Delaware Sea Grant Program
2012 NSGO Review

Dorn Carlson

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DE SG Management

- Management staff (Name, position, FTE)
  - NANCY TARGETT, Director (0.3)
  - JIM FALK, Associate Director and Director of MAS (1.0)
  - JENNIFER MERRILL, Research Coordinator (0.2)
  - RON OHREL, Director of Marine Public Education (0.5)
  - LISA RIDENOUR, Program Coordinator/FO (0.6)

- Delaware is a “medium” sized program

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DE SG 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	0.2	2.1
Comm.	5	0.2	2.0
Ext.	6	0.7	3.3
Education	0	0.0	0.0
Research	54	15.4	1.4

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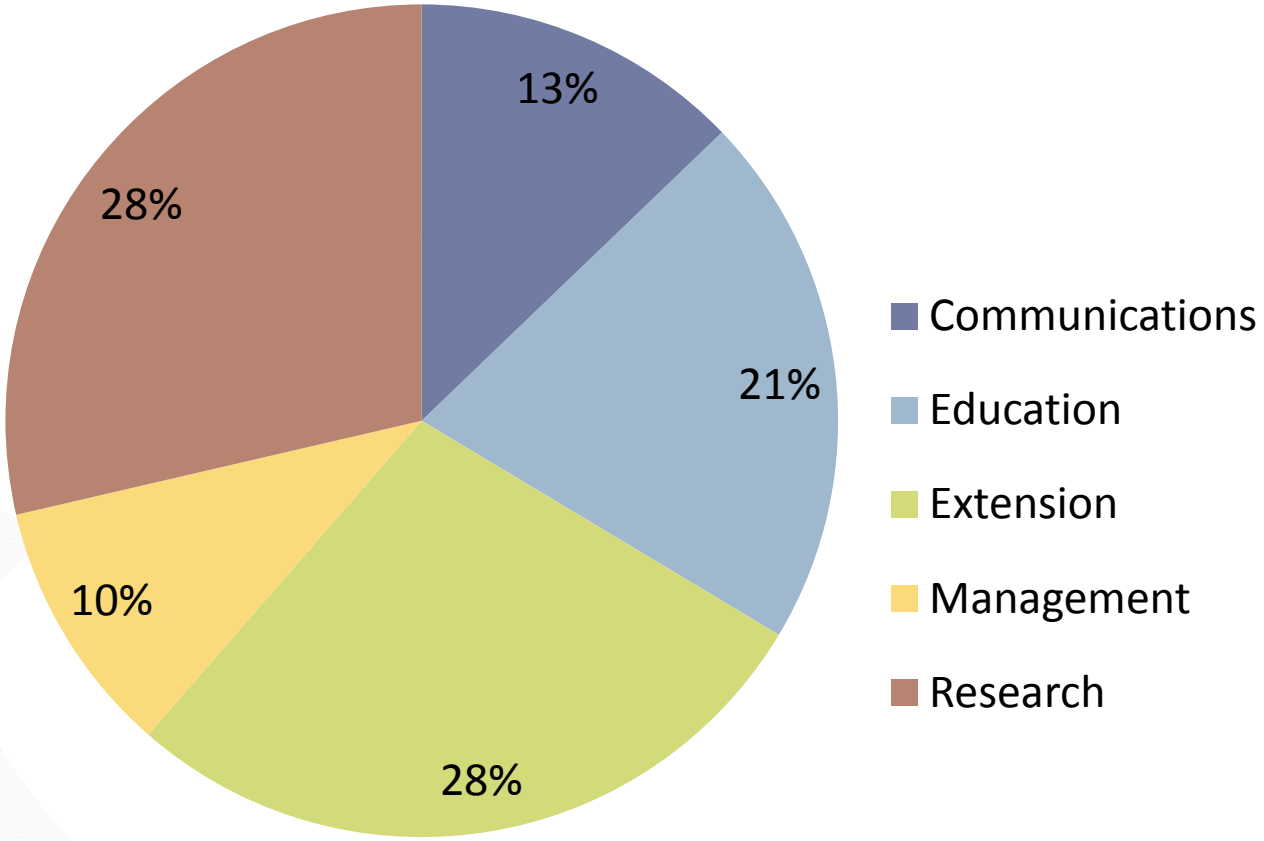
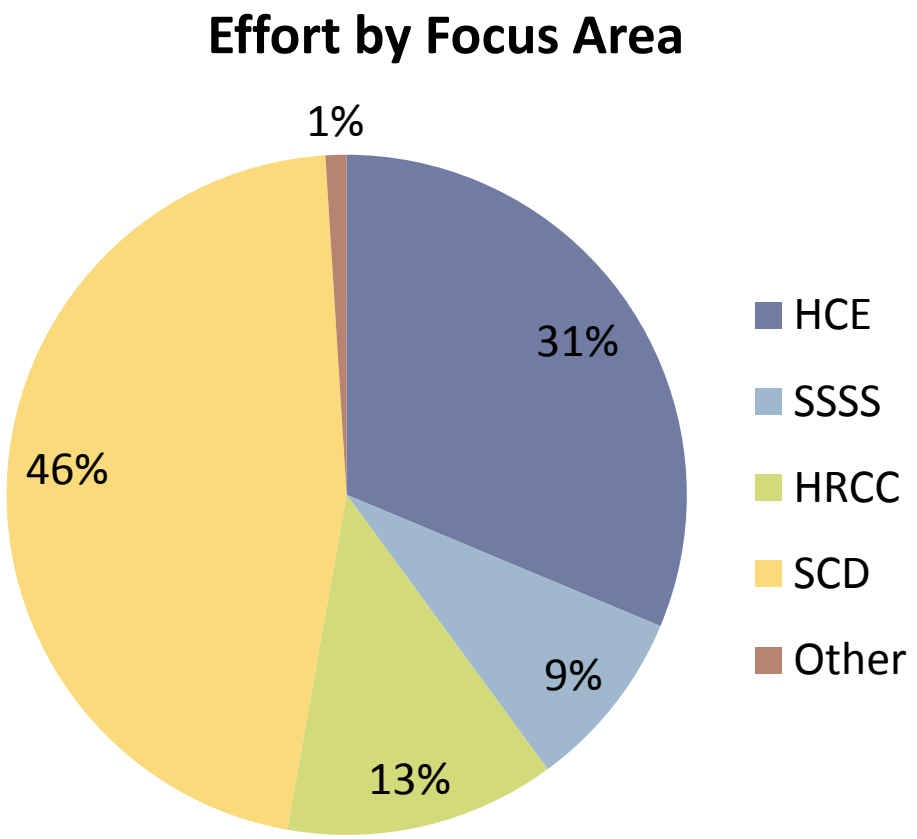
DE SG 2010 Core Budget (Fed + Match) towards each Functional Area



