

Washington Sea Grant Program 2011 NSGO Review

Program Officer - Heather A. Triezenberg



Program Management

Management staff:

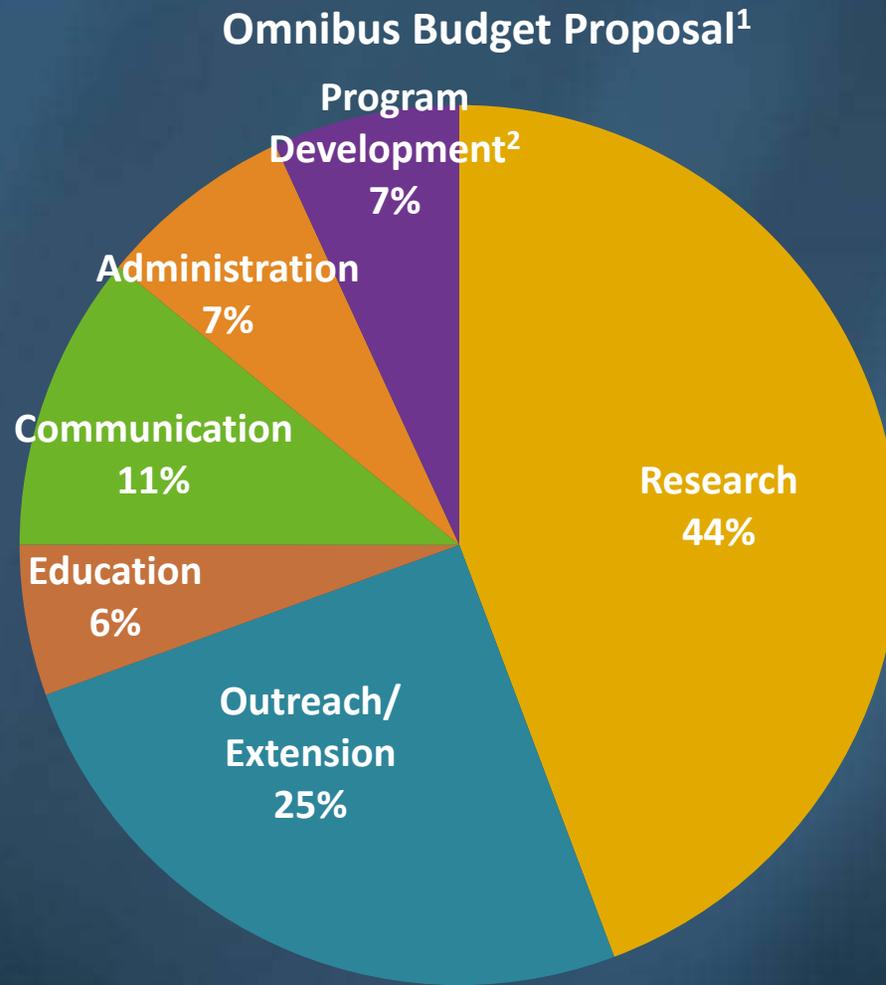
- Director, Penelope Dalton
- Associate Director, Raechel Waters
- Extension Leader, Pete Granger
- Communications Manager, Dan Williams
- Administrator, Karen Mooseker
- Senior Program Coordinator, Michelle Wainstein

Functional Area	# of individuals	# of FTEs supported by SG	# of FTEs supported by match/leverage
Administration	11	0.94	5.04
Communication	15	2.61	1.70
Extension	18	6.11	7.75
Education	34	4.90	1.80
Research	51	13.92	2.76

