

NH Sea Grant Program

Site Review PIER Information

(Information gathered from the Program's Annual Report Submissions in PIER)

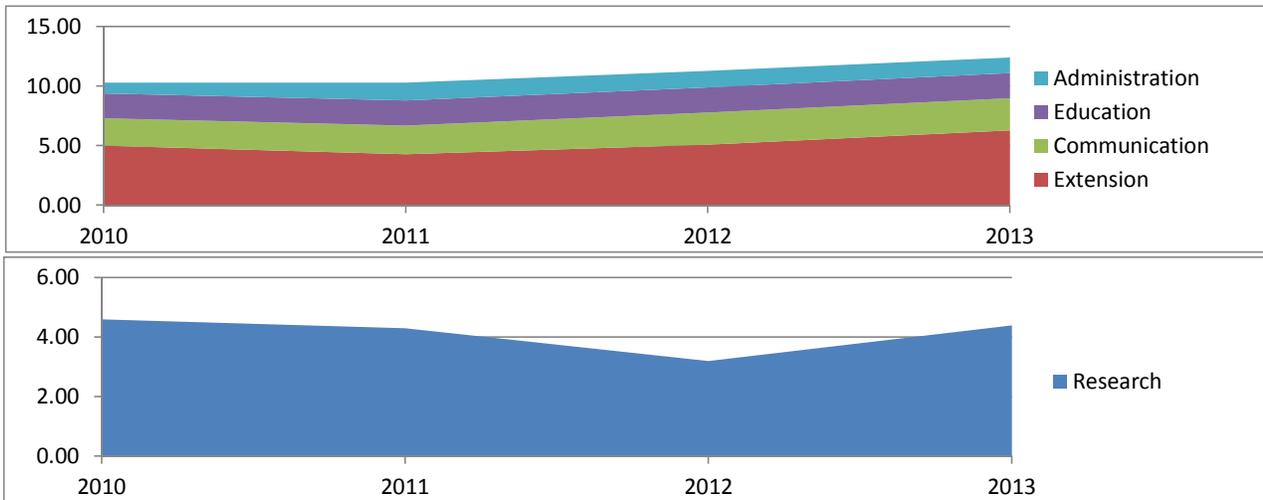
I. Program Management and Organization (organization, program team approach, support).

A. Sea Grant Staffing (2010-2013)

	Range of Annual Number of Individuals	Average Annual Full-Time Equivalents*
Administration	5-7	1.2
Extension	5-7	5.2
Communication	3	2.5
Education	5	2.1
Research	22-25	4.1

*One FTE is equivalent to 12 months of full time effort, and can be funded with Sea Grant Federal or non-Federal dollars.

Full Time Equivalents by Year (2010-2013)

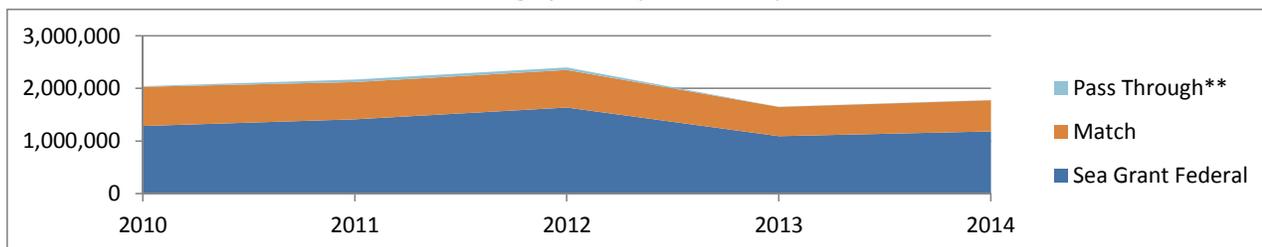


B. Total Funding by Source (2010-2014)

	Sea Grant Federal	Match	Pass Through**	Total Funding
2010	1,287,742	742,862	12,070	2,042,674
2011	1,418,144	705,622	47,825	2,171,591
2012	1,637,364	714,068	49,000	2,400,432
2013	1,091,803	557,867	0	1,649,670
2014	1,185,440	592,720	0	1,778,160

