

South Carolina Sea Grant Consortium 2012 NSGO Review

Elizabeth J. Ban

SCSGC Management

- Management staff
 - M. Richard (Rick) DeVoe, Executive Director (1.0 FTE)
 - Elaine L. Knight, Assistant Director (1.0 FTE)
 - Denise Sanger, Assistant Director for Research and Planning (0.75 FTE)
 - Susan Ferris Hill, Director of Communications (1.0 FTE)
 - Robert Bacon, Extension Program Leader (1.0 FTE)

- Medium Program

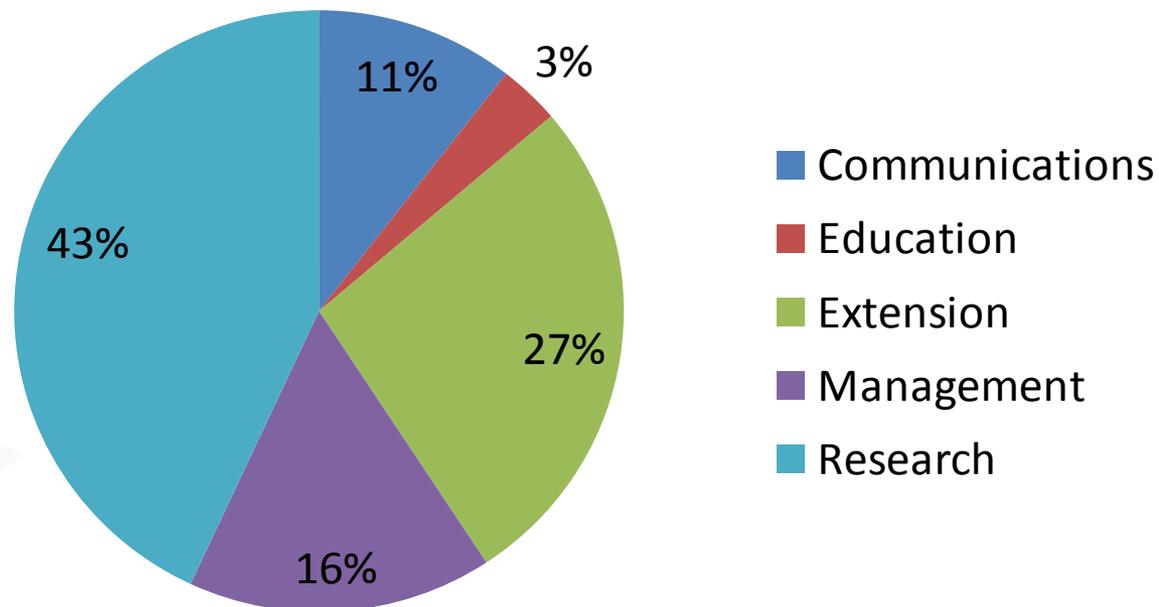
SCSGC Management

- Total FTEs on staff (information in Annual report metrics)

Functional Area	# of individuals	# of FTEs supported by SG	# of FTEs supported by match/leverage
Mgt/Admin	5	1	4
Comm.	3	1.4	1.6
Ext.	5	4	1
Education	2	0.25	1.75
Research	1	0.25	0.75

