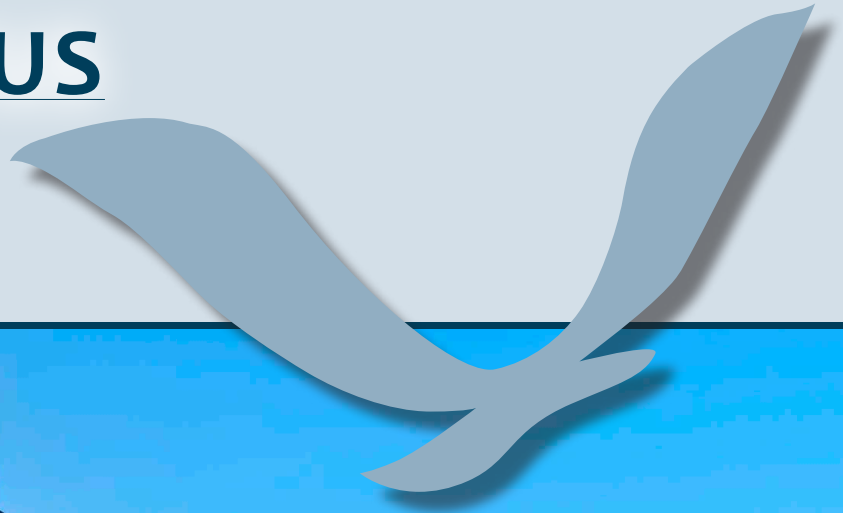


# RHODE ISLAND SEA GRANT PROSPECTUS



*Since 1971*

**SCIENCE SERVING RHODE ISLAND'S COASTS**

# RHODE ISLAND SEA GRANT PROSPECTUS

## TABLE OF CONTENTS



THE  
UNIVERSITY  
OF RHODE ISLAND



<b>About Rhode Island Sea Grant</b>	<b>1</b>
About the Extension and Legal Programs	1
About the Rhode Island Sea Grant Strategic Plan	2
<b>Rhode Island Sea Grant Program Administration</b>	<b>3</b>
Sea Grant Staff Full-time Equivalents	4
The Senior Advisory Council	4
Ronald C. Baird Sea Grant Science Symposium	4
Thematic Center Developments	5
<b>The Research Program</b>	<b>6</b>
Recruiting New Talent	6
How Omnibus RfP Priorities Are Set	6
The RfP Process	6
Quality Review	7
Relevancy Review	7
By the Numbers: Omnibus and National Competitions	8
Annual Rhode Island Sea Grant Program Development Funding	9
Program Development–Funded Proposals 2010–2012	9
Rhode Island Sea Grant External Research Management Program	10
<b>Program Funding</b>	<b>11</b>
<b>Stakeholder Engagement</b>	<b>12</b>
Partners	12
Partners List	13
Partnership Principles	14
<b>Collaborative Network/NOAA Activities</b>	<b>14</b>
Regional Initiatives	14
Other Initiatives	15
<b>Program Changes Resulting from Previous Review</b>	<b>16</b>
<b>Funded Research</b>	<b>17</b>
<b>Leadership on Boards &amp; Committees</b>	<b>18</b>
<b>Selected Awards and Honors</b>	<b>19</b>
<b>Fellowship Recipients 2006–2011</b>	<b>19</b>
<b>Organizational Structure of Rhode Island Sea Grant</b>	<b>20</b>

# ABOUT RHODE ISLAND SEA GRANT



Rhode Island's coastal and marine ecosystems are facing unprecedented challenges. Population growth and redevelopment along the coast continues to occur even in the midst of the current economic recession. Climate change is accelerating sea level rise, increasing the potential severity and frequency of storms, and leading to risks that could spread marine diseases and significantly alter marine ecosystems. Sea Grant researchers recently published in *Nature* that such a fundamental change in the marine nitrogen cycle of Narragansett Bay may have already occurred. Reductions in nutrient inputs to Narragansett Bay, thanks to millions of dollars of investments in treating combined sewer overflows, are improving water quality but are also altering the Bay's food web and productivity. Rhode Island's proposed offshore wind farms have the potential to generate green energy but will undoubtedly affect the physical, biological, social, and economic resources of the ocean areas where they would be developed. And Rhode Island's commercial fisheries, which have long struggled with management regimes, are embarking on an innovative, if controversial, management experiment—sector allocation or “catch shares”—that has been approved for the summer flounder (fluke) fishery.

Rhode Island Sea Grant-funded researchers and staff are making significant contributions to our state of knowledge of all these processes as well as working to develop tools, assist in policy development, and provide education to stakeholders, resource managers, and the public to address the issues at hand.

The program has two focus areas: Sustainable Coastal Communities and Ecosystems, and Sustainable Fisheries. Rhode Island Sea Grant is located at the University of Rhode Island Graduate School of Oceanography, and funds research at other institutions throughout the state. Rhode Island Sea Grant is also home to one of only four Sea Grant Legal Programs in the country, and the only one in the Northeast, located at Roger Williams University School of Law.

## ABOUT THE EXTENSION AND LEGAL PROGRAMS

### Sustainable Coastal Communities and Ecosystems

The Sustainable Coastal Communities and Ecosystems Extension Program, located at the University of Rhode Island's Coastal Resources Center, has a 40-year history of working with state and local governments and coastal community members to create policies that help them manage their resources comprehensively through ecosystem-based management. The program also works with the state and communities to address climate change and coastal hazards and to develop vibrant waterfronts.

### Sustainable Fisheries Extension Program

The mission of the Rhode Island Sea Grant Sustainable Fisheries Extension Program is to support long-term sustainability of fish, habitat, and fisheries by:

- Creating knowledge
- Exploring innovative ideas and technologies
- Providing opportunities for discussion
- Enabling stakeholders to play critical roles
- Optimal utilization of the resource

The Sustainable Fisheries Extension Program has been a major research and outreach component of Rhode Island Sea Grant for over 20 years and continues to evolve with ever-changing fisheries issues. Fisheries Extension activities are designed to develop and apply knowledge and skills for the future of sustainable fisheries. The program also plays a key role in facilitating collaboration among stakeholders at local, regional, national, and international levels.

### Legal Program

The Rhode Island Sea Grant Legal Program, established in 2003, is housed at the Marine Affairs Institute at the Roger Williams University School of Law. The program is a unique partnership between a public state university and a private university law school that builds on the dual-degree program that offers a J.D. from

Roger Williams University School of Law and an M.A. in Marine Affairs from the University of Rhode Island. The Legal Program is a clearinghouse for marine law and policy whose mission is to educate and prepare exceptional marine law professionals and host expert marine law and policy practitioners. The program:

- Offers rigorous and diverse maritime and marine law courses.
- Provides full extracurricular opportunities to develop excellent research, writing and advocacy skills.
- Convenes local, regional, national, and international experts in a neutral forum to address relevant maritime and marine law issues.

For more information about all of Rhode Island Sea Grant's programs, please visit [seagrant.gso.uri.edu](http://seagrant.gso.uri.edu).

## RHODE ISLAND SEA GRANT: BENEFITTING COASTAL COMMUNITIES AND FISHERIES

- Rhode Island Sea Grant works with state coastal program to draft, vet, and assist adoption of **one of America's first state sea level rise policies**.
- Rhode Island said to be at the **"vanguard of marine spatial planning"** by the national Ocean Renewable Energy Coalition regarding the Ocean SAMP.
- Rhode Island Sea Grant and partners developed and tested **"Eliminator Trawl,"** opening up haddock fishery with an estimated **\$30 million impact** to New England.
- Rhode Island Sea Grant provided first comprehensive **assessment of all of Rhode Island's state port and harbor** assets, infrastructure, and facilities.
- Metro Bay SAMP policy helped open up almost **2 miles of new, urban coastal public access that had not been available to the public since the Civil War**.



