoe</i>)</p> <p><i>Debra Hernandez</i>, Executive Director, Southeast Coastal Ocean Observing Regional Association (SECOORA), Charleston, S.C. (Regional coastal ocean observing efforts)</p> <p><i>Virginia Fay</i>, Ph.D., Assistant Regional Administrator, Habitat Conservation Division Southeast Regional Office, NOAA Fisheries, St. Petersburg, FL (S.C. Sea Grant Consortium engagement through regional NOAA efforts)</p> <p><i>Eugene “Geno” Olmi</i>, Ph.D., Coordinator, NOAA Southeast and Caribbean Regional Team (SECART) (Regional NOAA integration and engagement)</p> <p><i>Mary Conley</i>, Southeast Director of Marine Conservation, The Nature Conservancy (Regional engagement on ocean policy)</p> <p><i>Amanda Whittemore Martin</i>, Ph.D., Former Project Coordinator and Co-PI, Southeast Disaster Recovery Partnership (Regional resilience partnership efforts) – <u>Remote</u></p>
0940 – 1000	Break and Discussion with Panelists
1000 – 1145	<p><b>Collaborative Network Activities/Performance</b> – Science as the Essence of Engagement</p> <p><u>Panel #15</u> – Perspectives - Producing “Science for Society” (<i>DeVoe</i>)</p> <p><i>Timothy Callahan</i>, Ph.D., Professor and Chair, Department of Geology and Environmental Geosciences, College of Charleston</p> <p><i>Lauren Duffy</i>, Ph.D., Associate Professor, Parks, Recreation, and Tourism Management Department, Clemson University</p> <p><i>Paul T. Gayes</i>, Ph.D., Executive Director, Burroughs and Chapin Center for Marine and Wetland Studies, Coastal Carolina University</p> <p><i>Dianne Greenfield</i>, Ph.D., Associate Professor, Environmental Sciences Initiative, CUNY Advanced Science Research Center, Earth and Environmental Sciences, Queens College – <u>Remote</u></p> <p><i>James T. Morris</i>, Ph.D., Distinguished Research Professor, Belle W. Baruch Institute for Marine and Coastal Sciences, University of South Carolina</p> <p><i>Denise M. Sanger</i>, Ph.D., Associate Marine Scientist and ACE Basin NERR Research Coordinator, Marine Resources Research Institute, S.C. Department of Natural Resources</p> <p><i>Geoffrey I. Scott</i>, Ph.D., Chair and Clinical Professor, Department of Environmental Health Sciences, Arnold School of Public Health, University of South Carolina</p> <p><i>John E. Weinstein</i>, Ph.D., Chair, Department of Biology, and Associate Dean of Accreditation, Swain Family School of Science and Mathematics, The Citadel</p>
1145 – 1215	Break and Discussion with Panelists

**S.C. Sea Grant Consortium**  
**National Sea Grant Site Review Visit**

1215 – 1230	Site Review Visit Team Walk to S.C. Sea Grant Consortium
	<b>S.C. Sea Grant Consortium</b> <b>287 Meeting Street (corner of Meeting and George streets)</b> <b>Conference Room</b>
1230 – 1630	<b>Working Lunch/Session</b> – Site Review Visit Team
1630 – 1730	<b>Initial Read-Out</b> – Site Review Visit Team, Executive Director, and Board Member <b>Final Read-Out</b> – Site Review Visit Team and Consortium Core Group
1730	Adjourn