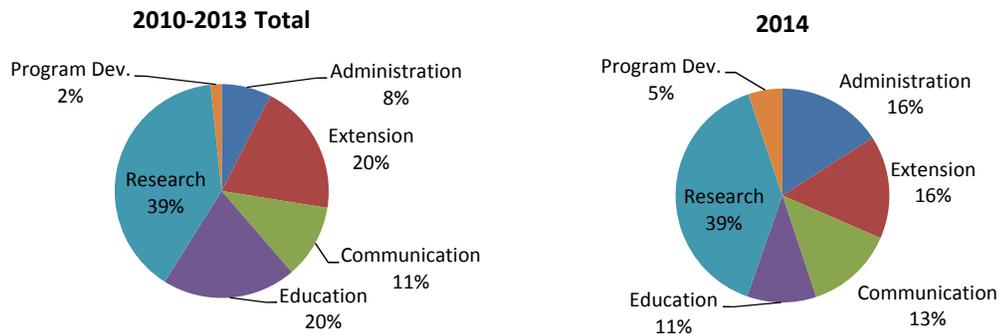
** Pass Through funding refers to federal funds not appropriated to Sea Grant, but administered through the National Sea Grant Office

Funding by Year (2010-2013)

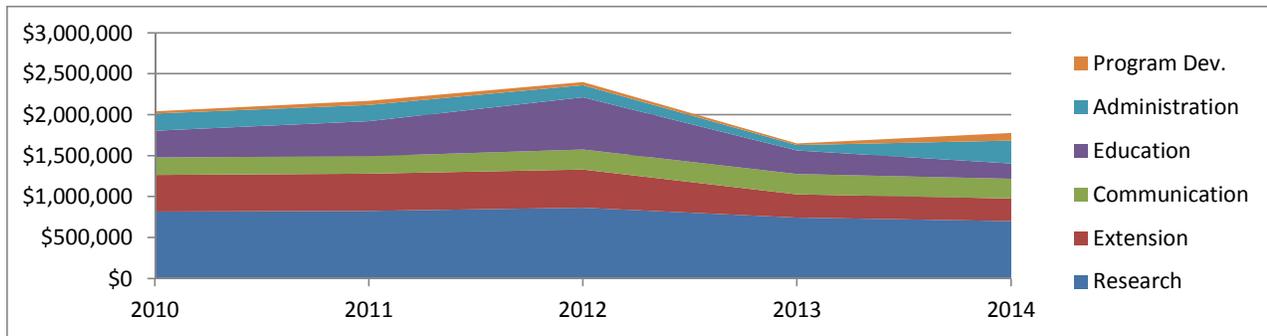


C. Distribution of Funding by Functional Area (Federal + Match + Pass Through)

	2010	2011	2012	2013	2014
Administration	209,999	198,509	145,214	66,119	282,683
Extension	446,307	454,778	466,571	286,807	277,604
Communication	214,425	215,030	242,702	248,878	238,176
Education	324,101	426,630	639,206	285,925	186,271
Research	819,698	825,321	865,882	742,703	701,765
Program Dev.	28,144	51,323	40,857	19,238	91,661



Trend (2010-2014)



D. Total Number of Core Funded Proposals (Not NSIs)

	2011	2013
Pre-Proposals Submitted	25	31
Full Proposals Submitted	16	14
Proposals Funded	5	4
Institutions with Proposals Funded	1	1
Proposals Funded from Home Institution	5	4

E. Core-Funded Research Projects

2014

Analysis and Communications of Flood Damage Cost Avoidance in the Lamprey River Watershed of New Hampshire (Cameron Wake)

Buy out or Build Back? A Comparative Assessment of Approaches to Employing Public Funding to Vulnerable Coastal Properties in the Northeastern United States (Porter Hoagland)

Diversifying the New England Sea Vegetable Aquaculture Industry: Modification of kelp nursery and grow-out technology for nori production (Christopher Neefus)

