

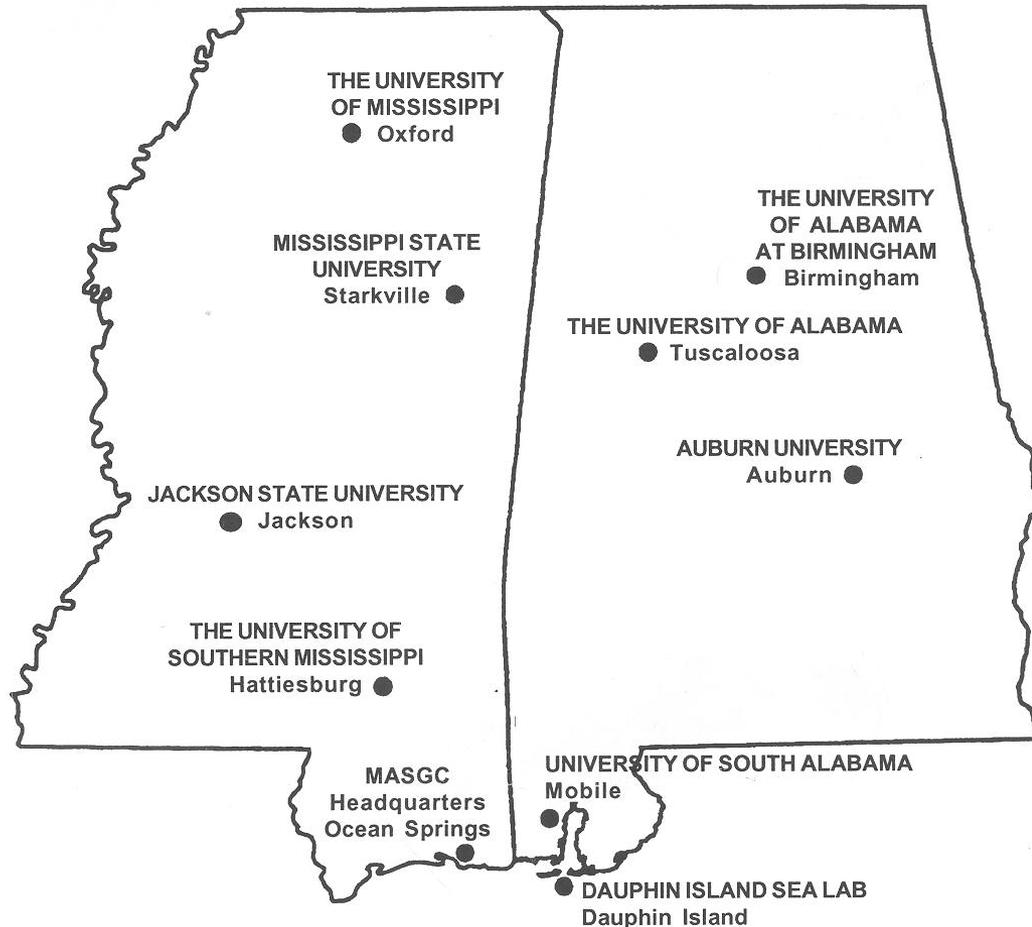
MISSISSIPPI - ALABAMA
SEA GRANT PROGRAM
2010 NSGO REVIEW

Gene W. Kim

Consortium Member Institutions

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MSAL SG



Program Management

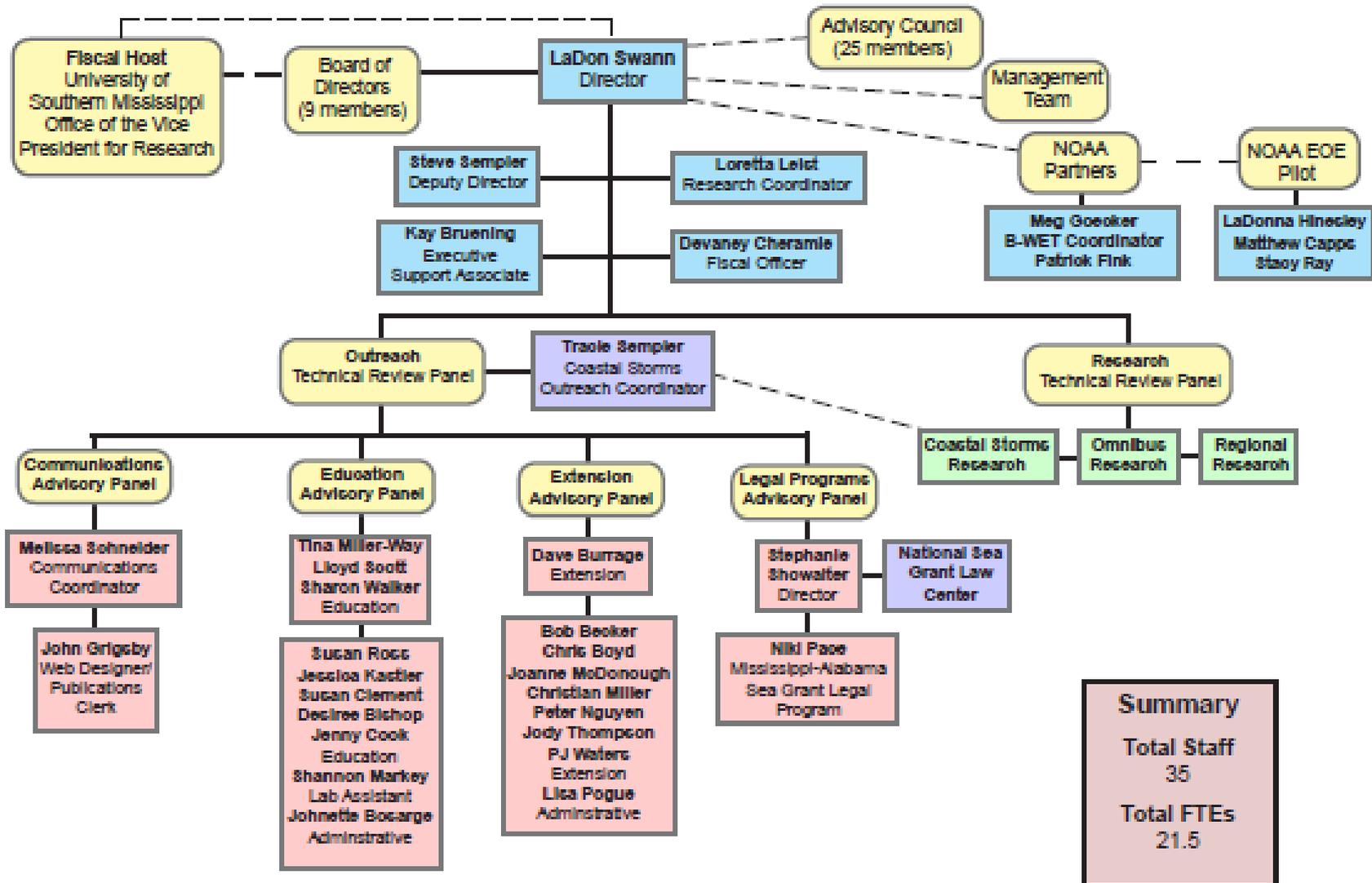
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MSAL SG

□ Management Team

- Director, LaDon Swann (0.6 FTE)
- Deputy Director, Steve Sempier (0.5 FTE Deputy and 0.5 FTE GMRP)
- Research Coordinator, Loretta Leist (1.0 FTE)
- Fiscal Officer, Devaney Cheramie (0.5 FTE)
- Communications Coordinator, Melissa Schneider (1.0 FTE)
- Executive Support Associate, Kay Bruening (1.0 FTE)
- Director of Education, Sharon Walker (0.2 FTE)
- Extension Leader, Dave Burrage (0.9 FTE)
- Extension Environmental Associate, Jody Thompson (0.33 FTE)
- Coastal Storms Program Coordinator, Tracie Sempier (1.0 FTE CSP)
- Director Sea Grant Legal Program, Stephanie Showalter (0.15 FTE)
- Research Counsel, Sea Grant Legal Program, Niki Pace (1.0 FTE)