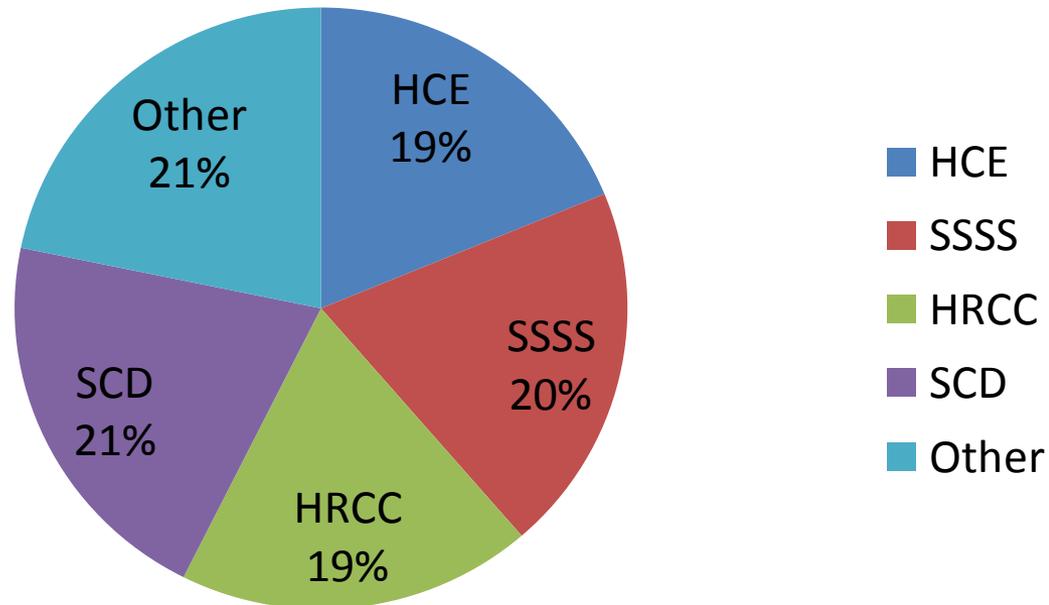
SCSGC 2010 Core Budget (Fed + Match) toward each Functional Area

Effort by Functional Area



SCSGC 2010 Budget towards each Focus Area (Fed + Match + Pass-Through + Managed Leveraged Funds)

Effort by Focus Area



Significant SCSGC Changes (since January 2011)

- Clemson University Cooperative Extension Service, due to state budget reductions, has withdrawn from the SCSGC/CES MOA and is no longer providing matching funds for Sea Grant Extension staff or programs. Nevertheless, Clemson University remains one of the SCSGC's eight member institutions.
 - Loss of this extension partner university has increased the difficulty of finding match funding for the SCSGC.
- The governor of the State of South Carolina vetoed the SCSGC FY11 budget on June 28th, but the legislature overrode her veto on June 29th, 2011.
 - Given only 24 hrs. notice of the veto, the staff worked tirelessly to engage SCSGC stakeholders.

SCSGC Program RFP Process

- Strategic and Implementation Plan serves as foundation for priorities in RFP followed by input from management community
- Applicants submit pre-proposal (concept letter) reviewed by expert panel of managers and scientists
- Approximately 25 full proposals are requested from pool
- Technical and conceptual peer review from academia, government and industry throughout U.S (usually outside of S.C.)
- Proposal Technical Review Panel (TRP) convened to review and evaluate full proposals.
- Research and outreach proposals are selected based on TRP recommendations and program priority needs for inclusion in program plan

SCSGC RFP Process for 2012-2013 Projects

– Research Metrics

Core Proposals	# of Proposals	# of institutions	# from home institution
Pre-proposals submitted	53	6	*
Full proposals submitted	25	5	*
Proposals Funded	11	4	*

* SCSGC is a state agency, therefore there is not “home institution”

SCSGC Contribution to National Performance Measures and Metrics

Focus Area	Metric	Actual
NA	Leverage Funds (managed by SCSGC)	\$2,995,527.00
NA	Number of volunteer hours	9550
NA	Number of SG supported students (undergrad and graduate)	47
NA	Economic benefits of extension information for S.C. shrimpers' sustainability and productivity	4 jobs created/115 jobs retained

SCSGC Contribution to National Performance Measures and Metrics

Focus Area	Metric	Actual
SCD	Number of coastal communities that have adopted/implemented sustainable development practices and policies as a result of Sea Grant practices	2
SSSS	Number of fishers who adopt and implement responsible harvesting techniques and practices	65
SSSS	Number of stakeholders who modify their practices using knowledge gained in fisheries sustainability, seafood safety and the health benefits of seafood	155

SCSGC Impacts

Consortium Spins Off SECOORA as Nonprofit

The Consortium initiated, nurtured, and spun off SECOORA (Southeast Coastal Ocean Observing Regional Association) as a stand-alone non-profit corporation that is one of 11 ocean observing regional associations under the auspices of the National IOOS Office and NOAA. SECOORA consists of 41 dues-paying member organizations, and a host of partnering institutions.