## ABOUT THE RHODE ISLAND SEA GRANT STRATEGIC PLAN

Rhode Island Sea Grant operates in a small, densely populated state with a lengthy (over 400-mile) coastline, and has the distinction of being one of the first four Sea Grant programs in the U.S. URI, in fact, sponsored the first national conference where the Sea Grant concept was proposed in 1965. This context informs Rhode Island Sea Grant's strategic plan, which describes the program's "glocal" approach to its work: Rhode Island Sea Grant works locally with an eye to how its work can be applied regionally, nationally, and even internationally. This can be exemplified by research on Narragansett Bay and coastal lagoons (salt ponds) that is representational of other similar ecosystems across the country. It is also exemplified by special area management planning—done with the state's coastal program, the R.I. Coastal Resources Management Council—that has been a model for other states' coastal programs, and has been applied internationally through the URI Coastal Resources Center. The glocal approach is also reflected in the program's participation in national initiatives, such as leadership on the Fisheries Extension Enhancement coordination committee, the National Sea Grant Smart Growth Committee, and other regional and national initiatives.

The strategic plan was designed intentionally to encourage the program to respond to emerging needs and priorities of the region's coastal stakeholders. This is reflected in a biennial RfP, described later in this document, that is refined with stakeholder input before it is issued, as well as in the allocation of Program Development funds, also described later. This responsiveness is also inherent in the work of Rhode Island Sea Grant's Extension and Legal programs, where initiatives such as the R.I. Ports and Commercial Harbors Inventory and Planning Study, the award-winning development of the "Eliminator Trawl," and the Law Fellows placements are undertaken at the behest of, and often in partnership with, Rhode Island Sea Grant stakeholders.

The strategic plan is online at [seagrant.gso.uri.edu/z\\_downloads/about\\_stratplan06.pdf](http://seagrant.gso.uri.edu/z_downloads/about_stratplan06.pdf).

# PROGRAM ADMINISTRATION

In 2007, management of Rhode Island Sea Grant was reorganized to make it more efficient, accountable, and cost effective given the Rhode Island and URI fiscal crises, a greater national attention to impacts and reporting, and the new availability of exterior (non-NOAA Sea Grant) funds in Rhode Island Sea Grant's priority themes and functions.

Program Administration was created, which comprised Program Management—personnel responsible for program development and management, as well as grants and fiduciary management—and communications and education, which previously had separate administrative responsibilities.

In 2009, a communications/education specialist was hired in order to address programmatic needs in the area of education. Personnel changes also occurred with the layoff of a senior Program Administration staff member in order to reduce increasing administrative costs, and to better focus investments in order to stop the erosion of the program's research funding base. Impacts of these changes have been clear. The program has: (i) become more fiscally stable, (ii) become more efficient by integrating communications at the Program Administration level, thus making greater connections between thematic and functional areas, and (iii) is building a new education portfolio.

Program Administration is directed by Dr. Barry Costa-Pierce and comprises:

- Alan Desbonnet, Assistant Director
- Heather Rhodes, Fiscal Officer
- Tracy Kennedy, Program Assistant
- Monica Allard, Communications Manager
- Meredith Haas, Research Communications Specialist

Program Administration coordinates the Sea Grant activities of an eight-member Rhode Island Sea Grant Leadership Team that, with the above (excluding T. Kennedy) includes:

- Susan Farady, Director of the Rhode Island Sea Grant Legal Program and Marine Affairs Institute and adjunct faculty at Roger Williams University School of Law;
- Jen McCann, Leader for Sustainable Coastal Communities and Ecosystems Extension Program; Team Leader for U.S. Coastal Program, URI Coastal Resources Center;
- Laura Skrobe, Co-Leader for Sustainable Fisheries Extension Program; Research Associate, URI Department of Fisheries, Animal and Veterinary Sciences, College of the Environment and Life Sciences

The Rhode Island Sea Grant Leadership Team meets monthly to improve communication and collaboration across functional areas, and assists in developing the agendas and analyzing results from the twice yearly meetings of the Senior Advisory Council. The Leadership Team also holds quarterly retreats to discuss program planning, progress, evaluation of impacts, inputs received from its advisory bodies, and new developments and opportunities. It should be noted that the members of the Leadership Team have additional university responsibilities beyond their roles in Rhode Island Sea Grant. This is reflected in the table on Sea Grant staff full-time equivalents.

## 41°N MAGAZINE

Rhode Island Sea Grant and the URI Coastal Institute have partnered since 2006 to produce 41°N magazine. This publication serves not only to keep readers informed of the programs' activities and research findings but to bring them science-based perspectives on critical issues such as climate change. The name 41°N is taken from the degree of latitude at which Rhode Island is located, but it also represents the concept that many of these issues are of concern around the world. The magazine is available online at [seagrant.gso.uri.edu/41N](http://seagrant.gso.uri.edu/41N).



## Sea Grant Staff (Full-time Equivalents)

Name	Position/Dept	Sea Grant FTE	Match FTE	Total FTE
Costa-Pierce	Director	0.35	0.65	1.0
Desbonnet	Asst. Director	0	1.0	1.0
Rhodes	Fiscal Officer	0	1.0	1.0
Kennedy	Admin. Asst.	1.0	0	1.0
Allard-Cox	Comm. Manager	1.0	0	1.0
Haas	Res. Comm. Spec.	1.0	0	1.0
Rubinoff	Coastal CCD	0.33	0	0.33
Neville	Coastal	0.38	0	0.38
Olsen	Coastal + CCD	0	0.34	0.34
Wyman	Legal	1.0	0	1.0
Farady	Legal	0	0.30	0.30
McCann	Coastal	0.6	0	0.6
Kennedy	Coastal	0.33	0	0.33
Crean	Coastal	0.66	0.34	1.0
Manning	Coastal	0.50	0	0.50
Smythe	Coastal	0.50	0	0.50
Skrobe	Fisheries	0.45	0	0.45
Castro	Fisheries	0.45	0	0.45
Bengtson	Fisheries	0	0.05	0.05
Parkins	Fisheries	0.34	0	0.34
Pivarnik	Fisheries	0.12	0	0.12
Somers	Fisheries	0.25	0	0.25
	<b>TOTAL</b>	<b>9.26</b>	<b>3.68</b>	<b>12.54</b>

## THE SENIOR ADVISORY COUNCIL

Senior Advisory Council members represent a cross-section of private, public, and university groups locally and nationally that are interested in Sea Grant's thematic areas and our marine research, policy, legal, education, and advisory services. Council representatives are chosen from the many organizations that Rhode Island Sea Grant interacts with, and represent a diversity of issues and interest areas. Memberships are flexible for a 3 to 5 year period, and are determined at the discretion of the director of Rhode Island Sea Grant in consultation with the Leadership Team. Rhode Island Sea Grant program monitors from the National Sea Grant College Program Office are ex-officio members, as are the members of the Leadership Team.

The Senior Advisory Council's 28 members meet twice a year and provide input to the research RfP issued for the Rhode Island Sea Grant omnibus regarding areas of topical focus for research. Sea Grant staff conduct focus group sessions with council members to define research areas and to set priorities for further review.

The council provides input into new program directions. For example, in discussion of possible new undergraduate fellows program development, the council found duplicity and conflict with existing programs and recommended new avenues (e.g., an undergrad intern position within Coastal and Fisheries extension) and building upon the existing Sea Grant Legal Fellows program. Both recommendations have been followed, and with good results: directed funding now goes to support up to 10 Law Fellows per year and semester- to year-long internships are available in coastal and fisheries extension units.

Rhode Island Sea Grant Extension and Legal programs also receive input from their own advisory bodies, which are composed of stakeholders specific to their work.

More information about the Senior Advisory Council, including meeting minutes and a membership roster, is available online at [seagrants.gso.uri.edu/about/about\\_sac.html](http://seagrants.gso.uri.edu/about/about_sac.html).

## RONALD C. BAIRD SEA GRANT SCIENCE SYMPOSIUM

Rhode Island Sea Grant sponsors an annual symposium as a forum for researchers, resource managers, decision-makers, and other stakeholders to discuss the state of the science in areas important to Rhode Island's coastal communities and beyond. In 2006, Rhode Island Sea Grant renamed the symposium in honor

of the retired director of the National Sea Grant College Program. For more information on past, current, and future Baird Symposia, visit [seagrant.gso.uri.edu/baird](http://seagrant.gso.uri.edu/baird).