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



Significant DE SG Changes
(since Jan. 2011)

- Chuck Epifanio, research coordinator
+ Jen Merrill, research coordinator
+ Chris Petrone, education specialist
+ Ed Lewandowski, coastal communities specialist
- Bill Miller, Sea Grant Advisory Council Chair
+ Jerry Esposito, SGAC Chair

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DE SG Program RFP Process

- Participated in Regional RFP (MD, DE, VA)
  - Offshore energy, Land Use & WQ, Socioeconomic Processes & Impacts
  - Joint selection, then each Program funds its own PIs

- DELAWARE RFP concurrent

  Encourages "cohesive, multidisciplinary combinations of natural science, social science and policy." Priorities in all focus areas, e.g.,
  - Innovative training and educational approaches to propagate best practices related to seafood safety and consumption
  - Ecosystem processes including relationships between natural and human induced coastal stressors, such as sea-level rise, eutrophication,
  - New technologies to help advance the development of regional coastal observation systems

  - Preproposals February; Full proposals April; Selection August

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DE SG RFP Process for 2012-2013 Projects – Research Metrics

Core Proposals	# of Proposals	# of institutions	# of home institutions
Pre-proposals submitted	26 + 5	**1***	all
Full proposals submitted	21 + 3	1	all
Proposals Funded	10 + 1	1	all

* Plus institutions that participated in regional proposals.

