Florida Sea Grant College Program

2010 Site Review Briefing Book

Sea Grant Florida

NOAA National Oceanic and Atmospheric Administration U.S. Department of Commerce

UF University of Florida

Agenda

September 22-23, 2010
University of Florida
UF Hilton Conference Center, Gainesville, FL

Wednesday, September 22	
Introduction and Program Organization (SRT and FSG Management Team)	
7:45 am	Welcome and introductions
8:00 am	Overview of FSG organizational structure and strategic programming, discussion with SRT
10:15 am	Break
Stakeholder Engagement (Specialists, Agents, Council Members and Others Join the Meeting)	
10:30 am	SRT presentation on purpose of site review
10:45 am	Introductory comments regarding engagement with industry and resource managers
11:00 am	Case studies of engagement I. Sustainable and Hazard-Resilient Coastal Communities
Noon	Lunch - SRT and FSG Advisory Council
1:00 pm	Case studies of engagement (continued) II. Climate Change: Impacts and Adaptations III. Seafood Production and Safety IV. Healthy Coastal and Marine Ecosystems
3:30 pm	Break
3:45 pm	Engagement - international dimensions
4:30 pm	SRT questions based on discussions of day 1
5:00 pm	Adjourn
5:00 pm	SRT closed meeting
5:15-7:30 pm	Reception (SRT joining at 6:00 pm)

Thursday, September 23	
7:00 am	SRT breakfast with FSG Management Team and University of Florida senior administrators
8:00 am	Response to a crisis: the Gulf of Mexico oil spill
Collaborative Network Activities	
9:15 am	Discussions led by federal, state and local partners in person or via conference call
10:15 am	Break
10:30 am	Examples of network activities of Florida Sea Grant
11:15 am	Questions and open discussion on collaborative network activities
11:45 am	Closing question and comments
Noon	Lunch - SRT and FSG Management Team
Closed Sessions	
1:00 pm	SRT deliberation
3:45 pm	SRT meets with Director of Florida Sea Grant
4:30 pm	SRT meets with UF leadership
5:30 pm	Adjourn

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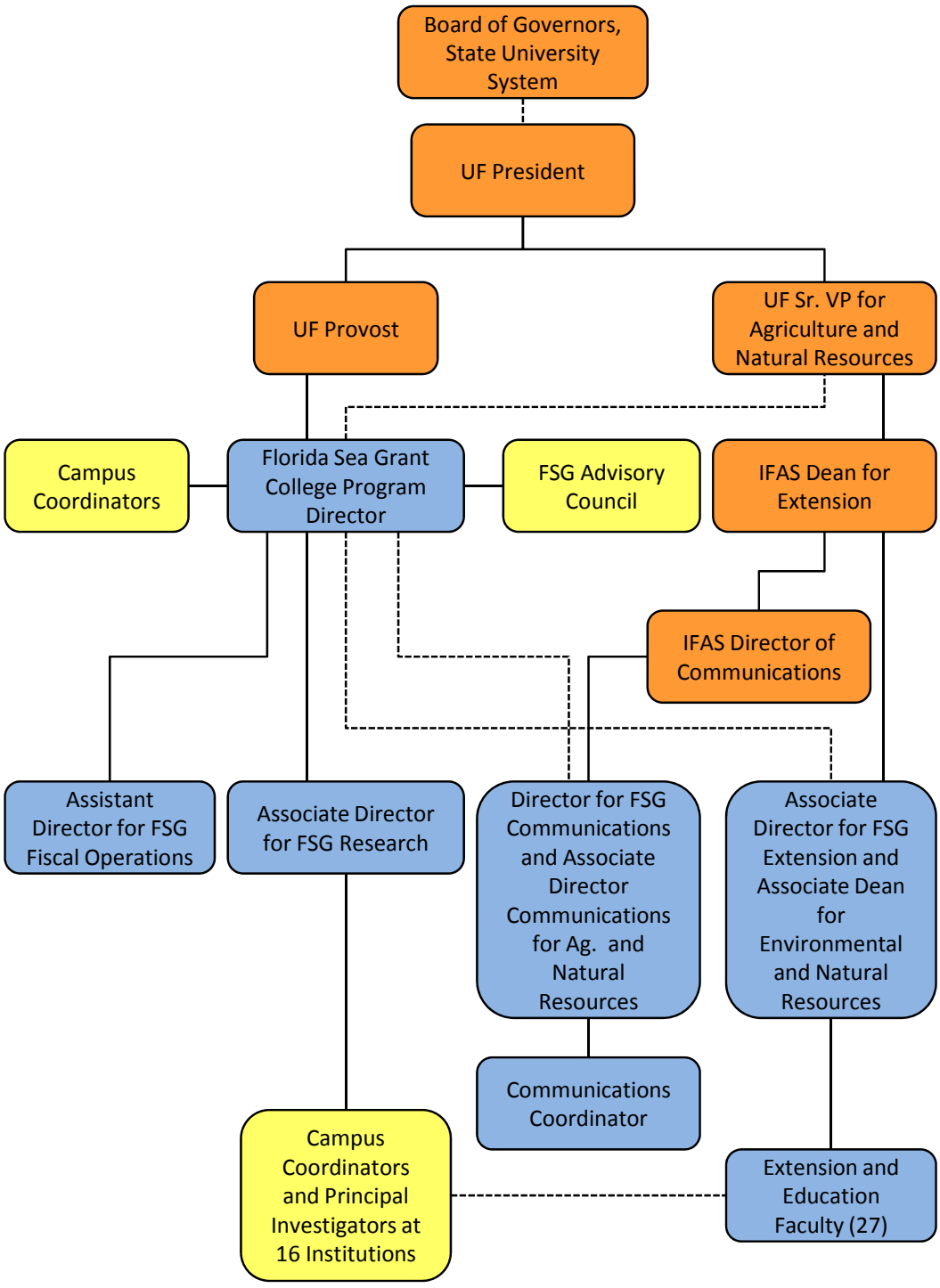
2010 Management Organization Chart



Blue = Sea Grant staff; Orange = University of Florida staff; Yellow = staff at other universities in Florida or external advisors.

PROGRAM MANAGEMENT AND ORGANIZATION

Florida Sea Grant Management Team

The program management team of Florida Sea Grant (FSG) operates a credible and effective Sea Grant College in one of the nation's most complex settings in terms of number and diversity of stakeholders, universities, coastal resources, and coastal uses. FSG management provides national and international leadership to academic interests concerned with sustainable coastal marine economies and environments.

The management team's principal responsibilities include strategic planning and coordinating research, extension, and communications to meet benchmarks established in four priority Focus Areas. This is accomplished by working internally with a stakeholder Advisory Council and with program specialists and agents; externally with campus coordinators affiliated with the 16 Florida academic institutions; and with collaborating governments, industries, and citizen groups.

At any given time, FSG manages over $5 million and more than 100 research, extension, education and communications projects, often with multiple investigators on each project. These include core program projects, program development projects, SG national strategic initiative projects, and a host of other extramurally funded projects that leverage the National Oceanic and Atmospheric Administration's (NOAA) investment and advance the FSG mission as defined in its strategic plan.

The management team includes the Director, Associate Director for Research, Associate Director for Extension and Education, Communications Director and Assistant Director for Fiscal Operations. The work of this group is coordinated through monthly staff meetings, augmented by ongoing communication between individuals and in smaller groups of the team, depending on the issue.