## THEMATIC CENTER DEVELOPMENTS

Rhode Island Sea Grant has been the “first investor” in a number of pioneering initiatives at URI that have had significant local impacts and have become important national, and even international, models. The most notable of these are URI’s Coastal Resources Center (CRC), and more recently, the Rhode Island Sea Grant Legal Program (2005) and the URI Sustainable Seafood Initiative (2008).

These centers all started with an innovative idea for partnerships and collaboration that built upon previous initiatives (for example, CRC was built upon URI’s International Center for Marine Resource Development, and the Legal Program was built upon the existing joint degree program between URI and RWU).

The Rhode Island Sea Grant methodology has been to scan the strategic landscape in a marine-focused state and its universities, to maintain connections via strong communications portals with faculty, and to take risks by using Program Development funds to support creative ideas that could lead to institution building.

Initial investments were made in “one leg” of the Sea Grant “three-legged stool” of research, education, or outreach. Thus, the Rhode Island Sea Grant Legal Program started as a Program Development investment in legal connections to its extension program, where legal needs were obvious to make greater change and add to Rhode Island Sea Grant/CRC’s strong expertise and connections in coastal policy. Next, investments were made in the education program, resulting in the very successful Sea Grant Law Fellows program. Lastly, use of Rhode Island Sea Grant research strength and its “Sea Grant brand” has allowed a legal research program to develop, with a legal research RfP issued as part of the NOAA-Sea Grant Omnibus on a pilot basis. While useful research was funded (for example, the Nature Conservancy’s submerged lands studies), it was clear that a legal research RfP needs to be crafted in a different manner than as for a science-based RfP, and Rhode Island Sea Grant is considering this as it moves forward in further developing its legal research capabilities.

This investment strategy has achieved a leveraging of new funds and a larger pool of expertise for a relatively small amount of Rhode Island Sea Grant funding.

## AWARD RECOGNIZES LANDMARK OCEAN PLANNING EFFORT



The R.I. Ocean Special Area Management Plan (SAMP) Outreach Team led by Jennifer McCann, Rhode Island Sea Grant Leader for the Sustainable Coastal Communities and Ecosystems Extension Program, received the 2010 Northeast Sea Grant Network Outstanding Outreach Achievement Award in recognition for their efforts helping Rhode Island, the region, and the nation access and apply new ocean data to the public policy debate surrounding the state’s offshore renewable energy resources.

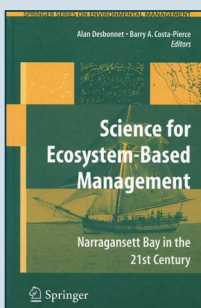
The Ocean SAMP is a \$10 million project to provide accurate, cutting-edge research critical for public policy and coastal management decisions. The SAMP is led by the R.I. Coastal Resources Management Council, with assistance from URI and Rhode Island Sea Grant. The Ocean SAMP builds on Rhode Island Sea Grant’s over 30 years of experience in marine spatial planning. This effort is helping the state develop tailored, place-specific plans to manage and protect its coastal resources, and applying science and innovation to solving marine-based issues.

With national attention upon it, the Ocean SAMP is a marine spatial plan that looks comprehensively at the offshore area’s characteristics, resources, uses, and constraints. It combines research by experts in a variety of fields with the input of stakeholders representing numerous user groups. As a result of growing interest in accessing offshore renewable energy resources to alleviate the costs and impacts of fossil fuels, the developing SAMP is already being considered a regional and national model. In fact, the effort was lauded by the Ocean Renewable Energy Coalition in a report to the national Ocean Policy Task Force as being “at the vanguard of marine spatial planning” in the nation.

The Ocean SAMP started in 2008, and a policy document is nearing completion. Visit [seagrant.gso.uri.edu/oceansamp](http://seagrant.gso.uri.edu/oceansamp) for more information.

**oceanSAMP**

## “BAY BOOK”: FIRST SCIENCE SYNTHESIS IN 25 YEARS FOR NARRAGANSETT BAY



*Science for Ecosystem-Based Management: Narragansett Bay in the 21st Century* addresses the broad problem of coastal nutrient pollution. In the U.S., approximately two-thirds of coastal rivers and bays are moderately to severely degraded from nutrient pollution. This in-depth case study can provide valuable guidance to managers deciding what steps to take.

Narragansett Bay is one of the world’s best-studied estuaries. Rhode Island has developed management actions to reduce nutrient inputs to the waters of the bay. This book was developed in response to the 2005 Ronald C. Baird Sea Grant Science Symposium addressing this mandate with coastal/estuarine scientists and environmental management agency personnel. The 50 scientists who contributed to this volume use long-term data sets to discuss the interactions among biological, ecological, chemical, and physical processes, and discuss what is known about nutrient inputs to the bay ecosystem, the impacts related to nutrient inputs, and how the ecosystem might respond to a sudden reduction in these inputs.

Desbonnet, A., and Costa-Pierce, B.A. (eds.). 2007. *Science for Ecosystem-Based Management: Narragansett Bay in the 21st Century*. Springer Series on Environmental Management. 570 pp.

## THE RESEARCH PROGRAM

The research program at Rhode Island Sea Grant has three parts: (1) the NOAA-Sea Grant two-year Omnibus research program, (2) the Rhode Island Sea Grant annual Program Development program, and (3) the external research management program.

### Recruiting New Talent

New talent is recruited via the release of the RfP, which is broadcast via electronic media to all state institutions of higher education as well as ocean/coastal/marine nongovernmental organizations and think-tanks. Rhode Island Sea Grant will often hear of new faculty hires throughout the state, and will personally meet with new faculty to introduce them to Sea Grant and the opportunities it offers in research, education, and outreach.

### How Omnibus RfP Priorities Are Set

- The Rhode Island Sea Grant strategic plan guides RfP priorities.
- To refine the RfP, the program engages in stakeholder meetings and consults with the SAC.
- Outcomes from the annual Ronald C. Baird Sea Grant Science Symposium help further refine the RfP. For example, the 2008 Baird Symposium on Rhode Island and Block Island Sounds identified knowledge gaps in the science of the sounds and those formed the basis for the 2010-2012 RfP.
- An e-survey has been used to get a perspective of the research community, but this tool needs further refinement to garner broader results.
- The Rhode Island Sea Grant Leadership Team assists in finalizing research priorities.

### The RfP Process

- RfP is developed as noted above; a regional RfP is developed by the directors through the Northeast Sea Grant Consortium with guidance from the research coordinators in the Northeast Sea Grant region. (Rhode Island Sea Grant Asst. Dir. Alan Desbonnet chairs this effort.)
- Pre-proposals received are reviewed by the Rhode Island Sea Grant Leadership Team and comments regarding relevancy of the proposed work to extension needs are provided. A 3-to-5 person panel is convened to review pre-proposals; panelists are also the reviewers and are selected based on their areas of expertise so as to best provide knowledge across the suite of topical areas represented in the pre-proposals. The panel provides yes/no recommendations to invite or not invite to the full proposal phase of the competition; decisions are based on relevancy to stated research priorities in the RfP and application to extension efforts. For more on the review process, see “Quality Review” and “Relevancy Review” below.



- Peer review ensues for all full proposals; three different reviewers provide comment on scientific rigor, cost efficiency of the proposed work, and relevance as per stated in the RfP. Reviewers are selected based on match of proposal to area of expertise.
- PIs are allowed to submit a rebuttal to reviewer comments.
- A panel is convened to guide the funding decision-making process; panelists are selected from outside of the state of Rhode Island based on their expertise such that reasonable coverage is provided to the scope of topical areas represented in the proposals. Panelists do not receive remuneration for their service. One or two members of the panel are local resource management staff that provide input regarding the relevancy of the research to local application in decision-making and resource management; these panelists are advisory only and do not take part in the ranking/decision-making process.
- Decisions to fund or not fund come from a proposal ranking developed by the review panel as they deliberate and debate reviewer comments, PI rebuttals, relevancy to Rhode Island Sea Grant priorities and needs, and relevancy to local resource management needs.