Large program



Program Budget towards each Functional Area

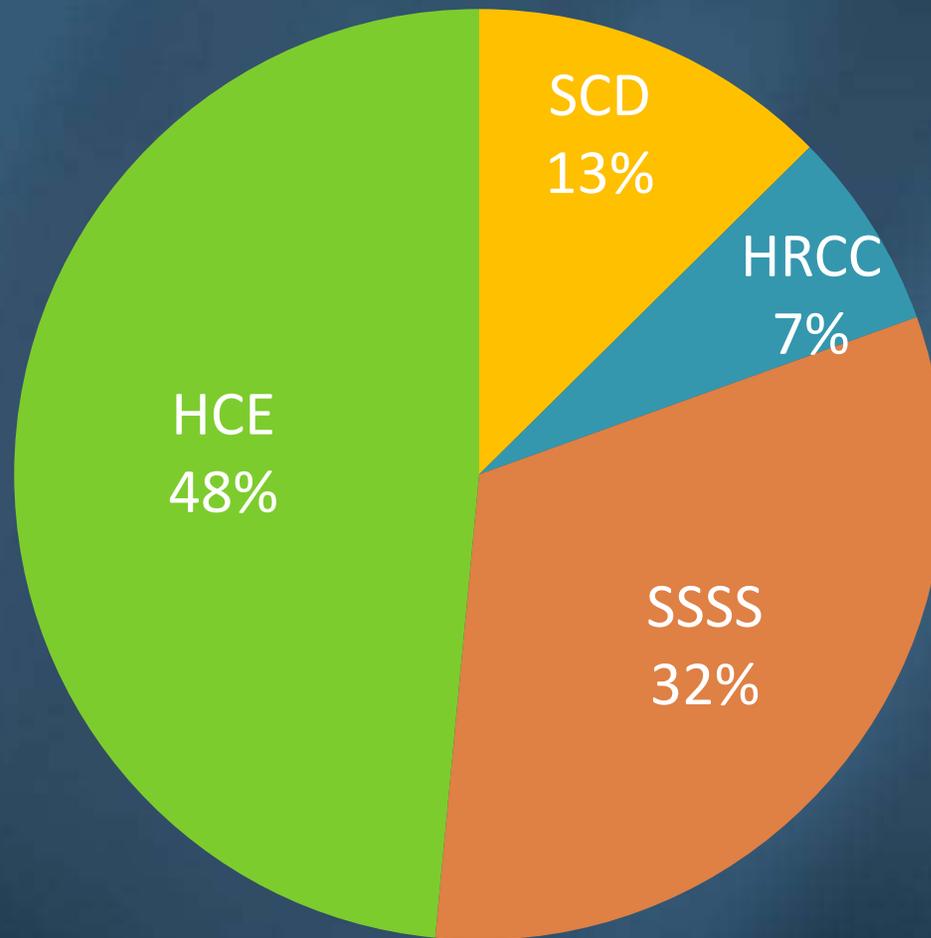


¹Core, merit, and bonus Sea Grant funds and match.

²These funds are typically invested in competitive projects.



Program Budget towards each Focus Area



Significant Program Changes

(since Jan. 2010)

- UW leadership response to 2009 TAT includes increased university cost-share support (\$315,832) and partial waiver of WSG indirect costs (from 56% to 26%)
- WASG transition to UW College of the Environment on July 1, 2010
- NOAA Coastal Services Center partnership on coastal resiliency extension specialist and state fellow
- Karen Mooseker becomes new WASG Administrator



Program Requested Changes to 2010-2013 Program Plan

- For HRCC focus area, addition of performance measure, two short to mid-term outcomes and revision and increases in related metrics
- For aquaculture and aquatic invasive species, stronger metrics for tools, technologies and information services and constituents reached
- Continuity of major five-year study of environmental impacts of \$40M geoduck aquaculture industry



State Program Performance Measures

Focus area	Performance measure	Target
HCE	Number of coastal communities who have restored degraded marine or terrestrial ecosystems as a result of Washington Sea Grant facilitation, technical assistance, research or outreach.	7
SCD	Number of coastal communities who adopt/implement sustainable - economic and environmental - development practices or policies (e.g., low impact development, resource management, marine industry optimization, responsible ocean energy development) as a result of Washington Sea Grant technical assistance, facilitation, tools, data, technologies, or education of community members.	16
SSSS	Economic (market or non-market) and societal benefits (jobs created or retained) derived from fisheries or aquaculture harvest, production or management models or techniques developed, facilitated or supported by Washington Sea Grant that lead to increased sustainability or productivity of fisheries or aquaculture operations.	171 jobs \$5.2 million
HRCC	Number of coastal communities and citizens provided with information or trained in local climate change adaptation, hazard resiliency or mitigation tools, techniques or best practices.	45 communities 450 citizens