Gene Expression During Development of Clam Leukemia: Interactive effects of temperature and ocean acidification on viral loading and onset of disease (Charles Walker)

What Happens to the Nutrients that Have Accumulated in the Sediments of the Great Bay? Quantifying nutrient release and removal due to diffusion and sediment resuspension (Linda Kalnejais)

Climate Adaptation for Road Infrastructure in Coastal New Hampshire (Jo Sias Daniel)

Identification of Endemic Lineages of *Vibrio parahaemolyticus* Causing Regional Outbreaks and their Occurrence in New Hampshire Shellfish Waters (Cheryl A. Whistler)

Coastal Hazards and Northeast Housing Values: Comparative Implications for Climate Change Adaptation and Community Resilience (Robert Johnston)

Social and Ecological Factors Influencing Shoreline Hardening in the Northeast: Implications for Vulnerability, Resilience and Informed Decision Making (J.H. Grabowski)

2012

Alewife Population Assessment and Aquaculture (David Berlinsky)

Interactions between Salinity and the Resident Microbial Community in Excluding Pathogenic *Vibrio* from Oysters (Vaughn Cooper)

Matching Alternative Marketing Opportunities with the N.H. Commercial Fishing Industry's Alternative Marketing Capacity (Charles French)

Recruitment and Retention of Lobsters in a New England Estuary (Winsor Watson)

Understanding the Mechanisms Controlling Storm Event Nitrogen Fluxes from the Lamprey River Watershed Using Continuous in situ Sensors (Wilfred Wollheim)

2010

Microbial pathogen removal guidance for stormwater management (Robert Roseen)

Mitigating Risk to Whales from Lobster Fishing (Hauke Kite-Powell)

Nutrient, trace metal and particle release from sediments in the Great Bay Estuary and riverine system (Linda Kalnejais)

Calibrating lobster ventless trap and standard trap surveys to optimize measurements of lobster abundance (Winsor Watson)

Development of seaweed culture system technologies to support integrated multi-trophic aquaculture and sea vegetable aquaculture in New England coastal waters (Christopher Neefus)

Using Technology to Assess the Invasive Sea Squirt, *Didemnum vexillum*, Impacts on Fisheries and Ecosystems (Franz Hover)

Establishing historic baselines and time series for rebuilding anadromous fish populations and coastal marine ecosystems in the Gulf of Maine (W. Jeffrey Bolster)

F. NSI, Pass-through, and enhancement funds
2014
Climate Adaptation (Julia Peterson) (SG-Climate)
Climate Adaptation for Road Infrastructure in Coastal New Hampshire (Jo Sias Daniel) (SG-Social Science)
2013
Interactions between Salinity and the Resident Microbial Community in Excluding Pathogenic Vibrio from Oysters (Vaughn Cooper) (SG-Aquaculture)
2012
Coastal Climate Change Adaptation Initiative (Julia Peterson) (SG-Climate)
Dean John A. Knauss Marine Policy Fellowship - Michelle Walsh (Jonathan Pennock) (NMFS)
Dean John A. Knauss Marine Policy Fellowship - Wan-Jean Lee (Jonathan Pennock) (SG-FEL-KNAUSS)
N.H. Sea Grant Coastal Research Volunteer Program (Stephen Jones) (SG-Social Science)
National Summit on Community Supported Fisheries (Erik Chapman) (SG-NSI)
Regional: Social and economic impact assessment of catch share management in the Northeast multispecies fishery. (NESGC) (Christopher Glass) (SG-Social Science)
Sea Grant Fisheries Extension Meeting (Kenneth La Valley) (SG-PD)
Reducing the Extent of Permanently Closed Shellfish Growing Areas through Regulatory Modernization: Enteric Virus Contamination and Mitigation Strategies (Stephen Jones) (SG-Aquaculture)
Decision Support for the Economic Analysis of Trade-offs in Coastal and Marine Spatial Planning (CMSP) for the U.S. Northeast Region (Porter Hoagland) (SG-Regional)
Regional: Climate change adaptation and ecosystem service resilience in Northeast coastal communities (NESGC) (Robert Johnston) (SG-Regional)
Regional: The governance role of local authorities in marine spatial planning: a legal assessment of prospects and problems. (NESGC) (John Duff) (SG-Regional)
2011
Dean John A. Knauss Marine Policy Fellowship - Gamelin (Jonathan Pennock) (OAR)
Enhancement in Marine Finfish and Molluscan Shellfish Aquaculture (Kenneth La Valley) (SG-PD)
Putting Mittens on a Crab (Mark Wiley) (SG-Invasives)
2010
Enhancing Sea Grant's Ability to Help Coastal Communities Adapt to Climate Change (JONATHAN R. PENNOCK) (SG-Climate)
FISHERIES EXTENSION ENHANCEMENT- TECHNOLOGY TRANSFER FROM COOPERATIVE RESEARCH PROJECTS (JONATHAN PENNOCK) (SG-FISHERY-EXT)
Ship Time (Mark Wiley) (OAR-SHIPTIME)
Working with New England Communities to Restore Winter Flounder Populations (Elizabeth Fairchild) (SG-Aquaculture)
Dean John A. Knauss Marine Policy Fellowship - Erika Washburn (Jonathan Pennock) (SG-FEL-KNAUSS)