### **Quality Review**

This approach is traditionally called “external scientific peer review.” Rhode Island Sea Grant applies rigorous quality evaluations to all of its proposals by first soliciting competitive pre-proposals that receive external mail-in peer reviews; pre-proposals are then evaluated for their merits to be developed into full proposals by an external, scientific peer review panel. Next, all full proposals undergo external mail-in peer reviews, then are evaluated in a three-part process by an external, scientific peer review panel: part one assessing individual merit; part two assessing relative merit; and part three, a relevancy review.

### **Relevancy Review**

Rhode Island Sea Grant has developed specific relevancy criteria that are summarized for evaluation of relevancy. Criteria are: (a) fit of the proposal to specific criteria specified in the current RfP; (b) fit to the program’s strategic and implementation plans (c) fit to National and Regional Sea Grant Strategic, Implementation or Science Plans.

## BY THE NUMBERS: OMNIBUS AND NATIONAL COMPETITIONS

### 2006–2008 Omnibus

- 39 pre-proposals submitted from three universities
- 18 full proposals submitted from two universities; nine projects funded

### 2008–2010 Omnibus (Four separate RfPs were issued)

#### Fisheries RfP

- 13 pre-proposals submitted from three universities
- Three full proposals submitted from three universities; one project funded

#### Legal RfP

- Seven pre-proposals submitted from three universities and three institutions
- Four full proposals submitted from two universities and two institutions; one project funded

#### Regional RfP

- Four pre-proposals submitted
- One full proposal submitted (withdrawn at last minute); no projects funded

#### Ecosystems RfP

- 31 pre-proposals submitted from two universities
- 21 full proposals submitted from two universities; eight projects funded

#### TOTAL FOR 2008–2010 Omnibus

- > 55 pre-proposals
- > 29 full proposals
- > 19 funded

### 2010–2012 Omnibus (Three separate RfPs were issued)

#### Collaborative RfP

- Six pre-proposals submitted from two universities
- One full proposal submitted from one university; one project funded

#### Regional RfP

- Seven proposals submitted; two projects funded

#### Omnibus RfP

- 23 pre-proposals submitted from four universities
- 14 full proposals submitted from three universities; nine projects funded

#### TOTAL FOR 2010–2012 Omnibus

- > 29 pre-proposals
- > 22 full proposals
- > 12 funded

### National Strategic Initiatives/NSIs

#### 2007 Oyster Disease NSI

- Two proposals submitted; none funded

#### 2008 Aquatic Nuisance Species NSI

- Two proposals submitted; one project funded (\$159,954)

#### 2009 — no NSIs issued

#### 2010

##### Ship Time Request

- Two proposals submitted; one funded (\$9,800)

##### Aquatic Nuisance Species NSI

- One regional proposal (CT, NJ, RI, NY) submitted; no decision as of 01 June

##### Aquaculture Research and Extension NSIs

- Three research proposals and one extension proposal submitted; no decision as of 01 June

##### 2011 Ship Time Request

- One proposal submitted; no decision as of 01 June

## Annual Rhode Island Sea Grant Program Development Funding

The research decision-making process at Rhode Island Sea Grant is continual—it does not only “ramp up” for Omnibus RfPs since new opportunities arise continually. Rhode Island Sea Grant has been able to offer Program Development funds solicitation due to its: (i) allocation of Program Development funds in its NOAA Omnibus requests by Program Administration, and (ii) ability to raise substantial amounts of exterior non-NOAA funds for the Rhode Island Sea Grant Foundation at URI. Program Development guidelines are posted on the Rhode Island Sea Grant website, and are open to any organization or individual who wishes to conduct work that fits Rhode Island Sea Grant priorities.

An example of a Program Development investment is the URI Sustainable Seafood Initiative, which began with Program Development funding in 2008. One of the fruits of this initiative has been the development of a website with a searchable database of reports addressing fisheries and aquaculture certification, consumer preferences for ecolabeled seafood, international trade implications, and other related issues to provide visitors with access to as wide a perspective of reputable research as possible. The lead researcher for this initiative, Cathy Roheim, with a number of co-authors, recently published an article in *Science* focused on the economics of sustainable seafoods. For more information, see [seagrant.gso.uri.edu/sustainable\\_seafood](http://seagrant.gso.uri.edu/sustainable_seafood).

Another Program Development-funded project assesses the current acidification status of Narragansett Bay and predicts the effects on the bay of continued acid build up and changing pH over both short- and long-term time scales. While the effects of ocean acidification have been studied in the open ocean, little is known about the status and impacts of acidification in a coastal estuary like Narragansett Bay, where pH levels fluctuate more widely. But the impacts may be as dramatic, if not more so: the pelagic food webs of Narragansett Bay are traditionally structured around zooplankton, which are susceptible to changing pH—and shifts in zooplankton abundance could have significant impact on the overall ecology of Narragansett Bay.

### Program Development–Funded Proposals 2010–2012

- Jeremy Collie/John King. Mapping and characterizing fish habitat in Rhode Island’s transitional seas.
- Lew Rothstein. The physical response and biogeochemical/ecological impact of potential changes to freshwater drainage in the Rhode Island Sound due to climate change and variability.
- Laura Skrobe. Characterizations of discard of scup from the floating fish trap fishery in Rhode Island.
- Steve D’Hondt Acidification of Narragansett Bay.
- Robert Rheault. *Vibrio* education workshops for shellfish growers.
- Perry Raso. *Gracilaria* and tidal upweller projects.
- Cathy Roheim. Sustainable Seafood Initiative.
- Chong Lee. Utilization of *Gracilaria* for human consumption: processing, nutrient, and sensory analysis.
- Mike Rice. Coastal Fellow: Investigation of feeding rates, growth rates of whelks, *Busycon* spp. held in captivity.



### MICRO-NEWSLETTER OFFERS SCIENCE NEWS ON A POSTCARD

Rhode Island Sea Grant has developed a micro-newsletter to share research findings with the public in a reader-friendly format. No envelopes to open or weighty documents to set aside “for later,” these colorful postcards arrive in the mail and are hard to ignore. Timed to coincide with events when possible, these newsletters offer interested readers opportunities to attend symposia or community lectures, visit websites, or contact Rhode Island Sea Grant for more information.

## Rhode Island Sea Grant External Research Management Program

Rhode Island Sea Grant has been selected by exterior and internal organizations to lead and manage the research decision-making process for a number of competitive grants processes over the years, including:

### *Local*

- The Rhode Island Aquaculture Initiative: two panels, awarding \$600,000 and \$300,000

### *Regional*

- The Commercial Fisheries Research Foundation
  - » 2008: 6 projects were funded for a total of \$800,000
  - » 2009: projects TBA for a total of \$1.6 million

### *Regional/National*

- The New England Lobster Research Initiative: Lobster Shell Disease:
  - » 15 grants; 16 researchers at 16 institutions, total award of \$2.31 million to research and ventless trap surveys

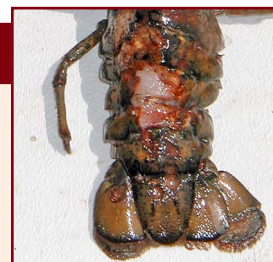
## 2010 BAIRD SYMPOSIUM TO FEATURE LOBSTER SHELL DISEASE RESEARCH

New England Lobster Research Initiative–funded scientists spent three years studying lobster shell disease; these researchers will present their findings to the public on August 10–11, 2010, at the University of Rhode Island during the 9<sup>th</sup> Ronald C. Baird Sea Grant Science Symposium.

Experts in crustacean endocrinology, genetics, veterinary medicine, behavior, microbiology, lobster biology, chemistry, environmental science, and epidemiology have worked together with fishermen and resource managers to uncover the dynamics of shell disease. One highlight of the collaboration is the “100 Lobster Study”: segments of 100 lobsters from Narragansett Bay were sent to each research group for analysis so that a coherent story about the disease could be constructed. The scope of such a study has not been seen before.

The researchers feel they have identified the key bacteria involved—of the genus *Aquimarina*—but that a variety of stressors, such as warming temperatures, changes in diet, or chemicals in the lobsters’ environment, may be making the lobsters increasingly vulnerable to the bacteria, which has long been present in the Pacific Ocean, but is only recently found in the Atlantic.