Contribution to National Performance Measures and Metrics

- Leveraged funds \$823,791
- 10,153 volunteer hours
- 2 Knauss Fellows; 3 NMFS/SG Fellows
- 9,254 K-12 students reached through educators
- 215 sponsored/organized meetings, workshops, and conferences
- Estimated \$1,010,000 in economic benefits derived from SG activities
- 168 jobs retained



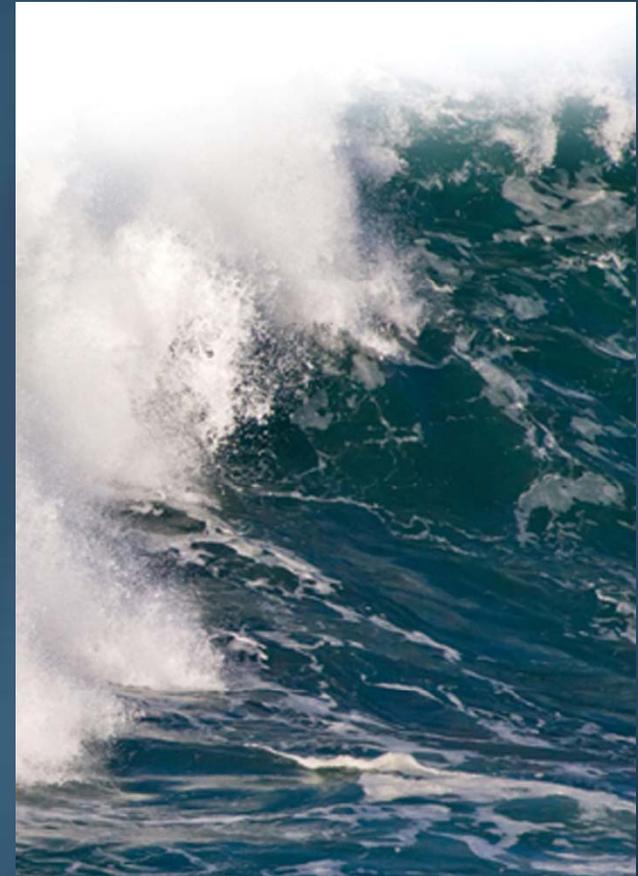
Program Impacts: Hazard resilient coastal communities

- Planning for climate change
 - Adaptation-focused course for shoreline and coastal professionals
 - Partnership among WSG, Padilla Bay NERR CTP, UW Climate Impacts Group, and King County Exec. Office
 - 93% (79/85) of respondents reported increased understanding of adaptation principles and practices
 - Course being adapted for CSC and Sea Grant trainings nation-wide

State Focus Area: Changing Oceans and Coastal Communities

State Goals:

- Improve capacity to manage ocean and coastal ecosystems and resources for societal benefit under changing climatic and demographic conditions.
- Assist coastal communities and marine-dependent businesses in planning and making decisions that provide local and regional economic benefits, increase resilience and foster stewardship of social, economic and natural resources.
- Improve understanding of coastal hazards and environmental change and develop tools and approaches for observation, prediction, planning and adaptation.



Program Impacts: Sustainable community development

- Seattle waterfront seawall habitat integration
 - Design, build, deploy and monitor seawall panels to test incorporation of different habitat-friendly designs into new \$241 million Seattle seawall
 - Evaluate effectiveness in restoring nearshore habitat function
 - Angled designs and surface cobbles encourage growth of ecologically important species
 - Designs can be applied to other urban waterfronts