- **Director** – provides overall program vision and leadership, explores new opportunities with partners, constituents, prospective sponsors and the Advisory Council, develops regional and inter-agency collaborations, and ensures that the program addresses priorities of National Sea Grant and NOAA
- **Associate Director for Extension and Education** – provides vision and leadership for the statewide extension and education program, develops cooperative programs with extension and education partners at local, state, and national levels including the Cooperative Extension Service, and coordinates the activities of FSG extension specialists and marine extension agents
- **Associate Director for Research** – coordinates the biennial call for research proposals, tracks the outputs and impacts of funded research projects, coordinates the funding of research development projects, and reports programmatic data and achievements against metrics identified in the National Information Management System (NIMS)
- **Communications Director** – develops and maintains an effective multi-media communications program to meet the needs of researchers, extension experts, elected officials, resource managers and coastal residents
- **Assistant Director for Fiscal Operations** – coordinates all fiscal functions of FSG including administration of awards, tracking of expenditures by investigators, development and/or review of proposal budgets, and fiscal reporting to National Sea Grant, NOAA, the University of Florida (UF) and the State University System Board of Governors

Amount of Time Florida Sea Grant Staff Devotes to Sea Grant

Individual	Title	Extension	Education	FTE
Karl Havens	Director			1.0
Mike Spranger	Associate director for extension and education	0.4	0.1	0.5
Charles Sidman	Associate director for research			1.0
Dorothy Zimmerman	Communications director			1.0
Vacant	Communications coordinator			1.0
Ed Harvey	Assistant director for fiscal operations			1.0
Jackie Whitehouse	Executive secretary			1.0
Sharon Cook	Administrative assistant			1.0
Treva Damron	Senior secretary			1.0
Dee Sanders	Communications program assistant			1.0
Thomas Ruppert	Coastal planning specialist	1.00		1.0
Charles Adams	Extension specialist – marine economics	1.00		1.0
Tom Ankersen	Legal specialist – environmental law and policy	0.20		0.2
William Lindberg	Extension specialist – fisheries ecology	0.20		0.2
Cortney Ohs	Extension specialist – aquaculture	0.40		0.4
Steven Otwell	Extension specialist – seafood technology	1.00		1.0
Robert Swett	Extension specialist–coastal/marine spatial plg.	1.00		1.0
Karen Blyler	Extension State 4H Marine Ed. Coordinator	0.00	0.20	0.2
Holly Abeels	Marine agent – Brevard County	0.90	0.10	1.0
Lindsay Addison	Marine agent (joint with Rookery Bay NERR)	0.90	0.10	1.0
LeRoy Creswell	Marine agent – St. Lucie County	0.85	0.15	1.0
Andrew Diller	Marine agent – Escambia County	0.50	0.50	1.0
Pamela Fletcher	Marine agent - Miami (joint with NOAA AOML)	0.95	0.05	1.0
Bryan Fluech	Marine agent – Collier County	0.85	0.15	1.0
Douglas Gregory	Marine agent/CED –Monroe County	0.55	0.05	0.6
Heather Hammers	Marine agent – Pinellas County	0.90	0.10	1.0
Joy Hazell	Marine agent – Lee County	0.90	0.10	1.0
Scott Jackson	Marine agent/CED – Wakulla County	0.55	0.05	0.6
Lisa Krimsky	Marine agent – Miami/Dade County	0.90	0.10	1.0
William Mahan	Marine agent/CED – Franklin County	0.55	0.05	0.6
Carlos Martinez	Marine agent (UF Tropical Aquaculture Center)	0.15	0.05	0.2
Maia McGuire	Marine agent – St. Johns and Flagler counties	0.40	0.60	1.0
Brooke Saari	Marine agent- Walton and Okaloosa counties	0.75	0.25	1.0
Betty Staugler	Marine agent – Charlotte County	0.90	0.10	1.0
John Stevely	Marine agent – Manatee, Sarasota, and Hillsborough counties	0.95	0.05	1.0
Leslie Sturmer	Marine agent (statewide shellfish aquaculture)	0.95	0.05	1.0
Steve Theberge	Marine agent – Bay County	0.90	0.10	1.0
Chris Verlinde	Marine agent – Santa Rosa County	0.50	0.50	1.0
Fred Vose	Marine agent –Taylor County	0.90	0.10	1.0
Total	**39 people**	(20.5)	(3.5)	**33.5**

The FSG Extension and Education Program is integrated within the University of Florida (UF) Institute of Food and Agricultural Sciences (IFAS) Extension Service. Funds to support specialists and agents (also known as faculty), come from federal, state, and county sources. As part of the State's Land Grant Institution, each county faculty member is required to devote a minimum of 5% effort to education programs that may include working with youth and adult volunteers involved in 4H programs, K-12 teachers and students. They are assisted in their efforts by UF state specialists and staff. The percentage of time that county faculty devote to extension and educational activities is dependent on local needs and

the source of funds; these vary slightly over time. Currently FSG has 20.5 FTE devoted to community-based extension programs, and 3.5 FTE devoted to educational programs.

Advisory Council Membership and Function

The FSG Advisory Council is comprised of leaders from the private sector, non-governmental organizations, local governments, and state and federal agencies who are actively engaged in issues related to the sustainable management of Florida's coastal and marine economies and natural resources. They serve a term of four years, concurrent with the timeline of the four-year strategic plan, and they generously provide their time, knowledge, experiences and ideas to help FSG maintain excellence and relevance in its research, extension and education at state, regional and national levels.

Name	Title	Affiliation
Bob Aylesworth, Chair	Owner	Aylesworth's Fish and Bait
Jim Cantonis	President	Acme Sponge and Chamois
Billy Causey	Southeast Regional Director	NOAA NMSP
Ted Forsgren	Executive Director	Coastal Conservation Assoc.
Elliot Kampert	Director, Growth Management	Okaloosa County, Florida
Liz Longstreet	Seafood Procurement	Darden Restaurants
Chuck Listowski	Executive Director	W. Coast Inland Navigation Dist.
Gary Lytton	Director	Rookery Bay NERR
Gil McRae	Director	Fish and Wildlife Research Institute
Ben Nelson	Forecaster	NOAA National Weather Service
Michael Poff	Vice President	Coastal Engineering Consultants
Jerry Sansom	Executive Director	Organized Fishermen of Florida
Dan Solano	Owner	Cedar Key Aquaculture Farms
John Sprague	Director of Government Affairs	Marine Industries of Florida

Florida Sea Grant Advisory Council Members, 2009-2013.

The Advisory Council participates in developing the FSG Strategic Plan, provides input regarding implementation of strategic planning objectives, and provides guidance and support for governmental relations, fund raising and new partnerships. Meetings of the Council occur twice per year, once at the University of Florida main campus in Gainesville, and once at a site that rotates to different locations around the state where particular Council members host the meeting.

Recruiting Talent

Process Used to Develop RFP Priorities

Priority research topics are taken verbatim from research strategies identified in the National Sea Grant Office (NSGO)-approved FSG Strategic Plan. That plan is developed every four years (most recently for the period 2009-13) in a transparent and inclusive process that includes an issues survey completed by Advisory Committee members of county-based agents and Florida residents, and a planning workshop attended by all members of the FSG Advisory Council, educators, university and agency scientists, resource managers, extension specialists and agents, and representatives from a variety of coastal business sectors. In addition to requiring that projects address priorities identified in the RFP, FSG ensures that projects are highly relevant to the needs of the coastal zone by requiring that researchers must work with end-users to develop relevant proposals. Further, FSG requires that full proposals include a specific outreach plan.

Research Proposal Review Process

FSG makes a concerted effort to ensure that all eligible faculty (and their matching funds partners) are aware of funding opportunities and that they have the opportunity to submit proposals. The RFP for

pre-proposals is posted biennially on the FSG Web site during the first week of January and broadly distributed by email to the more than 800 coastal and ocean research faculty at Florida public and private universities and research laboratories. The RFP is sent to the 16 campus coordinators who forward it to their respective faculty, divisions of sponsored research and others. The RFP is also sent to state and federal agencies, to the Florida Oceans and Coastal Council and Florida Ocean Alliance, and to the FSG Advisory Council.