The Coastal and Ocean Landscape (HCE) Focus Area

Goal: Sound scientific information available to support ecosystem based approaches to managing the coastal environment.

SCSGC Impacts

Improving Shellfish Aquaculture Production

After many iterations of development the South Carolina shellfish industry has entered a sustainable development period. The regulatory process has been streamlined and developmental funds were established to stimulate the industry's development. South Carolina Sea Grant Extension, working with the SCDHEC, SCDNR and interested farmers and fishermen have utilized a multifaceted program to develop and sustain a South Carolina shellfish industry based on small farmers, diversified fishermen/farmers and diversified traditional seafood docks.

Sustainable Fisheries and Aquaculture (SSSS) Focus Area

Goal: A sustainable supply of seafood that meets public demand at competitive prices



SCSGC Impacts

2010 Beach Sweep/River Sweep Litter Cleanup

Beach Sweep/River Sweep has economic, environmental, and societal benefits. In 2010, 4,700 volunteers collected 24 tons of litter from South Carolinas beaches, marshes, and rivers. The value of volunteer time equals \$200,784. The states natural resources are cleaner, safer, and more beautiful for all to enjoy.

The Coastal and Ocean Landscape (HCE) Focus Area

Goal: Restored function and productivity of degraded ecosystems.



SCSGC Impacts

Private Landowners and Volunteers Manage Coastal Invasive Species

Sea Grant Extension, working with agency partners, private landowners, and local volunteers are making significant progress in the control of three invasive plants that are adversely impacting the native coastal ecosystem.

This year, with \$200,000 in grant support, the SCSGC and its partners, worked with landowners to eradicate 1,500 acres of *Phragmites* along the states coastal waters. On the state's beachfront, the Carolinas Beach *Vitex* Taskforce has controlled *Vitex* at 228 of 235 identified sites. The initial success of Chinese Tallow control holds promise for controlling the invasive on thousands of acres in South Carolina.



The Coastal and Ocean Landscape (HCE) Focus Area

Goal: Restored function and productivity of degraded ecosystems

2010 SCSGC Research Accomplishments

Roofs of Homes Strengthened by Tougher Building Codes

Sea Grant researchers at Clemson University have created a computer model to test whether stronger building codes have improved the structural integrity of housing in coastal South Carolina. Builders in coastal areas are now required by code to attach a home's roof sheathing to rafters with additional nails, which is said to help prevent roof losses. The scientists created a model that simulates a Category 4 catastrophic storm hitting the same location where Hugo made landfall in 1989. The storm was directed into a simulated subdivision with homes built under today's more rigorous coastal construction code. The same storm was also directed through a similar simulated neighborhood but with homes built under typical construction practices of 1989. This Sea Grant research clearly demonstrates that current tougher building codes have made roofs stronger in high winds. If another storm the size of Hugo hit the coast today, there would be less roof failure and less debris because of improved roof construction practices.



2010 SCSGC Research Accomplishments

Unique interactions cause Long Bay dead zones

SCSGC-supported scientists now believe that an unusual interaction of physical and biological processes is causing hypoxic events in Long Bay. SCSGC and partners are carrying out several research and monitoring efforts to study the phenomena and identify causes of low-oxygen problems.

It appears that natural, physical oceanographic processes play a crucial role. During each event, strong southwesterly winds cause upwellings near the Long Bay beachfront resulting in a constrained mass of colder water in the nearshore zone. At the same time, hot summer days produced warm surface waters that limited mixing with cold waters on the ocean's floor. And on the landward side, nutrients and organic matter draining off developed uplands is thought to be another important contributor to low-oxygen events. Tidal creeks, stormwater-discharge pipes, and groundwater all carry nutrients and organic matter into the coastal ocean. Under typical conditions, this material is widely dispersed. But when constrained within Long Bay's nearshore zone, the material stimulates bacterial activity. The bacterial communities consume oxygen at a faster rate than it can be replenished, resulting in hypoxia.



Sources (unless otherwise noted)

- Planning, Implementation, and Evaluation Resources (PIER)
<https://pier.seagrant.noaa.gov>
- Personal Communication with Program
- 2011 Site Review Team Briefing Book
- 2011 Site Review Team Report