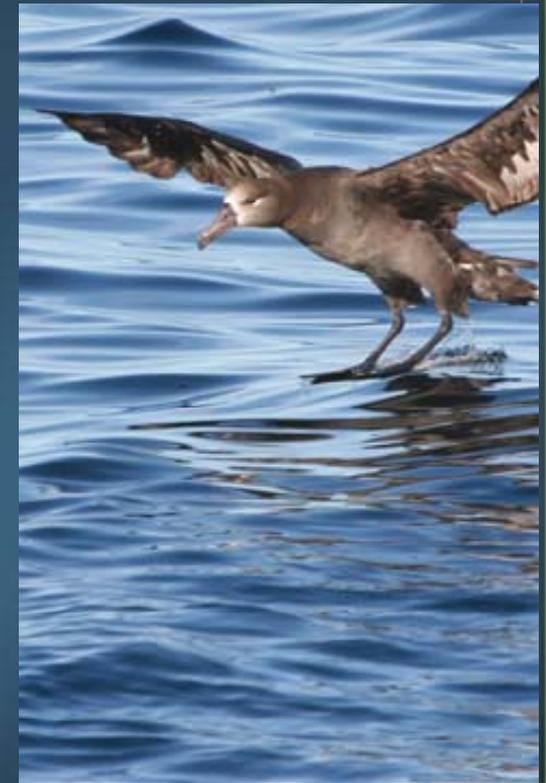


State Focus Area: Ocean and Coastal Environmental Health; Changing Oceans and Coastal Communities State Goals:

- Protect and restore marine, coastal and estuarine habitats.
- Assist coastal communities and marine-dependent businesses in planning and making decisions that provide local and regional economic benefits, increase resilience and foster stewardship of social, economic and natural resources.

Program Impacts: Safe and sustainable seafood supply

- Reduced seabird deaths in fisheries
 - SG collaboration with fishermen, managers and conservationists to curb bycatch of albatrosses and other seabirds
 - Regional expansion to West Coast groundfish fishery; international expansion to fishing fleets of New Zealand, Australia, Uruguay, Argentina, Brazil and South Africa
 - Foreign fisheries agencies beginning to change domestic and joint-venture regulations to limit seabird interactions



State Focus Area: Living Marine Ecosystems

State Goals:

- Support conservation and sustainable use of living marine resources through effective and responsible approaches, tools, models and information for harvesting wild and cultured stocks and preserving protected species.

Program Impacts: Healthy coastal ecosystems

- Roadmap for building citizen science capacity in the Puget Sound region
 - Citizen science advisory panel established
 - Provided recommendations for protocols for citizen science efforts to contribute to scientific research, monitoring, and management needs in the Puget Sound



National Cross-Cutting Goal: Informed public

State Focus Area: Ocean Literacy and Workforce Capacity

State Goal: Improve ocean literacy and interest in the marine sciences among students and educators, including those in tribal and under-represented communities.



Program Impacts: Healthy coastal ecosystems

● Bivalves for clean water

- Volunteers trained to address pollution and enhance shellfish populations on private and recreational beaches
- Tribal, state agency and shellfish industry partners
- 105 community members at five workshops; 14 shellfish-growing permits for property owners; four repaired septic systems; 18 homes with new landscaping practices; five new shore stewards or beach watchers; four rain gardens for managing stormwater; 12 beach clean-ups; five households using natural cleaning products



State Focus Areas: Living Marine Ecosystems; Ocean and Coastal Environmental Health

State Goals:

- Support conservation and sustainable use of living marine resources through effective and responsible approaches, tools, models and information for harvesting wild and cultured stocks and preserving protected species.
- Reduce toxic, nutrient and pathogen pollutants in water and the marine food web and address their relationships to and impacts on human health.
- Protect and restore marine, coastal and estuarine habitats.



2009 Research Accomplishments

- Identification of key drivers of ocean productivity for T/E/at-risk populations of steelhead trout
 - Climate change may affect the ocean's carrying capacity for steelhead through variation in ocean habitats and density-dependent trophic interactions



2009 Research Accomplishments

- Discovery of unique glass sponge reef habitat and methane seeps in the Pacific Northwest
 - Reef and seeps provide protective habitat for pregnant female and juvenile rockfish; likely building block for one of the world's most productive areas