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DE SG Contribution to National Performance Measures and Metrics

Focus Area	Metric/Performance Measure	Actual
	Volunteer Hours	11,005
	HACCP Certifications	37
SSSS	Number of stakeholders who modify their practices using knowledge gained in fisheries sustainability, seafood safety, and the health benefits of seafood.	265
HCE	Number of coastal communities who have restored degraded ecosystems as a result of Sea Grant activities.	1
HCE	Number of tools, technologies, and information services that are used by NOAA partners/customers to improve ecosystem-based management	2

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DE SG Impacts

Biofuel crop developed for low-lying, coastal farmland

- Relevance - Sea level rise is costing coastal farmers through crop and land loss due to flooding and increasing salinity of farmland.
- Response - Research into the cultivation of seashore mallow has been funded to provide farmers with a marketable alternative to current crops. Mallow can provide biofuels and hay, and may help protect coastal marshes.
- Results - Native Atlantic coast strains of seashore mallow have been isolated, identified and cultivated under a wide variety of environmental conditions. Seashore mallow appears to be not only a harvestable crop as a source of biofuel and animal feed, but also acts as a coastal shoreline stabilizer.

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DE SG Impacts

Volunteer Citizen monitors keep beaches safe and popular

- Relevance - Knowing that Delaware's coastal waters are safe reassures coastal visitors, who bring over $800 million to the state economy each year.
- Response - DE Sea Grant trains volunteer “citizen monitors” to collect and analyze water samples from recreational beaches for bacteria and other indicators and report results in support of state testing program.
- Results - Delaware beaches in 2010 were among the highest rated by the Natural Resources Defense Council (NRDC) in its annual rating of beach water quality. DNREC Program Manager credits the critical role of the volunteers and SG trainers in statewide environmental stewardship and watershed protection efforts.

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DE SG Impacts

Better technique for analyzing coastal waters

- Relevance - Monitoring of coastal waters, critical to preventing outbreaks of human illness and disease, rely on culture-based analysis that cannot identify or distinguish between different sources of contamination
- Response - Researchers developed and applied PCR analysis for more rapid, selective, and accurate identification of contaminants, and investigated sources, magnitude, and longevity of harmful contamination.
- Results –collaborating with DNREC, new techniques were found to be more sensitive, and more specific results than traditional culture methods. Results will be more tightly integrated into future work.

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DE SG Impacts

Public Comment for the Dietary Guideline Advisory Committee (DGAC)

- Relevance - While health benefits greatly outweigh the risks for the general population, there is concern that contaminants in some species may pose risks for certain populations. USDA and HHA created Dietary Guidelines Advisory Committee to help inform population.
- Response - Delaware Sea Grant organized a workshop connecting NE Sea Grant and Land Grant Extension professionals with National Fisheries Institute and DGAC.
- Results - The 2010 Dietary Guidelines for Americans now includes aquacultured species such as catfish, salmon, trout, clams, mussels, oysters and shrimp.

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2010 DE SG Research Accomplishments

Urban growth and climate change impacts on sea breeze

- Identified and analyzed sea/bay breeze occurrence for 10 summers from 2000 to 2009 using observations from DEOS and the National Data Buoy Center.
- Modeled the low-level winds for one year using the Weather Research and Forecasting Model (WRF) to investigate small-scale variations in the local wind fields and sensitivity to surface albedo and sea surface temperature.
- Publications/presentations
  - C. Hughes and D. Veron, 2010: "Prediction of the Delaware Bay Sea Breeze".
  - Muscarella, P., et al., 2011: "Surface Currents and Winds at the Delaware Bay Mouth, Continental Shelf Research"
  - Hughes, C., and D. E. Veron, 2011: "Characterization of the low-level winds in and around the Delaware Bay using observations and regional scale modeling", Monthly Weather Review. (under review)
  - Hughes, C., and D. E. Veron, 2011: "Objective detection of the Delaware Bay/Sea Breeze using 10 years of observations", Journal of the Atmospheric Sciences. (under review)
  - Presented at the American Meteorological Society meeting in Annapolis, MD in September 2010.

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Sources (unless otherwise noted)

- Planning, Implementation, and Evaluation Resources (PIER) https://pier.seagrant.noaa.gov
- Personal Communication with Program
- SRT briefing book
- Omnibus