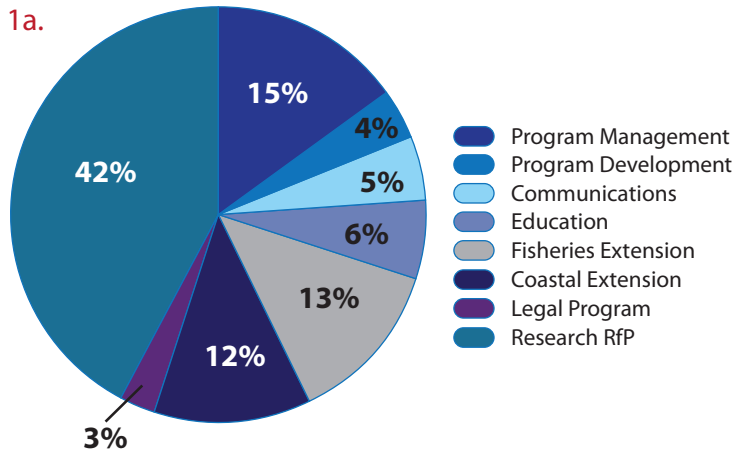
The symposium, “New Approaches to Understanding Emerging Marine Diseases: From Science to Management” takes place at the URI Center for Biotechnology and Life Sciences in Kingston, R.I. Registration is free. For more information, visit [seagrant.gso.uri.edu/baird](http://seagrant.gso.uri.edu/baird).



# PROGRAM FUNDING

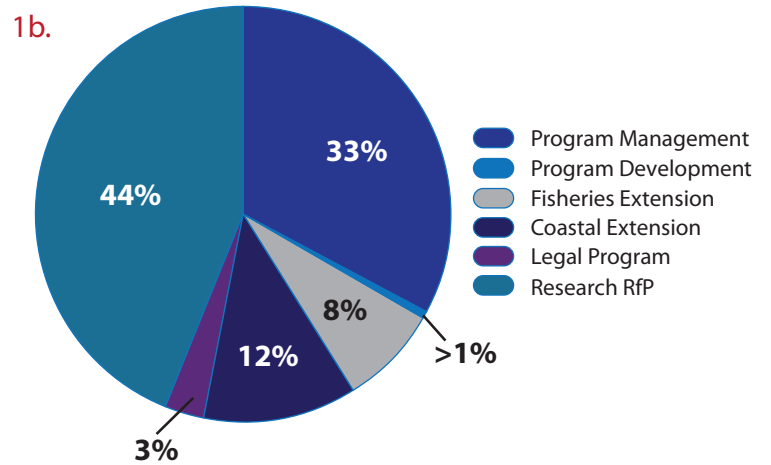
## NOAA Funding 2006-2010

\$10,335,682



## Match Funding 2006-2010

\$5,744,359

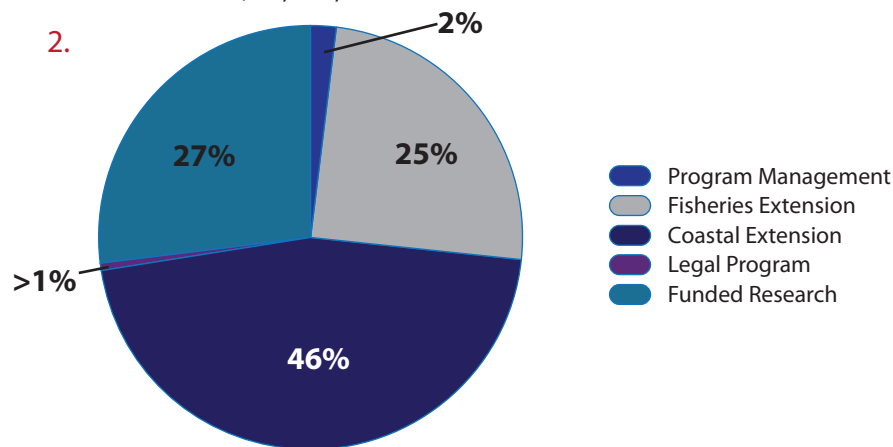


**Figure 1a. NOAA Funding 2006–2010.** This represents the funding allocation within the Rhode Island Sea Grant program for total NOAA/Sea Grant funds 2006–2010. Most Program Development funds are provided for small-scale research projects. During the 2006-2008 omnibus period, a research project (Smayda-Narragansett Bay Plankton Time Series Database) was funded under Education as it was a “data rescue” project, and was not vetted through the RfP process.

**Figure 1b. Match Funding 2006–2010.** Overall, each section of the program provides the match required by NOAA/Sea Grant at the 2:1 ratio.

## Leveraged Funding 2006-2010

\$14,649,122



**Figure 2. Leveraged Funding 2006–2010.** A major portion of the funds leveraged by the Coastal Extension program are related to the Ocean Special Area Management Plan initiative (Ocean SAMP) and are not expected to be a long-term funding source.

# STAKEHOLDER ENGAGEMENT



Rhode Island Sea Grant works with its stakeholders in many capacities. Stakeholders serve on the program’s Senior Advisory Council as well as in advisory capacities in each of the Extension and Legal programs. A stakeholder committee helped to develop Rhode Island Sea Grant’s 2006–2010 strategic plan, and a subset of the Senior Advisory Council has been working with program leadership on a self-evaluation that, among other things, will inform the next strategic plan. Stakeholder input is used in prioritizing outreach and education efforts as well as in crafting RfPs.

Rhode Island Sea Grant also works with stakeholders on projects initiated by the stakeholders themselves. For instance, members of the fishing industry approached Fisheries Extension with the idea for a net that would exploit fish behavior to target haddock and exclude bycatch of cod. The joint project to develop and test the “Eliminator Trawl” proved markedly successful and won the World Wildlife Fund’s 2007 International Smart Gear Competition.

The Law Fellows program matches outstanding law students from Roger Williams University School of Law with marine and coastal stakeholders in need of legal research services. The high-quality work done by the students under the supervision of Legal Program staff attorneys benefit stakeholders—from municipal governments, state agencies, and nonprofit organizations to large corporations and law firms—at a fraction of the cost of hiring a lawyer. The students, in turn, receive valuable real-world experience that helps them make career choices and builds their resumes.

The Sustainable Coastal Communities and Ecosystems Extension Program works with stakeholders in each of the Special Area Management Plans (SAMPs) it develops with the R.I. Coastal Resources Management Council (CRMC) to ensure that stakeholder input is included in the assessment of issues facing the SAMP area and in the recommendations and regulations put forth in the plan. During the development of each SAMP, the program may undertake specific projects related to the SAMP at the behest of stakeholders. For instance, work on the Aquidneck Island SAMP is complemented by the Newport Harbor Project, done in partnership with the city of Newport as well as local nonprofit and business organizations, that is working to address economic development issues and improve public access to the waterfront.

## PARTNERS

Rhode Island Sea Grant works with an array of partners to achieve its goals. Key partnerships have developed Special Area Management Plans (SAMPs) that guide decision making in coastal ecosystems (CRMC, municipal governments, nonprofit organizations, business organizations, and other stakeholders), developed a Smart Growth guide for coastal communities (EPA and NOAA), produced our flagship publication, *41°N* (URI Coastal Institute), and tested fishing gear designed in partnership with industry (Marine Institute of Memorial University).

Rhode Island Sea Grant has also worked with CRMC, the R.I. Emergency Management Agency, the R.I. Building Commission, and the R.I. Land Trust Council on sea level rise visualizations, sea level rise policies, and adaptation to climate change. The program worked with the NMFS Northeast Science Center on bycatch reduction in the haddock fishery through the use of the “Eliminator Trawl,” which was approved for use (as the “haddock rope trawl,” later renamed the Ruhle Trawl) in 2008. Sea Grant also assisted the Commercial Fisheries Research Foundation with its organizational development and distribution of \$2.4 million in cooperative research funds (see “Rhode Island Sea Grant External Research Management” section). The program also worked with Sand County Foundation on fisheries management workshops and publications in Narragansett, Del Mar, Calif., and Mystic, Conn.