Project selection by FSG consists of a two-stage technical/relevancy review. Pre-proposals are due in late February and are sent out for review to disciplinary experts at state and federal agencies, universities outside of Florida, and in the private sector. Lead scientists or program directors at each agency or business distribute pre-proposals to staff with academic and/or practical expertise in the area of pre-proposal focus. All reviewers are required to read and attest to a conflict of interest form before the FSG online review system allows them to view and critique a pre-proposal. Each pre-proposal also is assigned to a primary and secondary reviewer on the panel of 10 out-of-state experts whose collective expertise spanned the RFP priorities, including aquaculture and aquaculture production systems; fisheries management; coastal resource management; seafood safety and technology; coastal zone management; climate effects on nature and society; hydrodynamic and storm surge modeling; marine ecology; and fisheries ecology and modeling. Review panelists were selected both for their academic credentials and experience in leadership positions.

During the most recent proposal cycle each pre-proposal received at least three reviews from subject-matter experts, in addition to the reviews by two panel members. Review scores were tallied and provided as summary tables to the review panel members, who met with FSG leadership in Gainesville for a two-day evaluation session in early April. Each pre-proposal was discussed by the panel and a recommendation was provided regarding whether the project was a 'high priority,' 'low priority' or 'not acceptable.' The process involved the primary reviewer providing an overview of the project goals, objectives and approach; a summary of the review comments and scores; and his/her conclusions about the merits of the pre-proposal. The secondary reviewer provided additional comments, and the FSG Extension Director provided comments on the outreach component of the proposal. Other panel members commented, discussion occurred, and the primary reviewer suggested a rating, followed by secondary and panel concurrence. After discussing all of the pre-proposals the review panel selected the top 25 pre-proposals. Several days after the review panel concluded, FSG invited the PI's who submitted the top 25 pre-proposals to submit full research proposals. All PI's may submit full proposals; however this is not encouraged unless their pre-proposal was ranked in the top 25.

The full proposals were invited in mid-April and received by FSG through an online submittal process before a specified deadline in the first week of June. Prior to receiving the full proposals, FSG identified a minimum of three external reviewers from outside of Florida to evaluate each full proposal and contacted them by phone or by email to confirm that they would conduct a review in a specified period of time. Reviewers included subject-matter experts affiliated with academic institutions and federal agencies, and were leaders in their respective fields of study as documented by significant peer-reviewed publications in the subject areas of the full proposals. Again, reviewers were required to read and attest to a conflict of interest form. Each full proposal received at least three reviews, including reviews of a primary and secondary panel member (same panel as for pre-proposals). Prior to the review panel meeting, primary reviewers were required to complete a review summary form, where based on the reviews obtained, they provided a narrative of the pros, cons and areas for improvement for between one and four proposals that they were assigned.

The review panel met with the Florida Sea Grant leadership team in early August in Gainesville, and a representative of the NSGO monitored the process. Review panel members were provided with a list of the proposals and discussion occurred in the same manner as for the pre-proposal. Proposals were ultimately ranked in order from highest to lowest mean review score. At the end of each 15-minute discussion period, the primary reviewer was asked to rate the proposal as 'excellent,' 'very good,' 'good,' 'fair' or 'poor' and the completed forms were provided to the FSG Executive Secretary for entry into the online system where the critiques and scores were made available to the PIs for download.

In the most recent review, this process resulted in eight projects being rated as excellent or very good to excellent, and after considering the total dollar amount of the proposals in the context of a projected flat overall program budget relative to 2008-09, it was determined that all eight of these projects would be recommended for funding to the NSGO. Those eight projects rated most highly by the panel also had the highest mean review scores. No attempt was made to adjust the results of this process, for example, to ensure a broad distribution of funds across different universities in Florida, because there was no objective way to do that. The review process is unbiased and fully transparent and the projects selected represent the best science and the highest relevancy to issues identified in FSG's strategic plan.

Number of Proposals Submitted and Institutions Represented

Over the three previous omnibus cycles (2006-2011), FSG received 262 pre-proposals and 80 full proposals, and funded 33 proposals. In addition, 25 program development projects were funded at 9 institutions during that time. The total number of full proposals funded per cycle declined over this period because the maximum amount of funds eligible (per year) was increased from $75,000 to $100,000. This increase was implemented to address concerns voiced by program specialists and PI's that the maximum funding amount for projects stipulated by FSG was not keeping pace with rising implementation and student tuition/stipend costs.

	2006-07		2008-09		2010-11	
	No.	Institutions	No.	Institutions	No.	Institutions
Pre-proposals	76	16	88	15	98	16
Full proposals	31	11	24	10	25	11
Funded	14	7	11	7	8	5
PD Grants	1	1	15	5	9	3

Summary of research proposals funded by core funds over three previous funding cycles. Final row provides summary of program development grants.

	2006-2007	2008-2009	2010-2011
New Projects	15	12	10
Continuing Projects	1	2	0
New Principal Investigators	16	20	22

New vs. continuing projects funded with Omnibus funds.

PI	Institution	Project Title	Duration	Federal/Match	Type
Paul, John	USF	Grouper forensics for seafood quality control	2010-11	$200,000/100,000	R
Wright, Anita C.	UF	Implementation of *vibrio* monitoring methods	2010-11	$198,108/99,164	R
Kane, Michael	UF	Cryopreservation of Florida sea oats germ plasm	2010-11	$140,651/73,818	R
Craig, Kevin	FSU	Environmental controls on the dynamics of nursery habitat quality for estuarine fishes	2010-11	$169,949/84,974	R
Allen, Mike	UF	Ecosystem-based fishery management: a potential interdisciplinary approach to evaluating grouper harvest	2010-11	$200,000/100,000	R
Scarpa, John Sturmer, Leslie	UF/HBOI/FAU	Eliminating barriers to commercial production of Sunray Venus clams in Florida	2010-11	$199,693/101,916	R
Chowdhury, Arindam	FIU	Development of test-based data on hurricane-induced building damage for improved risk prediction and mapping	2010-11	$200,000/100,092	R
Prevatt, David	UF	Design guidelines for retrofitting wood roof sheathing	2010-11	$200,000/100,000	R
Ankersen, Thomas	UF	Policy development for coastal access, coastal economic and ecosystem health and coastal hazard mitigation and adaptation	2010-11	$50,000/41,040	R
Swett, Robert	UF	Planning for sustainable communities and waterways	2010-11	$50,000/25,000	R
Jourdan, Dawn	UF	A parameterized climate change projection model for hurricane flooding and population dynamics	2010-11	$98,000/50,000	R
Ruppert, Thomas	UF	Implications of takings law on innovative planning for sea-level rise	2010-11	$97,879/50,390	R
Berry, Leonard	FAU	Development of an integrated approach to sea-level change and effects analysis	2010	$9,950/4,975	PD
Todd, Austin C.	FSU	Understanding circulation dynamics and transport of gag grouper larvae	2010	$2,000/0	PD
Ohs, Cortney L.	UF	Dose optimization of human HCG for induced spawning of pinfish	2010	$5,000/2,748	PD
Frederick, Peter	UF	Identifying magnitude and sources of change in oyster reefs in the Big Bend	2010	$8,000/4,000	PD
Sheng, Peter	UF	Integrated storm surge and inundation prediction to strengthen resiliency of coastal communities	2010-11	$60,000/30,000	PD
Pine, Bill	UF	Effects of oiling on oyster resources in the Big Bend of Florida	2010-11	$9,864/4,932	PD
Frazer, Tom	UF	Pre-spill assessment of seagrass along Florida's Gulf coast	2010	$9,997/1,826	PD
Triplett, Eric	UF	Oil contamination as a driver of Archaea abundance and diversity in the Gulf of Mexico	2010	$5,000/4,523	PD
Chanton, Jeff	FSU	Tracing the intrusion of the GoM-2010 oil spill on coastal food webs	2010-11	$10,000/0	PD

Summary of new 2010-2011 projects including lead investigator, institution, project title, project duration, amount, and type. R = core-funded research. PD= program development.