Program Organizational Chart



Extension Program

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Name	Focus Area	Office
Bob Becker	SSSS	Mobile
Dave Burrage	SSSS	Biloxi
Peter Nguyen	SSSS	Biloxi
P.J. Waters	SSSS, Marine Science Literacy	Mobile
Jody Thompson	SCD, HRCC	Mobile
Joanne McDonough	SCD	Orange Beach
Chris Boyd, Ph.D.	HCE	Biloxi
Christian Miller	HCE	Mobile
Tracie Sempier, Ph.D.	HRCC	Ocean Springs
Niki Pace, J.D., LL.M.	HRCC, HCE, SCD, SSSS	Oxford
Stephanie Showalter, J.D.	HRCC, SCD	Oxford
Melissa Schneider	HRCC, HCE, SCD, SSSS	Ocean Springs
John Grigsby	HRCC, HCE, SCD, SSSS	Ocean Springs
Sharon Walker, Ph.D.	Marine Science Literacy	Ocean Springs
Tina Miller-Way	Marine Science Literacy	Dauphin Island
Lloyd Scott	Marine Science Literacy	Mobile

Program Management – Advisory Council and Board of Directors

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MASGC Board of Directors

- Nine-member Board from each member institution
 - Board members are VPs of Research or similar positions
 - Sets administrative policy to be implemented by the MASGC Director.
 - Monitors and approves fiscal budgets during annual meeting.
 - Conducts MASGC Director's performance review.

MASGC Advisory Council

- 24 Advisory Council members with equal representation from Alabama and Mississippi (includes Federal, regional, state, & local agencies; private sector; university; and NGO)
 - Brings senior advice and diverse viewpoints to the program and guidance to the MASGC Administration in program operation.
 - Provides input on the relevancy of proposed projects and helps guide MASGC in addressing critical local and regional issues.

Institutional Setting

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Mississippi-Alabama Sea Grant Consortium

- Administrative office in Ocean Springs, MS
- Fiscal host is the University of Southern Mississippi
- The nine MASGC members include:
 - ▣ Auburn University
 - ▣ Dauphin Island Sea Lab
 - ▣ Jackson State University
 - ▣ Mississippi State University
 - ▣ University of Alabama
 - ▣ University of Alabama at Birmingham
 - ▣ University of Mississippi
 - ▣ University of Southern Mississippi
 - ▣ University of South Alabama

State Sea Grant Program Plan – Estimated 4-yr Budget Allocation by Focus Area

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National Focus Area	Focus Area from Program Strategic Plan	Estimated Level of Effort of Federal, Match and Leveraged (%)	Estimated Level of Effort of Federal and Match (\$)	Estimated Level of Effort of Leveraged (\$)
Safe & Sustainable Seafood Supply	Safe & Sustainable Seafood Supply	24%	\$2,646,900	\$178,600
Sustainable Coastal Development	Sustainable Coastal Development	24%	\$2,259,356	\$550,676
Healthy Coastal Ecosystems	Healthy Coastal Ecosystems	24%	\$2,267,832	\$498,456
Hazard Resiliency in Coastal Communities	Hazard Resiliency in Coastal Communities	28%	\$2,378,966	\$853,168
Total		100%	\$9,553,054	\$2,080,900

Performance Measures/Outcome Highlights

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- Gulf of Mexico Research Plan
- Community Resilience Index
- Field guide for aquatic plants in MS and AL
- Storm Smart Coasts Network
- 44 volunteers raised 59,000 oysters for restoration project
- \$165,000 per year in energy saving shrimp gear
- \$500,000 working waterfront inventory

Major Partners

Over 400 partners, including:

- Gulf of Mexico Alliance
- NOAA Coastal Storms Program
- NOAA Regional Collaboration Team (NMFS-Southeast Regional Office)
- GulfQuest (National Maritime Museum of the Gulf of Mexico)
- Alabama Gulf Coast Convention and Visitors Bureau
- Mississippi Department of Marine Resources
- Alabama Department of Environmental Management
- State of Alabama Department of Conservation and Natural Resources
State Lands Division
- NOAA Northern Gulf Institute
- Gulf of Mexico Sea Grant Programs
- Mobile Bay National Estuary Program
- Gulf of Mexico Coastal Ocean Observing System

2008/2009 Network Activities

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- Focus Team Vice Chair, Hazard Resilient Coastal Communities (Swann)
- Focus Team member, Hazard Resilient Coastal Communities (Walker)
- Focus Team member, Sustainable Coastal Development (Showalter)
- Gulf of Mexico Regional Representative on the steering committee for the National Sea Grant College Program Communications Network (Schneider)
- Gulf of Mexico Regional Research Plan developed and released (Sempier)
- Gulf of Mexico Sea Grant and Regional Collaboration Team Climate Community of Practice
- GCOOS Board of Directors (Walker and Dindo)
- Gulf of Mexico Alliance Education, Resilience and Nutrients Priority Issue Teams
- COSEE Central Gulf of Mexico (Walker and Dindo)
- NOAA Coastal Storms Program
- NOAA Engagement pilot and NOAA Regional EOE Lead

2010 RFP Process

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- MASGC research in the following focus areas:
 - Healthy Coastal Ecosystems
 - Safe and Sustainable Seafood Supply
 - Sustainable Coastal Development
 - Hazard Resilience in Coastal Communities
- Of the 40 pre-proposals reviewed by TRP, 12 encouraged to submit full proposals
- 15 full proposals received and sent for external mail review and panel review (4-5 merit reviews)
- Panel with primarily out-of-state members, including university, FDA, NOAA (NMFS, Habitat, CSC), and other SG programs
- Advisory Council provided a relevancy review of fundable projects
- Prior to awarding successful projects:
 - PIs asked to respond to review comments
 - Work with MASGC outreach staff to finalize education and outreach plans
- Additional RFP competitions managed or co-managed by MASGC in 2009
 - Coastal Storms Program (CSC) \$500K
 - Regional Research Initiative (Gulf of Mexico Sea Grant programs, EPA) \$600K 08-09 and \$1.2M for 10-11

2008/2009 Program Metrics – Awards and Honors

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- Sharon Walker was awarded the Southern Association of Marine Educators—Outstanding Resource Award on November 14, 2008, for “Educational Efforts at the Scott Marine Education Center, the Dauphin Island Sea Lab, and the Environmental Studies Center.”
- Kay Bruening, MASGC Executive Support Associate, earned the Outstanding Staff Award from The University of Southern Mississippi Gulf Coast
- MASGC-supported student Victoria Gibbs received an award for “Best Oral Student Presentation” at the 2008 Aquaculture America meeting, Orlando, FL
- Sea urchin research as an aquaculture species and biomedical/ecotoxicological model was selected as one of 20 semifinalists for “Alabama Launchpad,” which is a business plan competition from the Governor’s office
- The Gulf of Mexico Alliance Environmental Education Network was co-recipient in the Coastal America Partnership Award

2008/2009 Highlights of Metrics

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- 23 Peer-reviewed journal articles or book chapters
- 126 Extension, Outreach and Education publications
- 9 PhD, 30 MS/Juris Doctor, and 19 undergraduates
- 5 Sea Grant Knauss Fellows since 2005
- 17 workshops, seminars, symposia, conferences for 1,739 participants
- 352 K-12 field trips for 27,270 students
- 30 K-12 teacher trainings for 278 teachers
- 278 public presentations for 22,439 people