## Major Partners

- Adler Pollock & Sheehan PC
- Alliance for a Livable Newport
- Aquidneck Island Planning Commission
- Aquidneck Land Trust
- City of Newport
- Commercial Fisheries Center of Rhode Island (representing 12 organizations)
- Commercial Fisheries Research Foundation of Rhode Island
- Marine Institute of Memorial University of Newfoundland
- Narragansett Bay National Estuarine Program
- National Oceanic and Atmospheric Administration
- National Sea Grant Law Center
- The Nature Conservancy
- Newport County Chamber of Commerce
- Newport County Tourism and Visitors Bureau
- NMFS Northeast Fisheries Science Center
- NMFS Northeast Regional Office
- NMFS Office of Protected Resources
- R.I. Coastal Resources Management Council
- R.I. Department of Environmental Management
- R.I. Emergency Management Agency
- R.I. Statewide Planning
- R.I. Watersheds, Bays and Estuaries Coordination Team
- Town of Middletown
- Town of Portsmouth
- URI Coastal Institute
- URI Coastal Resources Center
- URI Cooperative Extension
- U.S. EPA Smart Growth Office
- Washington County Regional Planning Council

## Other Partners

- Audubon Society of Rhode Island
- Beveridge & Diamond PC
- Blackstone River Watershed Council
- City of Pawtucket
- Coastal States Organization
- Conservation Law Foundation, Rhode Island Chapter
- Environmental Defense Fund
- Grow Smart Rhode Island
- Hinkley, Allen & Snyder LLP
- Law Offices of Carolyn Elefant
- Little Compton Harbor Commission
- Louisiana Sea Grant Legal Program
- Marine Renewable Energy Center, UMass
- Dartmouth Advanced Technology and Manufacturing Center
- Massachusetts Lobsterman's Association
- Massachusetts Office of the Attorney General
- Massachusetts Office of Coastal Zone Management
- Mid-Atlantic Fishery Management Council
- Mississippi-Alabama Sea Grant Legal Program
- National Fisheries Institute
- New England Fishery Management Council
- NOAA Coastal Services Center
- NOAA National Marine Sanctuary Program
- NOAA Restoration Center
- North Kingstown Free Library
- Northeast Aquatic Nuisance Species Panel
- Northeast Regional Ocean Council
- Pepe & Hazard LLP
- The Point Club
- R.I. Commercial Rod & Reel Anglers Association
- Rhode Island Land Trust
- R.I. Marine Fisheries Council
- R.I. Office of the Attorney General
- R.I. Office of Energy Resources
- R.I. Saltwater Anglers Association
- Roger Williams University
- Sand County Foundation
- Save The Bay
- Sustainametrix, Inc.
- Tillinghast Licht LLP
- Town of Lincoln Land Trust
- Town of New Shoreham Planning Board
- U.S. Army Corps of Engineers
- U.S. Department of Energy, National Renewable Energy Lab
- U.S. Fish and Wildlife Service Coastal Program
- U.S. Minerals Management Service
- U.S. Agency for International Development
- Warwick City Council
- Warwick Harbor Commission
- Williams Mystic Maritime Studies Program of Williams College and Mystic Aquarium
- Woods Hole Oceanographic Institution, Marine Policy Center
- Woonasquatucket River Watershed Council

## PARTNERSHIP PRINCIPLES

Developed by the Rhode Island Sea Grant Senior Advisory Council in 2002, this set of principles helps determine which programs are ripe for partnering and possible investment by Sea Grant.

**Scientific Expertise and Track Record:** Program is proven commodity with an excellent record of follow-through on commitments. Program is grounded in sound science with proven knowledge and links to a larger body of academic marine and environmental science expertise.

**Commonality:** Program shares common goals or common audience with Sea Grant.

**Leveraging:** Program has proven capacity to deliver applied research and/or outreach so that Sea Grant's investment will pay incremental costs rather than bear the full costs of programs.

**Two—Way Street:** Both programs can articulate the mutual benefits (both strategic and specific) derived from a Sea Grant partnership, and have a mutual understanding of the mandates of the parent organizations.

**Responsible Cadre of Interested Partners:** Groups have a cadre of qualified, responsible partners who express a strong interest in partnering with Sea Grant on a strategic, long-term basis.

**Fiscal Stability:** Program has stable staff and funding base, assuring that Sea Grant investments will not be wasted through short term project collaborations that end due to a fiscal crisis of the new partner.

**Joint Evaluation:** Partners express strong interest in incorporating evaluation and outcome criteria into joint activities from the outset to rigorously assess whether the partnership has been successful and has had beneficial impacts on Sea Grant and its stakeholders.

## COLLABORATIVE NETWORK/NOAA ACTIVITIES

### REGIONAL INITIATIVES

Rhode Island Sea Grant led the establishment of the Northeast Sea Grant Consortium, which supports regional efforts to improve stewardship of coastal resources through research, improvement of scientific information sharing, and planning and coordination activities. The consortium has developed a mechanism that promotes regional initiatives by only charging overhead by the host university, allowing more of the funding to be spent on the proposed projects rather than on administrative costs. All seven institutions hosting Sea Grant programs in the Northeast have signed the MOU. Rhode Island Sea Grant has contributed \$25,000 annually towards a Northeast Sea Grant fund for competitive regional research RfPs.

Rhode Island Sea Grant is a member of the National Sea Grant New York Bight Regional Planning Initiative. The New York Bight includes the coast from Cape May, NJ, to the south coast of Cape Cod, Mass. The initiative's focus is on the region's estuaries, which over the last 50 years have experienced varying degrees of human impact, especially from anthropogenic nitrogen, with most exhibiting evidence of eutrophication.

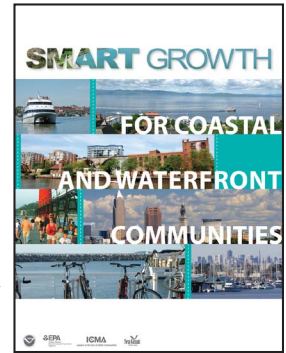
Rhode Island Sea Grant is also a member of the National Sea Grant Gulf of Maine Regional Planning Initiative, which produced its science plan for the Gulf of Maine in 2009. Rhode Island Sea Grant is joining seven members of the Northeast Sea Grant Consortium to invest in regional funding of two peer-reviewed science projects on invasive species and marine spatial planning identified in the Gulf of Maine Regional Ocean Science Plan.



## OTHER INITIATIVES

### Smart Growth

In 2006, with help from Rhode Island Sea Grant, the Aquidneck Island Planning Commission obtained assistance from the EPA to implement smart growth on Aquidneck Island. The process revealed that the EPA's smart growth elements could be refined to better apply to coastal areas, with their unique issues, such as the challenges in revitalizing waterfront brownfields while protecting water resources and habitats. NOAA and Rhode Island Sea Grant joined with the EPA to develop coastal smart growth elements, and a report and website to help communities apply the principles is online at [coastalsmartgrowth.noaa.gov](http://coastalsmartgrowth.noaa.gov). This document was also sponsored by the International City/County Management Association.



### Fisheries Extension Enhancement (FEE)



Rhode Island Sea Grant Fisheries Extension program co-leader Kathy Castro was the national chair of the FEE Coordination Committee. The FEE program ran from 2004 to 2009, enabled the establishment of seven regional coordinators, the hiring of 18 new FTEs, Sea Grant participation on 68 boards and committees; over 380 collaborations, resulted in 79 products, 15 awards, allowed for conducting of 146 educational programs; helped sponsor 15 graduate and undergraduate students, and resulted in over 132 peer reviewed publications. One highlight of Rhode Island's involvement was the partnership with industry that produced the Eliminator Trawl, which won the 2007 World Wildlife Fund Smart Gear Award and enabled harvest of underutilized haddock.

### North Atlantic Regional Team Climate Literacy Training

Rhode Island Sea Grant hosted this workshop in April 2010 that was designed to increase the capacity of NOAA representatives to communicate current efforts on climate change science and service in the region. At this workshop, 24 NOAA climate representatives and Sea Grant extension agents received training on the latest science, tools, and materials relevant to climate change in the North Atlantic, with the intent that these representatives would then host workshops to share this information with their colleagues.