Regional Research and Extension Projects

PI Name	Institution	Project Title	Duration	Federal/Match
Karl Havens/James Cato	UF	Planning, prioritizing and implementing regional marine research and information needs	6/1/06-5/31/11	$6,333/13,005
Chowdhury, Arindam	FIU	Development load transfer mechanism to reduce failures in residential construction	2/1/08-1/31/10	$132,000/66,000
Jourdan, Dawn	UF	GoM regional natural hazard and climate change projection model	1/1/10-12/31/11	$98,000/50,000
Ruppert, Thomas	UF	Implications of takings law on innovative planning for sea-level rise	2/10/10-1/31/12	$97,879/50,390
Spranger, Michael	UF	Regional COSEE Central Gulf of Mexico	9/1/05-8/31/10	$174,182/0

Four regional Gulf of Mexico research projects, dealing with coastal hazards, were jointly funded by the Sea Grant programs of FL, LS, MS-AL and TX during 2006-2010.

In addition to projects being supported with core research funding , there are a number of ongoing regional projects in research, extension, outreach and education being led directly by the four Sea Grant programs in the Gulf of Mexico (FL, LS, MS-AL, TX) and the four Sea Grant programs in the South Atlantic (FL, GA, NC, SC). These projects resulting from a strengthening of regional program partnerships include:

- Development of the Gulf of Mexico Regional Research Plan (September 2009)
- Development of the South Atlantic Regional Research Plan (April 2010)
- Climate Outreach Community of Practice project in the Gulf (ongoing since 2009)
- Climate Outreach Community of Practice project in South Atlantic (ongoing since 2009)
- Gulf of Mexico Hazard Resiliency Extension project (2010-11)
- Gulf of Mexico Habitat Restoration project (2010-11)
- Gulf of Mexico oil spill informational Web site (active since May 2010, hosted by TX SG)
- South Atlantic oil spill informational Web site (active since June 2010, hosted by FSG)

Funding

Success in National Competitions

Florida Sea Grant has been highly successful in national competitions related to biotechnology, fisheries extension, aquaculture extension, aquaculture research and non-native species research and outreach. A substantial number of Florida graduate students have received fellowships in a variety of NOAA national competitions.

Competition	2006	2007	2008	2009	2010
National Strategic Investment Proposals Submitted	12	9	NA*	NA*	8
National Strategic Investment Proposals Funded	**2**	**2**	NA*	NA*	**TBD**
Knauss Fellowships Submitted	5	3	3	4	6
Knauss Fellowships Awarded	**1**	**3**	**1**	**3**	**2**
NMFS Population Dynamics Fellowships Submitted	0	0	1	0	1
NMFS Population Dynamics Fellowships Awarded	**0**	**0**	**1**	**0**	**1**
NMFS Marine Economics Fellowships Submitted	0	0	0	1	0
NMFS Marine Economics Fellowships Awarded	**0**	**0**	**0**	**1**	**0**
NOAA Coastal Management Fellowships Submitted	0	0	0	1	0
NOAA Coastal Management Fellowships Awarded	**0**	**0**	**0**	**0**	**0**

Success in National Sea Grant competitions. Note: There were no National Strategic Investment grants in 2008 or 2009.

Students Funded with Private Endowments

Fellowship or Award	2006	2007	2008	2009	2010
Aylesworth Foundation Scholarship	3	3	1	2	1
Old Salt Fishing Club Scholarship	1	1	1	0	0
Skoch Award	1	1	1	1	1
Guy Harvey Excellence Award	NA	NA	NA	NA	2
Total Students Supported with Private Funds	**5**	**5**	**3**	**3**	**4**
Students Supported on Omnibus Research Grants	25	18	18	24	24
Students Supported on National Fellowships	1	3	2	4	3
TOTAL	**36**	**31**	**26**	**34**	**35**

Students Supported by private endowments, NOAA Omnibus research grants, and national fellowships. Note: The Guy Harvey Award was established in 2010.

Distribution of Omnibus and Leveraged Funds

Core funds from the NSGO support regular research projects, PD projects, extension, communications and program management. The percentage of core funds in support of these program functions are provided below for 2005-2010. A breakout of how funds have been allocated by major focus area since adoption of the current strategic plan (thus those data are for 2009-10 only) is presented at the end of this section.

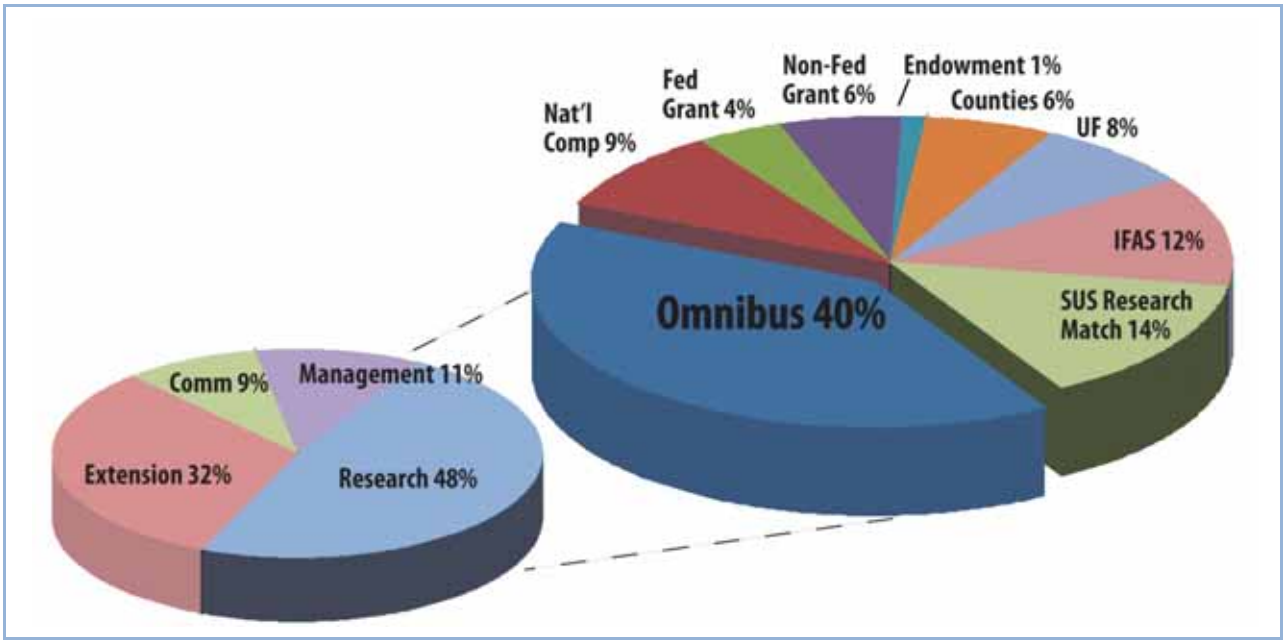
FSG Extension and Education programs are highly leveraged with support from UF/IFAS Extension, and state and county partners, in addition to funds provided by the National Sea Grant Office. UF, state and county funds are used to fund state and county faculty salaries. Office space for community-based faculty is also provided by counties, the University of Miami, the Rookery Bay NERR, NOAA AOML, the UF Tropical Aquaculture Center, and the UF Indian River Research and Education Center. Of the 21 community-based faculty, 12 are fully supported by funds other than provided by NOAA National Sea Grant. Nine are supported by a combination of NOAA Sea Grant, state, and county funds. It is conservatively estimated that there is a 5:1 ratio in non-NOAA Sea Grant funds to NOAA Sea Grant funds for FSG Extension and Educational programs.