II. **Stakeholder Engagement** (relevance, advisory services, and education and training).

A. **Total Number of SG-Sponsored Meetings, Workshops, Conferences, Presentations and Attendees (2010-2013)**

Events	Attendees
1,090	57,254

B. **Total Number of Volunteer Hours (2010-2013)**

32,895

C. **Students Supported (2010-2013)**

	Students		Degrees Awarded
	New	Continuing	
Undergraduate	150	21	128
MS/MA	23	15	5
PhD	15	16	6
Professional Degree	18	19	1

D. **K-12 Students Reached (2010-2013)**

33,917

III. Collaborative Network Activities (relationships and coordination).

A. Program Partners by Scale

FEDERAL or NATIONAL

American Fisheries Society (AFS)
Aquaculture Industry
Bridgeport Regional Vocational Aquaculture School
Cape Cod National Seashore
Center for Coastal and Ocean Mapping, Joint Hydrographic Center (US DOC, NOAA, NOS, CCOM-JHC)
Chewonki Foundation
Coastal Conservation Association
Coastal Services Center (US DOC, NOAA, NOS, CSC)
Coastal Services Center, Northeast Region (US DOC, NOAA, NOS, CSC)
Commercial Fisheries News
Consortium for Ocean Leadership
Diadromous Species Restoration Research Network (DSRRN)
Dominion Nuclear Millstone Environmental Laboratory
Eastman's Fishing Fleet
eXtension
Farm Service Agency (USDA)
Federal Emergency Management Agency (US DHS, FEMA)
Georgetown Climate Center
Geosyntec Consultants
Great Bay Aquaculture, LLC
Great Bay National Estuarine Research Reserve (US DOC, NOAA, NOS, NERRS)
Gulf Coast Marine Life Center
Gundalow Project
Harmon Brook Farm
Institute for Broadening Participation
Marine Debris Program (US DOC, NOAA, NOS, ORR, MDP)
National Estuarine Research Reserve System (US DOC, NOAA, NOS, NERRS)
National Fish and Wildlife Foundation (NFWF)
National Marine Educators Association
National Marine Fisheries Service (US DOC, NOAA, NMFS)
National Non-Point Education for Municipal Officials (NEMO) Network
National Ocean Sciences Bowl, Consortium for Ocean Leadership (NOSB)
National Oceanic and Atmospheric Administration (US DOC, NOAA)
National Science Foundation (NSF)
National Sea Grant Office (US DOC, NOAA, OAR, NSGO)
National Weather Service (US DOC, NOAA, NWS)
New Hampshire Estuaries Project (US EPA, NEP)
NOAA/NMFS/James J. Howard Marine Sciences Laboratory
Northeast Fisheries Science Center (US DOC, NOAA, NMFS, NEFSC)
Region 1 (US EPA)
Region 5 (US EPA)
Sea Grant Association
Sea Grant Educators Network
Seacoast Science Center
Stephenson Strategic Communications