# **PROGRAM CHANGES RESULTING FROM PREVIOUS REVIEW**

Prior evaluations of Rhode Island Sea Grant (site visits, PAT 2003) had noted some weakness in the organization in its strategic and implementation planning processes; questioned the program's balance between short and long-term research investments; asked to strengthen its advisory mechanisms; and asked about the internal review and reporting structures at URI.

## **STRATEGIC AND IMPLEMENTATION PLANNING**

In 2004–2005 Rhode Island Sea Grant engaged a nationally respected firm (Working InConcert, Inc.), whose lead consultant in strategic planning and organizational development worked in collaboration with Rhode Island Sea Grant leadership to develop strategic and implementation planning and evaluation. As a result, Rhode Island Sea Grant developed a: (i) detailed “Plan for the Plan”—which was later adopted by the National Sea Grant College Program for its new strategic planning process—(ii) developed specific planning objectives—vision, mission, short and long-term outcomes in all program thematic and functional areas, and (iii) vision for organizational development of Rhode Island Sea Grant after 2010 (Costa-Pierce et al., 2005). Regular refinements to Rhode Island Sea Grant's strategic plan—to make it a “living document”—have been implemented through the annual Ronald C. Baird Sea Grant Science Symposium and our Senior Advisory Council.

Costa-Pierce, B.A., A. Colt, V. Lee, K. Castro, K. Fletcher, M. Schwartz-Cromarty, and P. Nelson. 2005. Rhode Island Sea Grant College Program Strategic and Organizational Development Plan 2006–2010. Rhode Island Sea Grant, Narragansett, R.I. 44pp.

## **BALANCE BETWEEN SHORT AND LONG-TERM RESEARCH INVESTMENTS**

Rhode Island Sea Grant reorganized and downsized its management unit, combining previously separate units in management, communications, and education, resulting in a significant savings of funds. Program Administration Program Administration built the Rhode Island Sea Grant Foundation to help fund larger program development requests, with the result that many more program development funds were available over varying time frames. Rhode Island Sea Grant actually increased funding during an era of declining funding. As a result, the program has a unique mix of short- and long-term research investments in its Omnibus, Program Development, and leveraged grants processes, in which competitive funds are available for 1–3 year research grants. In 2010–2012, Rhode Island Sea Grant funded 10 Program Development grants totaling \$227,011.

## **ADVISORY MECHANISMS**

Since 2003 Rhode Island Sea Grant established an interactive Senior Advisory Council that has offered many new opportunities, substantially changed the way we view our roles and responsibilities, and allowed us the advantage of the reflections of outsiders on our impacts. The foundations, operations and impacts of the SAC on Rhode Island Sea Grant are covered in other parts of this Prospectus.

## **REPORTING STRUCTURE AND LEADERSHIP PERFORMANCE EVALUATIONS**

Rhode Island Sea Grant reports to the Dean of the Graduate School of Oceanography. There have been major changes in the URI leadership since the last review of the Rhode Island Sea Grant College program—a new URI President, Provost, Dean of the College of the Environment and Life Sciences (CELS), and Director of the URI Coastal Institute—since the last review. The Rhode Island Sea Grant Director and all Rhode Island Sea Grant Program Administration staff are reviewed every year. In addition, in 2009, a university-wide Administrator Evaluation Committee evaluated the performance of the Rhode Island Sea Grant Director over his 9 year tenure at URI. This review consisted of: (1) review of Dr. Costa-Pierce's self-assessment, including his responses to our questions during his interview; (2) summary of the results of the public survey that was administered; (3) summary of our interview with Dr. Leon Cammen, the National Sea Grant Program Director; and (4) conclusions regarding Dr. Costa-Pierce's performance.

# FUNDED RESEARCH

## 2010–2012 Omnibus

1. Fulweiler, Robinson. *Evaluating climate change impacts on nitrogen cycling along a gradient of anthropogenic impact—from Narragansett Bay to Rhode Island Sound and Block Island Sound.*
2. Kincaid, Christopher. *Role of environmental forcing and local geometry on the health of urban marine ecosystems.*
3. King, John. *Concluding the BayMap habitat mapping project and assessing the impact of nutrient reductions on habitat quality in Upper Narragansett and Greenwich Bays.*
4. Nixon, Scott. *City to Sound: benthic–pelagic coupling in the Providence River Estuary, Narragansett Bay, Rhode Island Sound and Block Island Sound.*
5. Prell, Warren. *A multi-proxy reconstruction of anthropogenic-induced productivity and spatial couple in Narragansett Bay.*
6. Rich, Jeremy. *Impacts of anaerobic ammonium oxidation (anammox) on benthic nitrogen cycling on Rhode Island coastal waters.*
7. Rowley, David. *The role of interspecies interactions in mitigating diseases of marine animals.*
8. Rubinoff, Pamela. *Linking natural, behavioral and communication sciences to enhance community well-being in the face of climate change.*
9. Ullman, David. *Observations of Rhode Island Sound circulation and hydrography: interaction with Massachusetts shelf waters.*

## 2008–2010 Omnibus

1. Bertness, Mark. *Is crab herbivory driving New England salt marsh die offs?*
2. Bradley, Terrance. *A collaborative study for the development of a behavioral assay to estimate discard mortality in summer flounder.*
3. Jenkins, Bethany. *Climate change and nitrogen cycling in Narragansett Bay: a coupled biogeochemical and molecular approach.*
4. Karp, Caroline. *Re-visioning women in the Southern New England fishing industry.*
5. King, John. *BayMap: A proposal to image the seafloor, map and ground truth the habitats, and document the cultural landscape of Narragansett Bay, and Rhode Island and Connecticut coastal environments.*
6. Lee, Chong. *Solving a squid processing waste disposal problem through bioconversion into organic fertilizer.*
7. Moran, Bradley. *An integrative study of changes in physical circulation, groundwater nutrient supply and plankton community structure in Rhode Island coastal waters.*
8. Nixon, Scott. *Experimental studies of benthic–pelagic coupling in a changing Narragansett Bay.*
9. Uchida, Hirotsugu. *Lab testbedding of fishery comanagement regimes.*
10. Udelhoven, Jay. *State and federal submerged lands law and policy assessment.*

## 2006–2008 Omnibus

1. Anderson, Chris. *Laboratory testbedding of transferable allowance policies and institutions: tradable output and input allowances.*
2. Bertness, Mark. *Shoreline development and the functioning of Narragansett Bay salt marsh ecosystems.*
3. Collie, Jeremy. *Multispecies fisheries models for ecosystem decision support.*
4. Dalton, Tracey. *Shoreline development and the functioning of Narragansett Bay salt marsh ecosystems.*
5. Hargraves, Paul. *Characterizing the dynamics of phytoplankton change in Narragansett Bay.*
6. Kincaid, Chris. *A combined modeling and observational study of circulation, residence time and biological-chemical transport within Narragansett Bay.*
7. King, John. *BayMap: a proposal to image the seafloor, map and groundtruth the habitats, and document the cultural landscape of Narragansett Bay.*
8. Moran, Bradley. *Integrated nutrient and bacterial TMDLs and best-management.*
9. Nixon, Scott. *Experimental studies of benthic–pelagic coupling in a changing Narragansett Bay.*
10. Smayda, Ted. *The Narragansett Bay plankton time series.*

# LEADERSHIP ON BOARDS & COMMITTEES

## Barry A. Costa-Pierce

### *International*

Food and Agriculture Organization of the United Nations (FAO) Working Group Chair for “Responsible use of resources for sustainable aquaculture” (2009—)  
Food and Agriculture Organization of the United Nations (FAO) Working Group Member for “An Ecosystems Approach to Aquaculture” (2007-2009)  
Member, ICES Working Group on the Environmental Impacts of Mariculture, 1999—  
World Fish Center (Penang, Malaysia) Senior Fellow (2008—)  
Aquaculture Without Frontiers, International Co-Chair with M.C. Nandeesh, Dean, Tamil Nadu University, India, 2010—