	2005-06	2006-07	2007-08	2008-09	2009-10
Research	$1,016 (51%)	$1,002 (51%)	$1,025 (51%)	$926 (45%)	$913 (45%)
Extension	$620 (31%)	$620 (31%)	$620 (31%)	$660 (32%)	$660 (32%)
Communication	$165 (08%)	$165 (08%)	$165 (08%)	$198 (10%)	$203 (10%)
Management	$189 (09%)	$195 (10%)	$203 (10%)	$257 (13%)	$265 (13%)
Total	**$1,990 (100%)**	**$1,982 (100%)**	**$2,013 (100%)**	**$2,041 (100%)**	**$2,041 (100%)**

Distribution of OMNIBUS funds by program functional area in 2005 to 2010. Values are amounts in thousands of dollars and % of totals are in parentheses.

	2005-06	2006-07	2007-08	2008-09	2009-10
Research	$1,487 (30%)	$2,073 (38%)	$1,533 (33%)	$1,418 (31%)	$1,339 (26%)
Extension	$2,628 (53%)	$2,586 (48%)	$2,420 (51%)	$2,462 (53%)	$2,885 (56%)
Communication	$225 (05%)	$225 (04%)	$228 (05%)	$257 (06%)	$228 (04%)
Management	$450 (09%)	$405 (08%)	$425 (09%)	$462 (10%)	$531 (10%)
Fellowships	$165 (03%)	$87 (02%)	$125 (03%)	$38 (01%)	$160 (03%)
Total	**$4,955 (100%)**	**$5,376 (100%)**	**$4,731 (100%)**	**$4,637 (100%)**	**$5,143 (100%)**

Distribution of ALL funds by program functional area in 2005 to 2010. Values are amounts in thousands of dollars and % of totals are in parentheses.



Cumulative FSG Funding Sources, averaged from 2005-2010, with breakout of Omnibus fund expenditures from same period. Matching fund sources are from the recipients of research grants, and include both UF and other Florida universities and research institutes. UF=Florida; IFAS= UF Institute of Food and Agricultural Sciences.

Focus Areas 2009-10	Omnibus	All Funds
Healthy Ecosystems	$814 (40%)	$2,390 (46%)
Safe Seafood	$468 (23%)	$1,158 (23%)
Resilient Communities	$515 (25%)	$1,152 (22%)
Climate Adaptation	$244 (12%)	$443 (9%)
Total	**$2,041 (100%)**	**$5,143 (100%)**

Distribution of OMNIBUS funds and ALL funds by Focus Area in 2009-10 (the period corresponding to the current strategic plan and its four focus areas). Amounts given in thousands of dollars. Percent of totals in parentheses.

Note: The 2011 distribution of funds by focus area may change depending on the need for refocusing research, extension and education on issues related to the Deepwater Horizon oil spill and its impacts to the Gulf coast. Florida Sea Grant will work with the NSGO in upcoming months to develop a flexible addendum to our strategic plan to reflect those possible changes in distribution of funds, man hours, activities and outcomes.

There are substantial additional leveraged funds in the FSG program that are not displayed in the tables and figures shown previously. Through the mandatory online reporting process, FSG requests information from project investigators on the source and amount of their extramural funding. Researchers who had ongoing projects during 2008-09 and 2009-2010 reported that they were able to leverage FSG and match dollars by an additional $3.4 million and $4.8 million, respectively. This translates to an average of four times the original non-matched National Sea Grant investment, and underscores the importance and relevance of research sponsored by FSG.

STAKEHOLDER ENGAGEMENT

Leadership by Staff on Boards and Committees

The leadership team of Florida Sea Grant is highly engaged on boards and committees from the international to state level. At the regional level, the program is in a unique position of occurring in two NOAA regions – the Gulf of Mexico and South Atlantic. This presents challenges in regard to staff time, as well as opportunities for serving as a bridge between regions. The following are examples of recent and current leadership positions.

International and National

Planning Committee Member, National Conference on Beach Preservation Technology (Havens)
Associate Editor, *Hydrobiologia* (Havens)
Editorial Board Member, *Environmental Pollution* (Havens)
Scientific Advisory Board Member, *Korean Journal of Limnology* (Havens)
Reviewer for US-Israel Bi-National Science Foundation (Havens)
Reviewer for Austrian Academy of Sciences (Havens)
Founding Editor and Board Member, *Freshwater Systems* (Havens)
Member, Advisory Board, International Association of Aquaculture Economics and Management (Adams)
Technical Advisor, USA Delegation for Codex Alimentarius, South Africa (Otwell)
Executive Board and U.S. Representative, International Association of Fish Inspectors (Otwell)
Team Member, Project FISHPORT, World Health Organization/UN Food and Agriculture Organization (Otwell)
Executive Director, Seafood Science and Technology Society of the Americas (Otwell)
Member, External Advisory Board for Seafood PLUS Europe (Otwell)
Member, Indonesian Marine Education Team (Spranger)
Member, Sino-American Invasive Species Site Team (Spranger)
Member, Advisory Committee to National Plan for Algal Toxins and Harmful Algal Blooms (Adams)
Member, Seafood Education Committee, Association of Food and Drug Officials (Otwell)
Member, Technical Advisory Committee, National Fisheries Institute (Otwell)
Member, Technical Advisory Committee, National Shrimp Processors Association (Otwell)
Coordinator, Seafood HACCP Alliance for Training and Education (Otwell)
Member, National Academy of Science panel to study the balance of risks and benefits of seafood (Otwell)
Member, Advisory Committee for the National Sea Grant Ports and Harbors Specialist (Swett)
Member, Advisory Committee for Working Waterways and Waterfronts (Swett)
Member, National Marine Educators Association, International Committee (Spranger)
Member, National Marine Educators Association, Past-President Circle (Spranger)

Regional

Member, Scientific and Statistical Committee, Gulf of Mexico Fishery Management Council (Adams)
Member, Aquaculture Interagency Coordinating Committee, FDACS (Adams)
Member, Aquaculture Subcommittee, Florida Oceans and Coastal Council (Adams)
Member, Proposal Review Committee, Southern Regional Aquaculture Committee (Adams)
Member, Gulf of Mexico Land Grant/Sea Grant Regional Oil Spill Task Force (Adams, Spranger, Otwell, Zimmerman)
Member, Gulf of Mexico Community Resiliency Engagement Panel (Havens)
Member, Board of Directors, Northern Gulf Institute (Havens)
Member, Organizing Committee, Southeast Atlantic Regional Research Project (Havens)
Member, Organizing Committee, GOM Regional Research Project (Havens)
Member, Organizing Committee, GOM Extension, Education and Outreach Project (Havens)
Member, Gulf of Mexico Coastal Ocean Observing System, Board of Directors and Executive Committee (Spranger)
Member and Past Chair, Gulf of Mexico Coastal Ocean Observing System, Education and Outreach Council (Spranger)
Member, Southeast Coastal Ocean Observing Regional Association (Spranger
Co-PI, Gulf of Mexico, Centers for Ocean Sciences Education Excellence (Spranger)
Member, Gulf of Mexico Alliance, Coastal Community Resiliency Task Force (Spranger)
Member, NOAA Extension, Outreach and Engagement Work Group (Spranger)