U.S.A. National Phenology Network
UNH/NOAA NERR Science Collaborative
University of New Hampshire, Coastal Response Research Center (UNH CRRC)
US Coast Guard (US DHS, USCG)
US Department of Agriculture (USDA)
US Economic Development Agency (US DOC, EDA)
US Environmental Protection Agency (US EPA)
US Fish and Wildlife Service (US DOI, FWS)
US Food and Drug Administration (US HHS, FDA)
US Foreign Agriculture Service (USDA, FAS)
US Forest Service (USDA, USFS)
US Geological Survey (US DOI, USGS)
US Trout Farmers Association
Wells National Estuarine Research Reserve (US DOC, NOAA, NOS, NERRS)

INTERNATIONAL

Blue Ocean Society
Census for Marine Life (CoML)
Consensus Building Institute (CBI)
Dalhousie University
Environmental Defense Fund (EDF)
Fisheries and Oceans Canada (DFO)
Northeast Consortium
Ocean Conservancy
The Nature Conservancy (TNC)
The Norwegian Research Council
University of New Brunswick (Canada UNB)
Wealth From Oceans Flagship, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia
World Aquaculture Society (WAS)

LOCAL

Acton Wakefield Watersheds Alliance
AE Fisheries
Cedar Point Oyster Company
Choice Oysters LLC
City of Dover, NH
City of Portsmouth, NH
City of Rochester, NH
Downeast Institute
Exeter River Local Advisory Committee
Fat Dog Shellfish Company LLC
Friends of Casco Bay
Gloucester Maritime Heritage Center
Granite State Shellfish LLC
Great Bay Oyster Company
Great Bay Stewards
Hodgson Brook Restoration Project
Little Bay Oyster Company
Martha's Vineyard/Dukes County Fishermen's Association
Mystic Aquarium and Institute for Exploration
New England Aquarium

New Hampshire Community Seafood
New Hampshire Division of Forests and Lands (NH DFL)
New Hampshire Office of Energy and Planning (NH OEP)
Phillips Exeter Academy
Portsmouth Yacht Club
Provincetown Center for Coastal Studies
R/V Coastal Surveyor
R/V Gulf Challenger
Rockingham County Conservation District
Rockingham Planning Commission
Sagamore-Hampton Golf Club
Salem Sound Coastwatch
Sanders Fish Market
Seacoast Stormwater Coalition
Shoals Marine Laboratory
Small Business Development Center (US DOC, SBA, SBDC)
Southern N.H. Regional Planning
Strafford Regional Planning Commission
Taylor Lobster
Town of Aquinnah, MA
Town of Brentwood, NH
Town of Chilmark, MA
Town of Durham, NH
Town of Epping, NH
Town of Exeter, NH
Town of Greenland, NH
Town of Hampton Falls, NH
Town of Hampton, NH
Town of Kensington, NH
Town of Newfields, NH
Town of Newington, NH
Town of Newmarket, NH
Town of Oak Bluffs, MA
Town of Old Saybrook, CT
Town of Raymond, NH
Town of Salisbury, Mass.
Town of Seabrook, NH
Town of Stratham, NH
Town of Tisbury, MA
Town of Waterford, CT
Wild Ocean Aquaculture LLC
Winnicut River Watershed Coalition
New Hampshire Homeland Security and Emergency Management (NH HSEM)

REGIONAL

Atlantic Marine Aquaculture Center
Atlantic Offshore Lobstermen's Association
Atlantic States Marine Fisheries Commission (ASMFC)
Carbon Solutions New England (CSNE)
Coastal and Estuarine Research Federation (ERF)