### *National*

Advisory Council, NOAA HBCU Diversity Initiative (NOAA Living Marine Resources Cooperative Science Center), University of Maryland Eastern Shore, 2006—  
Vice Chair, NOAA/National Sea Grant Association Healthy Coastal Ecosystems Focus Team, 2009—  
Member, External Relations Committee, Sea Grant Association, 2008—  
Scientific Expert, NOAA-NMFS Aquaculture Listening Sessions (East and Gulf Coasts), 2010  
Past Secretary, Board of Directors, Sea Grant Association  
Past Chair, Program Mission Committee, Sea Grant Association  
Past Chair, Ad Hoc Committee on International Sea Grant, Sea Grant Association

### *Regional*

Member, NOAA Sea Grant New York Bight Regional Ocean Science Council, 2008—  
Member, NOAA Sea Grant Gulf of Maine Regional Ocean Science Council, 2007—  
Board of Directors, Northeast Sea Grant Consortium, 2010—

### *State*

Chair, Science Advisory Committee, RI Bays, Rivers, and Watersheds Coordination Team, State of Rhode Island, 2009—

## Alan Desbonnet

### *National*

Alternate Member, Sea Grant Association  
Chair, National Sea Grant Research Coordinators  
Member, National Sea Grant Extension Assembly

### *Regional*

Northeast Sea Grant Regional Meeting Steering Committee (2009/2010)

### *Local*

Stonington Shellfish Commission, Secretary  
Wood-Pawcatuck Watershed Association Board of Trustees

## Susan Farady

Metcalf Institute for Marine and Environmental Reporting, Advisory Board member, 2010-present  
Stellwagen Bank National Marine Sanctuary Advisory Council, education representative, alternate, 2010-present  
Vermont Law School, Environmental Law Center Advisory Committee, Member, 1996-present  
SEA Semester, Overseers member, 2006-present  
Massachusetts Ocean Partnership (Partner)

## Jennifer McCann

2010 Waterways and Waterfronts National Symposium on Coastal Access Abstracts Selection Committee  
Aquidneck Island Planning Commission, Advisory member  
Aquidneck Island Planning Commission West Side Master Plan Task Force

## Pam Rubinoff

Leader, National Sea Grant Smart Growth Committee  
Co-chair, Northeast Sea Grant Regional Climate Network

## Laura Skrobe

Sea Grant Fisheries Extension Coordination and Enhancement Committee (Castro: Chair), 2006-present  
Sustainable Marine Fisheries Community of Practice, 2006-present

# SELECTED AWARDS AND HONORS

- Northeast Sea Grant Group Award (2008) for Outstanding Achievement in Extension for Rhode Island Sea Grant Fisheries Extension Program.
- Apex Award for 41°N, the Rhode Island Sea Grant magazine
- 2007 International Smart Gear Award for the “Eliminator Trawl” from the World Wildlife Fund
- Rhode Island Sea Grant director Award for Outstanding Service and Contributions to the World Aquaculture Society
- Northeast Sea Grant Group Award (2010) for Outstanding Achievement in Extension for Rhode Island Sea Grant Coastal Extension Program.

## FELLOWSHIP RECIPIENTS 2006–2011

### **NATIONAL MARINE FISHERIES SERVICE**

2006: Matthew Freeman

2007: Kiersten Curti, Elizabeth Smith

**TOTAL: 3**

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### **COASTAL SERVICES CENTER**

2008: Matt Nixon

2009: Laura Mattison

2010: Heidi Nutters

**TOTAL: 3**

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### **KNAUSS MARINE POLICY**

2006: Rebecca Asch, Michael Conathan

2007: Jingjie Chu, Elizabeth Etrie, Yong Jiang

2008: Marselle Alexander-Ozinskas, Karen Hyun, Jennifer Mehaffey, Christine Patrick

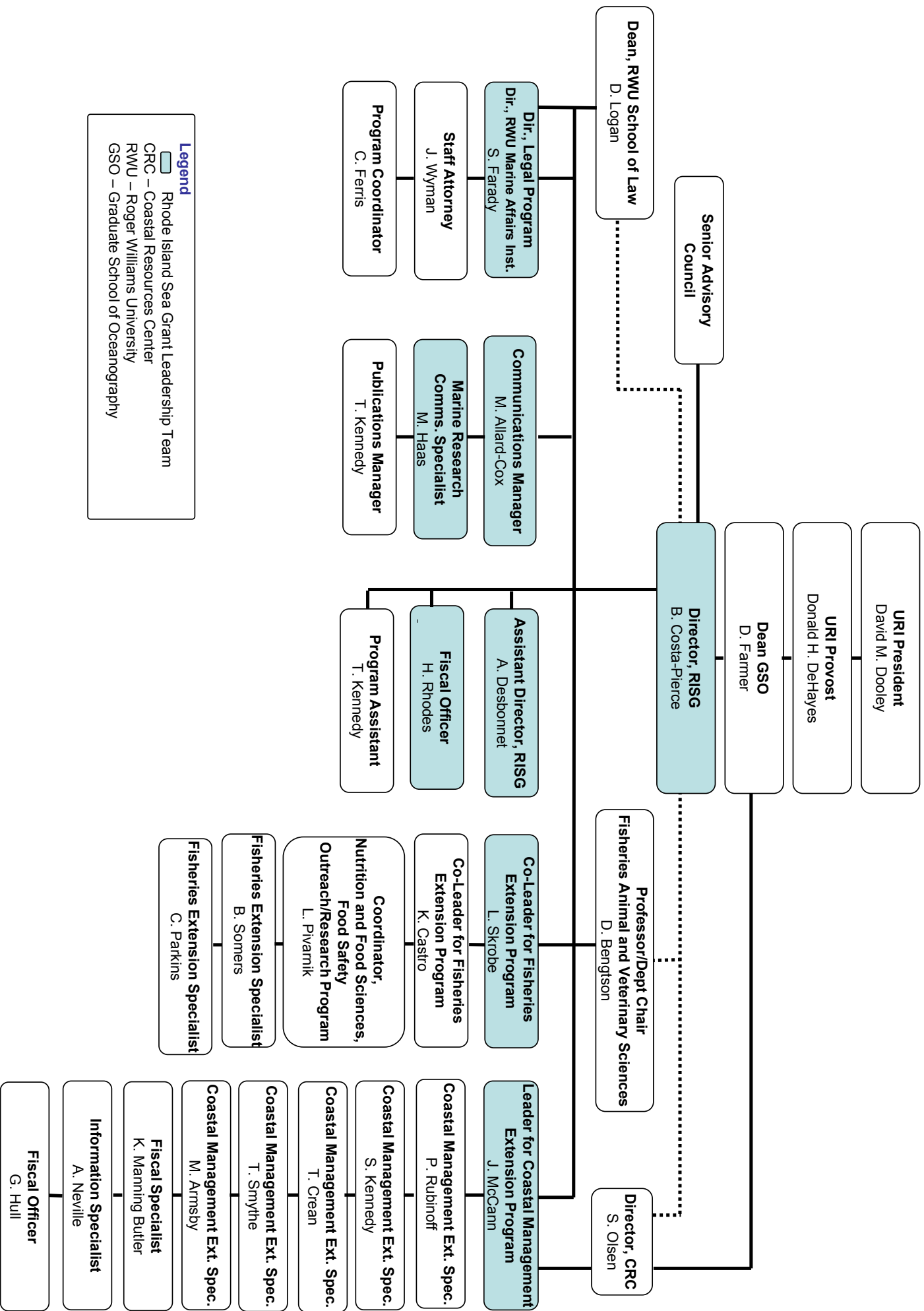
2009: Nicholas Battista, Kate Mulvaney

2010: Jacqueline Kemp, Long Zhou

2011: Christina Hoefsmit, Nicole Rohr, Kathleen Haber, Carrie Gill

**TOTAL: 17**

## Organizational Structure of Rhode Island Sea Grant



**Legend**

- Rhode Island Sea Grant Leadership Team
- CRC – Coastal Resources Center
- RWU – Roger Williams University
- GSO – Graduate School of Oceanography