State and Local

Member, Oil Spill Task Force, Florida Institute of Oceanography (Havens)
Co-Chair, UF Oil Spill Academic Task Force (Havens)
Member, Florida Oceans and Coastal Council (Havens)
Member, Florida Ocean Alliance (Havens)
Member, Board of Directors, Florida Institute of Oceanography (Havens)
Member, Marine Science Steering Committee for FL Board of Governors (Havens)
Technical Advisor, Apalachicola Oyster Dealers Association (Otwell)
Member, UF Oil Spill Academic Task Force (Otwell, Spranger)
Member, Florida Clean Boating Partnership Board (Spranger)
Member, Education Advisory Committee, The Florida Aquarium (Spranger)
Member, Florida Consortium of Ocean Observing Systems (Spranger)
Chair, Florida Outdoor Writers Scholarship Committee (Zimmerman)

Sea Grant

Secretary, Sea Grant Association (Havens)
Member, External Relations Committee, Sea Grant Association (Havens)
Member, National Review Panel, Knauss Marine Policy Fellowship (Havens)
Member, Safe and Sustainable Seafood National Focus Team (Otwell)
Member, Sustainable Coastal Communities National Focus Team (Spranger)
Coordinator and Co-Founder, National Sea Grant Extension Academy (Spranger)
Member and Regional Representative, Sea Grant Climate Change Extension Network (Spranger)
Member, Network Advisory Committee (Harvey)
Vice-Chair of Fiscal Officers Network will become Chair (Harvey)
Publications Coordinator, National Seafood HACCP Alliance for Training and Education (Zimmerman)

Partners and Stakeholders

Florida Sea Grant has a diverse array of partners and stakeholders at the international, national, state and local levels. Partnerships are formed strategically so that FSG and the partner collaboratively bring knowledge, skills and resources to bear on issues directly related to the goals and objectives of Sea Grant's Strategic Plan. Examples of partners and stakeholders include:

International and National

Bandung Institute of Technology, Indonesia
Bogor Agricultural University, Indonesia
Hasanuddin University, Indonesia
International Association of Fish Inspectors
National Dong Hwa University, South Korea
National Seafood HACCP Alliance
Sam Ratulangi University, Indonesia
Seafood Products Association
Tokyo University of Marine Science and Technology

Regional

Gulf of Mexico Coastal Ocean Observing System
Gulf of Mexico Ctr. for Ocean Sciences Education Excellence
Gulf of Mexico Governor's Alliance
Gulf of Mexico Sea Grant Programs (LS, MS-AL, TX)
NOAA AOML
NOAA Gulf of Mexico Regional Team
South Atlantic Governor's Alliance
South Atlantic Sea Grant Programs (GA, NC, SC)
Southeast Coastal Ocean Observing System
Southern Shrimp Alliance

State and Local

Acme Sponge and Chamois, Inc.
Angler Conservation Education, Inc.
Apalachicola Bay Oyster Dealer's Association
Aquatic Release Conservation Association
Aylesworth Foundation for the Advancement of Marine Science
Aylesworth's Fish and Bait, Inc.
Bay Area Resource Council
Boards of County Commissioners, Coastal Counties Marine Advisory Councils
Cedar Key Aquaculture Association
Citizens for Florida's Waterways
Darden Restaurants
Dawson's Seafood
Duval Audubon Society
Florida Clean Boating Partnership
Florida Guides Association
Florida Keys Commercial Fishermen's Association
Florida Local Environmental Resource Agencies
Florida Marine Contractors Association
Florida Outdoor Writers Association
Florida Shore and Beach Preservation Association
Florida COOS Consortium

Florida Ocean Alliance
Florida Oceans and Coastal Council
Florida Fish and Wildlife Research Institute
Florida Department Agriculture and Consumer Services
Florida Department of Community Affairs
Florida Department of Environmental Protection
Florida Cooperative Extension Service
Florida Fish and Wildlife Conservation Commission
Florida Marine Science Educators Association
Franklin County Oyster and Seafood Task Force
Guy Harvey Ocean Foundation
Florida Master Naturalist Program
Marine Industries Association of Florida
Marine Industries Association of Northeast Florida
Marine Industries Association of South Florida
National Fisheries Institute
Old Salt Fishing Foundation
Rookery Bay National Estuarine Research Reserve
Southern Association of Marine Educators
Southwest Florida Marine Industries Association
U.S. Geological Survey
U.S. Army Corps of Engineers
West Coast Inland Navigation District
Water Management Districts of Florida

Process of Stakeholder Engagement

The success of Florida Sea Grant as the state's premier research-extension-education program in coastal and ocean sciences is grounded in the high degree of engagement we have with coastal constituents. This engagement begins with the development of our four-year strategic plan and is woven through all of our program functional areas.

The priorities in the 2009-2013 strategic plan were developed by a two-part engagement process – including a survey of more than a thousand coastal business owners, elected officials and residents to rate the importance of coastal and ocean issues – and then a two-day workshop where more than 80 participants, including representatives from a wide range of coastal sectors, developed the goals, strategies and objectives of the plan. All 15 members of the Florida Sea Grant Advisory Council participated in this process, and they worked with the leadership team to develop the final draft of the plan and its accompanying implementation plan.

Florida Sea Grant's research program is driven by both the priorities of the strategic plan and by a requirement that all researchers engage end users of information in the development of relevant proposals. This requirement, added in the 2009 call for proposals, resulted in all of our new research proposals being partnerships between university faculty and either the private sector (e.g., the building sector in research related to hurricane-safe roofing materials; the clam farming industry in research to develop and market a new product; the seafood industry in research to develop a rapid test kit for detecting fraudulent labeled grouper) or a resource management agency (e.g., the Florida Fish and Wildlife Conservation Commission in research to develop a fisheries management model for grouper that explicitly considers economic impacts of fishing regulations). Most research projects also engage a marine extension agent, who assisted in developing the required outreach component of the project plan.

The extension and education programs, by nature, are driven by the needs of coastal constituents. Every Florida Sea Grant marine extension agent has an Advisory Committee of 10 to 20 members that is representative of the coastal region they serve. Members may include local business leaders, mayors, county commissioners, NOAA and NERRs staff, other federal and state agencies representatives, educators, and non-profit professionals. These committees provide guidance to the agents on their ongoing and future programs in regard to alignment with community issues.

A majority of the agents are headquartered in their respective county extension offices. They have reporting responsibilities to their host county, to Florida Sea Grant and to UF/IFAS Extension. Their activities are integrated into both the strategic plans of Florida Sea Grant and UF/IFAS Extension. Agents prepare an annual Plan of Work that is based on local needs, yet is consistent with FSG strategic

priorities. At the end of the year, the agents prepare an annual Report of Accomplishments that is shared with UF/IFAS Extension and FSG administrators, and with their local advisory committees. Program activities, outputs and impacts also are reported in a new online system recently developed by FSG.

Coordination of local activities and development of a balanced, programmed team approach is accomplished through an annual planning retreat of all the Sea Grant extension agents and specialists with the leadership team, to plan collaborative activities for the upcoming year and ensure that the overall program is aligned with the strategic plan and the national priorities. A quarterly internal newsletter also is a venue for exchange of information between the extension staff. Work Action Teams in such areas as sustainable fisheries, artificial reefs, seafood safety, aquaculture, education, and boating and waterway management are a primary means for development and implementation of statewide extension projects.

The complexity of issues facing Florida coastal communities requires collaborative solutions. Therefore FSG works closely with industry, local communities, and state/federal agency partners. As noted above, this occurs with research projects, both in regard to the review process and in partnerships to conduct the work, and it also is a critical element of our extension program. FSG presently has three extension agents located at NOAA facilities, working in collaboration with those partners – one agent at the NOAA AOML in Miami, who leads an education program on Everglades restoration, and two agents at the Rookery Bay NERR who work with reserve staff and the regional population on a variety of issues from fisheries to artificial reefs and boating safety. One of these partnerships at Rookery Bay is highlighted in the following section.