2008/2009 Program Impacts

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- HRCC: MISSISSIPPI/ALABAMA. Barrier island restoration plan implemented based on committee input
 - The MASGC Director chaired the Mississippi Marine Resources Committee for Recovery after Hurricane Katrina. The committee recommended that Mississippi's barrier islands be restored to reduce impacts from future storms. The Mississippi Coastal Improvement Program has devoted \$480 million for this effort based on input from this committee and others.
- SCD: MISSISSIPPI/ALABAMA. Sea Grant encourages local decision-makers to support nature-based tourism.
 - Sea Grant researchers are using economic data gathered from local nature festivals to highlight the importance of ecotourism to local decision-makers. The total expenditures impact of two, local nature festivals was \$293,559 which created direct and indirect employment in the areas that was equivalent to 12 jobs during the examined festival period. These benefits have been highlighted by event organizers to strengthen support from communities. Impact: Coastal nature-based tourism events have increased support from the communities.
- SCD: MISSISSIPPI/ALABAMA. Sea Grant assists local waterfront community in planning
 - Funding for the Town of Dauphin Island, Alabama was used to develop a long-term strategic and implementation plan that will improve “community development, environmental protection, economic improvement, unified governance, and means for capitalizing on the Island’s cultural assets and tourism/recreational resources.” Impact: In a short period of time, the Dauphin Island strategic plan has led to major changes in the town’s economic growth, cultural tradition and environmental stewardship by increasing nature-based tourism, developing the working waterfront district and replacing impermeable surfaces with environmentally-friendly pervious surfaces to improve drainage and reduce environmental impact of the development.

2008/2009 Program Impacts, cont.

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- SSS: MISSISSIPPI/ALABAMA. Sea Grant reduces operating costs for Mississippi and Alabama shrimpers
 - Research and technology transfer regarding the use of Sapphire trawl webbing has shown that shrimpers can reduce fuel consumption between one and two gallons per hour by switching to the new webbing. This was done in collaboration with the Gulf and South Atlantic Fisheries Foundation, Inc. and TXSG. In 2008, 11 boats adopted the practice leading to conservative estimates of over \$75 per day savings per boat. Assuming that each boat is working 200 days per year; this equates to a savings of \$165,000 per year. As diesel fuel prices increase, the savings increase proportionately.
- SSS: MISSISSIPPI/ALABAMA. Feeds, water systems grow sea urchins, tasty sushi
 - Researchers have developed nutritionally complete feeds and recirculating artificial sea water systems that result in high growth and survival of sea urchins in inshore culture facilities. Urchins (*Strongylocentrotus droebachiensis*) fed on these feeds yield high quality gonads for the sushi market according to buyers that have taste tested the product. Systems and techniques developed in the lab allow researchers to culture sea urchins from egg to egg in artificial sea water systems.

2008/2009 Research Accomplishments

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- SSS: MISSISSIPPI/ALABAMA. Oyster microarray technology project identifies oyster genes and assists with *Dermo* infection detection
 - Using genomic approaches, this Sea Grant funded project has identified almost 5,000 unique oyster genes, estimated to represent one third of all the oyster genes. These expressed sequence tag (EST) resources are now widely used by the scientific community for the development of microarray technologies. Impact: Use of microarray technology for analysis of gene expression has saved tens of thousands of scientist hours. This project also identified a set of genes induced after *Dermo* infection, which should set the theoretical basis for marker-assisted selection.

- HCE: MISSISSIPPI/ALABAMA. 26-mile beach restoration based on Sea Grant research
 - A successful three-acre, pilot restoration project funded by MASGC resulted in a large scale beach restoration project funded by U.S. Army Corps of Engineers to create living shorelines instead of artificially created sandy beaches.

Best Management Practices

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- The MASGC has been designated as the engagement lead for the NOAA regional team. And is leading multiple engagement efforts for the team.
- MASGC led a regional research competition that involved participation from EPA, USGS, NOAA CSC, and the four Gulf of Mexico Sea Grant College programs. Over two cycles four projects funded totaling \$1.8 million.
- Relevancy Review of Research Proposal by Advisory Council.
- Outreach and Education Plan development for each research project which includes allocation of funds to implement these plans.
- NOAA Coastal Storms Program grant program. First ever small grant program implemented at the local level. Total funding was \$500K in 2009 and an additional \$500K is expected for 2010.
- The Aquaculture Network Information Center (AquaNIC) continues to be the most widely used aquaculture web site in the world (<http://aquanic.org>); currently ranked in the top 14% of all web sites.