Connecticut River Estuary Regional Planning Agency
East Coast Shellfish Growers Association
Gulf of Maine
Gulf of Maine Council on the Marine Environment
Gulf of Maine Marine Education Association
Gulf of Maine Ocean Observing System (GoMOOS)
Massachusetts Bays Program
Massachusetts Marine Invader Monitoring and Information Collaborative
Massachusetts Ocean Partnership
New England Fisheries Management Council (NEFMC)
New England Interstate Water Pollution Control Commission (NEIWPCC)
New England Region Water Quality Team (USDA)
New England Reptile
New Hampshire Coastal Adaptation Workgroup
Northeast Fishery Sector XI
Northeast Fishery Sector XII
Northeast Regional Association of Coastal Ocean Observing Systems (NERACOOS)
Northeast Regional Ocean Council (NROC)
Northeast Sea Grant Consortium
Northeast Shellfish Sanitation Association (NESSA)
Northeast States and Caribbean Islands Regional Water Program (USDA, NESCI)
Northwest Atlantic Marine Alliance
Ocean Approved
Penobscot Marine Museum
Piscataqua Region Estuaries Partnership
Red's Best
Regional Association for Research on the Gulf of Maine
SeaPlan
Southeast Watershed Alliance
Southeastern Connecticut Council of Governments
The Stewardship Network: New England
University of New Hampshire Cooperative Extension
Yankee Fisherman's Cooperative

STATE

Alaska Sea Grant
Antioch University New England
Bangor University
Bates College
Boat Camp
Boston University (BU)
Bowdoin College
California Sea Grant
Clark University
Clean Air — Cool Planet
College of the Atlantic
College of the Holy Cross
Commercial Fishing Industry
Connecticut Agricultural Experiment Station (CAES)
Connecticut Department of Agriculture, Bureau of Aquaculture (CT CTDA)

Connecticut Sea Grant
Cornell University
Darling Marine Center, University of Maine
Dartmouth College
Delaware Sea Grant
Duke University
Eastman's Fresh Catch
Fishermen's Voice
Granite State Fish
Granite State Whale Watch
Gulf of Maine Research Institute (GMRI)
Hawaii Sea Grant
ISF Trading, Inc.
Lake Champlain Sea Grant
Louisiana Sea Grant
Maine Aquaculture Association
Maine Department of Environmental Protection (ME DEP)
Maine Department of Marine Fisheries (ME DMF)
Maine Department of Marine Resources
Maine Department of Marine Resources (ME DMR)
Maine Fishermen's Forum Board
Maine Lobstermen's Association
Maine Sea Grant
Maine State Museum
Massachusetts Department of Conservation and Recreation
Massachusetts Division of Marine Fisheries (MA DMF)
Massachusetts Institute of Technology (MIT)
Massachusetts Institute of Technology Sea Grant (MIT)
Massachusetts Office of Coastal Zone Management (CZM)
Michigan Sea Grant
N.H. Sea Grant Coastal Research Volunteers
National Sea Grant Law Center
Natural Resources Outreach Coalition (NROC)
New England Ocean Sciences Education Collaborative (NEOSEC)
New Hampshire Agricultural Experiment Station
New Hampshire Coastal Program
New Hampshire Coastal Training Program (NH)
New Hampshire Commercial Fishermen's Association
New Hampshire Department of Environmental Services (NH DES)
New Hampshire Department of Fish and Game (NH DFG)
New Hampshire Department of Resources and Economic Development (NH DRED)
New Hampshire Environmental Educators Association (NHEE)
New Hampshire Natural Heritage Bureau (NHNHB)
New Hampshire Oyster Farmers
New Hampshire Port Authority
New Hampshire Rivers Council
New Hampshire Rural Economic Development Center (NH)
New Hampshire Science Teachers Association
New Hampshire Sea Grant