COLLABORATIVE NETWORK/NOAA ACTIVITIES

Collaboration is critical to Florida Sea Grant's ability to meet its objectives in an effective and efficient manner. The following provide examples of collaboration with local, state and federal partners.

Gulf of Mexico Research Plan

The four Sea Grant programs in the Gulf of Mexico (FL, LS, MS-AL, TX) region developed a regional research plan that now has been used by 14 different organizations in their strategic plans and/or calls for proposals. The plan was developed in a comprehensive process that included input from people at more than 260 universities, government agencies, businesses, NGOs and other organizations. Over 1,500 people completed an issues survey to identify priority research needs, and more than 300 people participated in give regional planning workshops to complete the plan.

Gulf of Mexico Climate Outreach Community of Practice

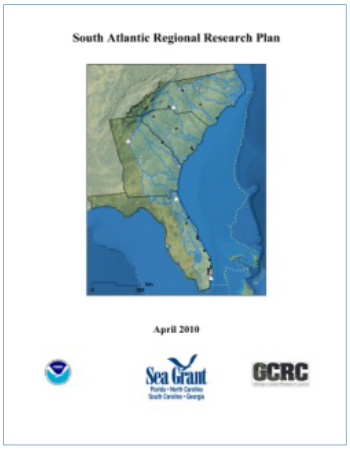
The Gulf of Mexico Sea Grant programs, the NOAA Gulf of Mexico Regional Collaboration Team, the NOAA Coastal Services Center and other federal, state and local Gulf partners have formed a 'community of practice' to bring awareness and resources for action to coastal communities affected by the impacts of climate change, in particular sea-level rise. This project began in early 2010 with a face-to-face meeting in St. Petersburg, Fla., led by Florida Sea Grant, and is continuing with an interactive group on the Storm Smart Coasts Web site. It is now also serving as a vital group for exchange of information regarding the Gulf oil spill.

Gulf of Mexico Sea Grant Regional Research Initiative

The four Gulf of Mexico Sea Grant programs also have partnered in funding regional research projects to address coastal resiliency and hazards. In the first research partnership (2007), each program contributed $100,000 for two years of research funding. Based on the success of that process, a second partnership occurred in 2009, where each program contributed $150,000, and this was supported with additional funds from the U.S. EPA Gulf of Mexico Program and the NOAA Northern Gulf Institute. In sum, over $2 million has been used to collaboratively support critical science in the Gulf region.

South Atlantic Regional Research Plan

The four Sea Grant programs of the South Atlantic region conducted a process similar in scope and methodology to that used in the Gulf of Mexico, in order to develop a regional research plan that addresses critical ocean and coastal issues. The process included a regional survey and face-to-face workshops, and the plan now is being used by the newly formed South Atlantic Governor's Alliance as a source of information for its own regional research prioritization.



South Atlantic Sea Grant Oil Spill Research Summits

The South Atlantic Sea Grant programs are holding research summits where experts are discussing critical issues related to potential impacts of oil on the South Atlantic coast, and the programs are developing synthesis documents for the general public. The first summit focused on hydrodynamic processes and the second focused on oil and oil-dispersant transformation processes. The third and fourth summits will focus on ecological and human health impacts. The summits will provide a list of research questions for developing an addendum to the South Atlantic Regional Research Plan.

NOAA-NERRS Team OCEAN Program

Florida Sea Grant and the Rookery Bay National Estuarine Research Reserve have partnered to launch a Team OCEAN program that promotes marine resource conservation while enriching experiences of boaters, anglers and visitors in recreational saltwater activities. The program has been highly successful in the Florida Keys. The Team OCEAN Coordinator works jointly for FSG and Rookery Bay, and trains citizen volunteers who in turn educate the public about safe boating, protection of habitat, and catch-and-release fishing.

Clean Boating Partnership

Florida Sea Grant partners with the Florida Department of Environmental Protection in helping marinas and boatyards become certified in the Clean Marina Program. This is a voluntary designation program with a proactive approach to environmental stewardship. Participants receive assistance in implementing Best Management Practices through on-site and distance technical assistance, mentoring by other Clean Marinas and continuing education. To become designated as a Clean Marina, facilities must implement a set of environmental measures designed to protect Florida's waterways. These measures address issues such as sensitive habitat, waste management, stormwater control, spill prevention and emergency preparedness.

National Seafood HACCP Alliance for Training and Education

HACCP, or Hazard Analysis and Critical Control Point, remains the primary program for assuring the safety of seafood processed for sale in the U.S. The HACCP program has been mandated by federal and state authorities for over 15 years, and includes requirements for training. Sea Grant Extension programs provide this training through the National Seafood HACCP Alliance for Training and Education to over 90% of the seafood processing firms in the U.S. and every major seafood producing nation in the world. Steve Otwell, Florida Sea Grant seafood safety specialist, chairs the seafood HACCP Alliance, and Florida Sea Grant serves as the publisher and distributor of its four manuals, as well as the U.S. FDA Fish and Fisheries Products Hazards and Controls Guide. The Alliance is now actively updating all training materials in anticipation of additional mandates expected in 2010. Likewise, it has been approached by lead authorities for seafood safety in China to collaborate on a similar training program mandated for all Chinese processors exporting seafood to the USA.

Sustainable Fisheries

FSG has a long-standing partnership with NOAA Fisheries and the Florida Fish and Wildlife Conservation Commission in a recreational fisheries outreach program. The future of Florida's high-quality sport fishing depends upon recreational fishermen choosing to practice catch-and-release to prevent overfishing and ensure fish populations remain sustainable for future generations. FSG worked with partners to develop local educational programs and a Web site that includes fact sheets, videos, fishing regulations and other materials that demonstrate sustainable fishing practices. In 2009, the FSG Sustainable Fisheries Work Action Team received the Jim App (Extension State Team Award) for its efforts from the UF/IFAS Extension Administration.

Building International Extension Capacity

Mike Spranger has worked with the NOAA Climate Programs Office and Office of International Programs to build extension capacity in Indonesia. He coordinated a training for Extension Adminstrators for the Indonesian Sea Partnership Program in 2006, and also led a UF team in 2008 that participated in the 4th annual NOAA-MMAF Capacity Building Workshop. Betty Staugler, Charlotte County Marine Agent was also a member of the team. These workshops brought U.S. and Indonesian government officials and researchers together to share applications of science to local decision making. The UF team also met with representatives of three Indonesian universities and established formal cooperative agreements to facilitate academic development and collaboration among the institutions.

Leadership on Safe and Sustainable Seafood Supply Focus Team

The Safe and Sustainable Seafood Supply focus team is one of four national teams in the Sea Grant network. The teams, aligned with areas where Sea Grant has historically made significant contributions, are designed to respond to emerging issues of major importance to NOAA. Florida Sea Grant played a key role advancing the seafood focus team's planning and outreach efforts by organizing a summit in 2009 titled "Addressing Our Domestic Fisheries and Seafood Industry." The meeting, attended by more than 75 individuals from Sea Grant and NOAA programs across the nation, provided a current overview of U.S. fisheries and seafood processing industries, from production through processing and retail commerce. Steve Murawski, chief science advisor for NOAA Fisheries, served as keynote speaker. The event concluded with recommendations for the team.

Spatial Analysis of Recreational Boating Helps North Atlantic Right Whale Recovery Efforts

More than a million boaters ply Florida's coastal waters every year. Knowing where boaters go and what they do once they are on the water can help coastal decision makers better manage the resources that attract boaters to Florida in the first place. In support of state and federal coastal resource management efforts, FSG's Boating and Waterways Planning Program has been invited to partner with the NOAA Fisheries Service Right Whale Recovery Program to develop a recreational boating GIS for northeast Florida coastal areas. These areas represent important winter calving locations for the endangered North Atlantic right whale. The development of this marine spatial planning application builds upon a series of prior boating studies implemented by FSG in other high-use Florida boating regions through partnerships established with the Florida Fish and Wildlife Conservation Commission and the Florida's Coastal Management Program. FSG's recreational boating GIS was featured in a recent edition of NOAA Coastal Services Center's *Coastal Services* magazine.

PROGRAM CHANGES RESULTING FROM PREVIOUS REVIEW

The 2005 PAT review of Florida Sea Grant provided four recommendations. Two have been addressed, and two are not applicable because they referred to a marine biotechnology program that no longer exists.

Recommendation 1: Establish an overall advisory board to provide perspective that a board of senior agency, industry and academic advisors could provide in discussing the strategic directions and long-range issues facing the program.

Response: An advisory council was formed in 2009 and members actively participated in development of the Florida Sea Grant strategic plan and implementation plan. The council members represent several NOAA units, the major state fisheries management agency and leaders from the private sector. They are actively engaged with the program and most members will participate in the site review so that they can interact with the SRT. Their term is four years, encompassing the period of the strategic plan.

Recommendation 2: Within the area of marine biotechnology as well as the funded projects, focus on the area of marine bioproducts.

Response: There no longer is a biotechnology program at Florida Sea Grant because it was not identified as a critical area for the program during the process that created the current strategic plan. It also is not a focus area of the current National Sea Grant strategic plan, with which the FSG plan is aligned.

Recommendation 3: Develop a business plan that maximizes the use of marine biotechnology while ensuring that intellectual property yields an appropriate return for the program.

Response: Again, Florida Sea Grant no longer has a marine biotechnology program so this recommendation is not relevant.

Recommendation 4: Develop a technology transfer plan to export techniques and results from the highly successful waterways management program to all counties in the state.

Response: Technology transfer is occurring via statewide 'Stem to Stern' conferences and regional symposia led by Florida Sea Grant, and through a boating and waterway planning work action group that includes statewide county planners and Sea Grant agents. The Regional Waterway Management System now includes all counties in the West Coast Inland Navigation District. A technical manual that describes all facets of the system's implementation protocol was developed and is being used by program partners in that region.

Following the PAT review, the NSGO provided one additional recommendation.

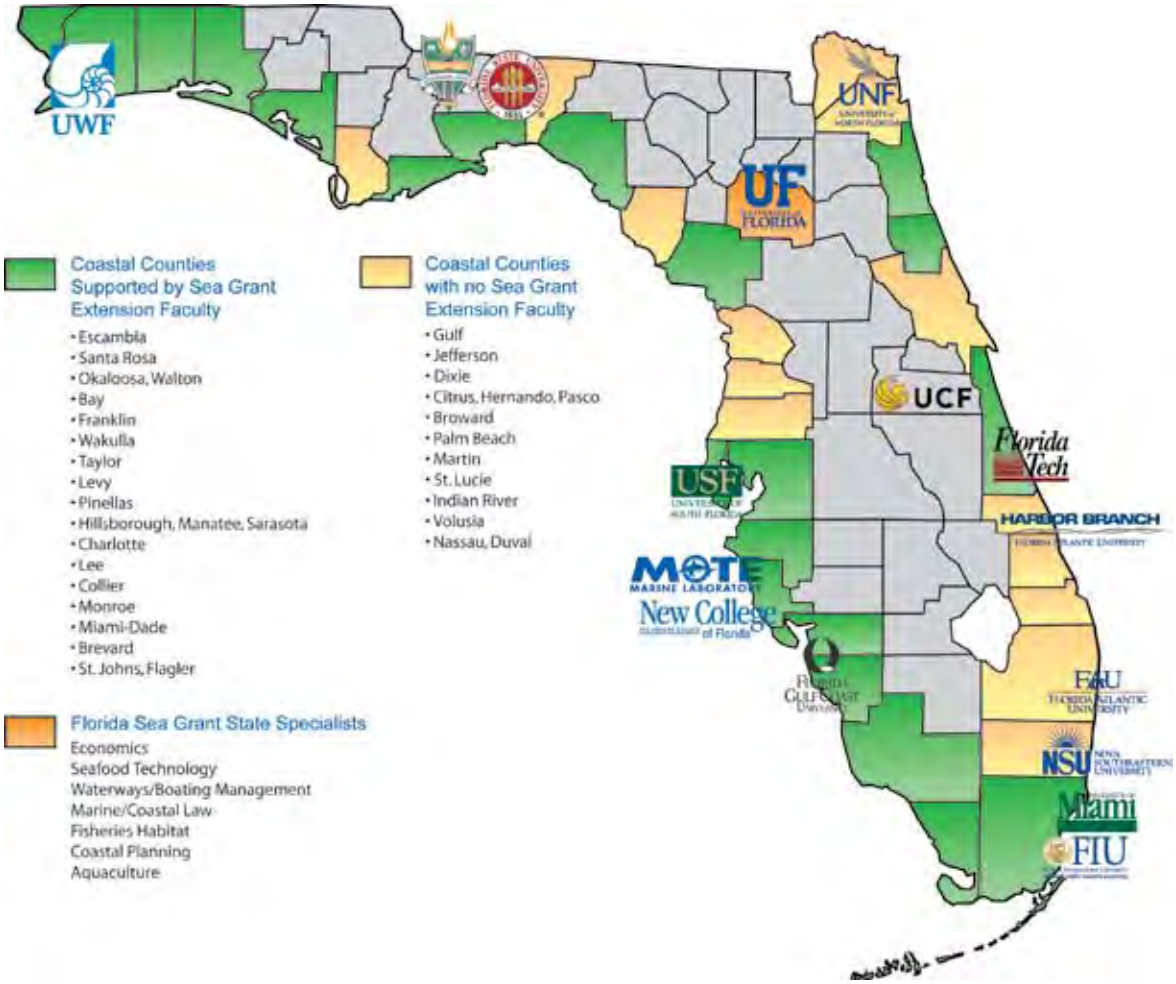
Recommendation 5: FSG should play a stronger role in smart growth because of projected increases in the coastal population. FSG might also work to expand its outreach to Spanish-speaking communities.

Response: FSG legal specialists have been actively working with coastal counties in revising their comprehensive plans to incorporate smart growth principles. We hired a full-time Coastal Community Planning Coordinator to address this issue, as well as to help coastal communities prepare for and adapt to sea-level rise. This new staff person is fluent in Spanish. Furthermore, we have been working with the Latino Environmental Education network to provide information to the Latino community of south Florida on a variety of issues through printed media, town hall meetings and television shows.

Statewide Distribution of Research, Extension and Education Programs

Florida Sea Grant supports an integrated program of research, education and public outreach through a statewide network of 11 public universities, 3 private universities, 2 research laboratories, and the Florida Cooperative Extension Service. The University of Florida in Gainesville serves as the host campus, but all of the institutions shown here are a formal part of the program. UF is also home for Sea Grant's statewide specialists, who interface with program management and a network of 21 marine extension professionals in coastal counties.

Florida Sea Grant is also part of the National Oceanic and Atmospheric Administration, and one of 32 Sea Grant programs nationally.



Sea Grant
Florida

Science Serving Florida's Coast

The Florida Sea Grant College Program is committed to enhancing the practical use and conservation of coastal and marine resources to create a sustainable economy and environment.

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This publication was supported by the National Sea Grant College Program of the United States Department of Commerce's National Oceanic and Atmospheric Administration under NOAA Grant # NA06-OAR-4170014. The views expressed herein do not necessarily reflect the views of any of these organizations.

August 2010 TP 173

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