New Hampshire Sea Grant Coastal Research Volunteers
New Hampshire Steelhead Trout Farmers
New York Sea Grant
North Carolina Sea Grant
Northeastern University
Penobscot East Resource Center
Plymouth State University
Prescott Park Arts Festival
Rhode Island Department of Environmental Management (RI DEM)
Rhode Island Sea Grant
Rutgers University
Seacoast Buy Local
Seacoast Eat Local
Seaport Fish
Slow Food N.H.
South Carolina Sea Grant Consortium
Spinney Creek Shellfish
State University of New York, Stony Brook (SUNY)
Tufts University
University of California, Santa Barbara (UCSB)
University of Connecticut (UCONN)
University of Delaware (UDEL)
University of Florida (UF)
University of Georgia (UGA)
University of Maine (UMaine)
University of Maine, Orono (UMO)
University of Maryland (UMD)
University Of Massachusetts At Amherst (Umass)
University of Massachusetts at Boston (UMass)
University of Massachusetts, Dartmouth
University Of Minnesota (UMN)
University of New England (UNE)
University of New Hampshire (UNH)
University of New Hampshire Marine Docents
University of New Hampshire, Carsey Institute (UNH)
University of New Hampshire, Cooperative Extension (UNH)
University of New Hampshire, Cooperative Institute for Coastal and Estuarine Environmental Technology (CICEET)
University of New Hampshire, Environmental Research Group (UNH)
University of New Hampshire, Institute for the Study of Earth, Oceans and Space (UNH EOS)
University of New Hampshire, Jackson Estuarine Laboratory (UNH)
University of New Hampshire, Marine Program (UNH)
University of New Hampshire, Office of Sustainability (UNH)
University of New Hampshire, School of Marine Science and Ocean Engineering (UNH SMSOE)
University of New Hampshire, Stormwater Center (UNH)
University of Rhode Island (URI)
University of Southern Maine (USM)
Virginia Polytechnic Institute and State University (VT)
Virginia Sea Grant
Washington Sea Grant

Woods Hole Oceanographic Institution (WHOI)

Woods Hole Oceanographic Institution Sea Grant (WHOI)

Vermont Law School

University of New Hampshire, Technology Transfer Center (UNH T2)

Tribal

Wampanoag Tribe

B. Source and Amount of Leveraged Funds (2010-2013)	
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Amounts	Year			
Source	2010	2011	2012	2013
Managed	\$406,361	\$1,460,991	\$1,421,890	\$1,240,052
eXtension	\$15,000	\$60,000	\$60,000	\$10,000
Gulf of Maine Research Institute (GMRI)		\$60,000		
Marine Debris Program (US DOC, NOAA, NOS, ORR, MDP)		\$38,000	\$38,000	\$38,000
National Fish and Wildlife Foundation (NFWF)		\$45,000	\$45,000	\$45,000
National Marine Fisheries Service (US DOC, NOAA, NMFS)	\$68,337	\$207,000	\$237,000	\$154,000
National Oceanic and Atmospheric Administration (US DOC, NOAA)	\$96,768		\$75,000	\$476,070
National Science Foundation (NSF)	\$43,608	\$263,083	\$263,083	\$263,083
New Hampshire Agricultural Experiment Station	\$6,000	\$24,000	\$24,000	\$24,000
New Hampshire Coastal Program			\$30,899	\$30,899
New Hampshire Department of Fish and Game (NH DFG)				\$22,000
Northeast Consortium	\$67,500	\$205,000	\$90,000	\$45,000
Saltonstall-Kennedy Grant Program		\$249,908	\$249,908	
The Norwegian Research Council		\$185,000	\$185,000	
University Of Massachusetts At Amherst (Umass)		\$15,000	\$15,000	\$15,000
University Of Minnesota (UMN)		\$109,000	\$109,000	\$109,000
University of New Hampshire, Cooperative Extension (UNH)	\$10,000			
US Department of Agriculture (USDA)	\$99,148			\$8,000
Influenced	\$82,522	\$875,722	\$2,616,710	\$2,709,847
Clark University			\$3,000	
National Estuarine Research Reserve System (US DOC, NOAA, NOS, NERRS)			\$1,910,333	\$2,509,847
National Oceanic and Atmospheric Administration (US DOC, NOAA)	\$82,522	\$330,086	\$330,086	\$200,000
National Sea Grant Law Center		\$25,000	\$25,000	
US Department of Agriculture (USDA)		\$347,791	\$347,791	
US Forest Service (USDA, USFS)		\$172,845		
Unreported Source			\$500	