



COASTAL
INSTITUTE

<https://ci.uri.edu>



Supporting Coastal Research and Outreach through Interdisciplinary Approaches: Return on Investment

THE
UNIVERSITY
OF RHODE ISLAND

Calendar Year 2017 — Spring 2018

Supporting Coastal Research and Outreach through Interdisciplinary Approaches: Return on Investment

CONTENTS

Southern New England Recreational Fishing Symposium	2
North Atlantic Coast Cooperative Ecosystem Studies Unit (NAC-CESU)	3
National Park Service Duty-Stationed Personnel at URI	3
Narragansett Bay Estuary Program	4
Scientific Support for Environmental Emergency Response (SSEER)	4
Land and Water Conservation Summit	5
Coastal and Estuarine Research Federation Biannual Meeting	6
2017 Estuary Research Workshop: Limiting Factors Beyond Nitrogen	6
30th Annual NIEHS Superfund Research Program Meeting	6
National Humanities Conference	7
Scott W. Nixon Lecture	7
Coastal State Series	8
National Institute of Environmental Health Sciences Superfund Research Program	8
National Institute of Environmental Health Sciences Centers for Oceans and Human Health Program	9
U.S. EPA Southeast New England Program: Improving Environmental Monitoring	9
U.S. EPA Southeast New England Program: Climate Change Response Demonstration Site	10
CI Student Support	10
The Nature Conservancy / Coastal Institute Global Marine Research Awards	11
Fulweiler Award: Research on Nitrogen Uptake Cycle in Narragansett Bay Support	11
Climate Response Demonstration Sites	11
Natural Area: Napatree Point led by Dr. Peter August	12
Urban Ports: led by Dr. Austin Becker	12
Mixed-Use: co-led by Dr. Charles Roman	13
CI Senior Fellows	13
Economic Value of Rhode Island Coastal Zone	14
Data Carpentry / rhodyRstats	15
Coastal Images: The Work of Eric Lutes	15
Napatree Point Video Trilogy	16
41° North Rhode Island’s Ocean and Coastal Magazine	16
Watershed Counts	17
RI Environmental Monitoring Collaborative	17
Waves of Change Website (www.riclimatchange.org)	18
Institute Personnel	18
Coastal Institute Grant Support	19
Reporting Structure	20
Coastal Institute Activities — 2017 to spring 2018	21
Value Added of Grant-in-Aid, Leveraging and Catalyst Grants	23



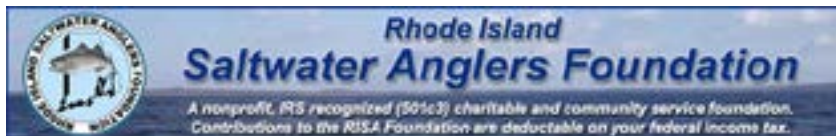
Supporting Coastal Research and Outreach through Interdisciplinary Approaches: Return on Investment

The Coastal Institute (CI) is engaged in a broad range of activities that support its mission to increase our understanding of the relationships between human activity and the condition of the coastal environment and its resources. The CI employs this understanding to work in partnership with local, state, federal, and international agencies to contribute to the solution of the complex problems of human use and development in coastal environments. The CI works across and beyond traditional structures to encourage new approaches to problem solving.

This report provides an overview of the major projects the CI has engaged in from Spring 2017 through Spring 2018. Given the fiscal year cycle, this time period best captures an overview of the return on investment (ROI) of CI activities in support of its Senior Fellows as well as local, state, regional, and federal agencies, NGOs, URI, and other partner academic institutions, elected officials, and municipalities. As always, the CI strives to serve as a neutral venue, promote collaboration, advance knowledge, and translate science. This report does not contain an exhaustive list of activities and more information may be found on the CI website at ci.uri.edu and in the *Investing in Our Coasts* ROI report at https://ci.uri.edu/files/Investing_Coasts.pdf. It is important to note that ROI considers not only financial returns on the overhead investment but also intangible returns that magnify URI's value to the many external partners with whom the CI engages.

The Coastal Institute's role as a neutral venue includes collaboration with and support for the work of a wide-range of partners. The CI does not reside within a single college or department at the University of Rhode Island, but serves as a transdisciplinary venture that encompasses a variety of interests both in academia and beyond. Because of this, the CI retains a neutral stance with regard to research and the application of regulations so long as the path forward protects our oceans, coastal, and upland communities.

Southern New England Recreational Fishing Symposium



The Magnuson-Stevens Act: How to Make It Work for Recreational Fishing. (January 26, 2018)

The CI sponsors this biannual event of the RI Saltwater Anglers Foundation to discuss the management of recreational fisheries in southern New England and their contribution to local and state economies. The CI director serves on the event planning committee and assists with the identification of expert speakers.

- **CI Support:** \$1,000
- **CI Partners:** RI Saltwater Anglers Foundation, Inc., Marine Fish Conservation Network
- **ROI:** Meets CI mission by providing support for economic analysis of recreational fishing—a significant aspect of tourism—and the associated economic multiplier effect.

The Coastal Institute promotes collaboration by serving as convener for state and regional organizations, and interested, invested parties to address problems facing our coasts and watershed. The CI serves as the host organization, convener, and co-coordinator for a variety of state and regional collaboratives. By leveraging expertise, experience, and research across geographic areas and scientific disciplines, the CI works to develop cutting-edge solutions to the problems facing our coastal zone environment and communities.

North Atlantic Coast Cooperative Ecosystem Studies Unit (NAC-CESU)



URI's role as host to the NAC-CESU is situated within the CI and the CI director also serves as director of the NAC-CESU. This regional initiative is managed through the U.S. Department of the Interior with the goal of moving resources rapidly from federal agencies to targeted researchers via letters of interest or statements of interest, a capacity of particular

value when the conducting of research is critical within a tight timeframe, e.g., assessing damage post-Superstorm Sandy.

- Provided research funding for URI students and faculty and a base of operations for 5 FTE's from the National Park Service who are duty-stationed at URI.
- Adopted a new indirect cost rate structure to provide greater administrative support to host institutions.
- Project database was developed by the NAC-CESU at the initiative of the CI and is now being upgraded to serve as an electronic database in the 17 regional units.
- http://www.cesu.psu.edu/unit_portals/NOAT_portal.htm
- Federal Partners (10): *Bureau of Indian Affairs, U.S. Army Corps of Engineers - Civil Works, Bureau of Ocean Energy Management, Department of Defense, U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration, National Park Service, U.S. Department of Agriculture - National Resources Conservation Service, U.S. Geological Survey*
- Tribal Partner (1): *Narragansett Indian Tribe*
- Academic Partners (19): *Bates College, City University of New York, College of the Atlantic, Columbia University, Cornell University, Harvard University, Manhattan College, Northeastern University, Rutgers University, SUNY-College of Environmental Science and Forestry, Stony Brook University, University of Connecticut, University of Maine - Orono, University of Maryland Center for Environmental Science, University of Maryland - Eastern Shore, University of Massachusetts - Amherst, University of Massachusetts - Boston, University of New England, University of Rhode Island*
- Other Partners (7): *Biodiversity Research Institute, Marine Biological Laboratory, Maryland Coastal Bays Program, Provincetown Center for Coastal Studies, Schoodic Institute at Acadia National Park, Narragansett Indian Tribal Historic Preservation Office, Virginia Aquarium & Marine Science Center Foundation, Inc.*
 - **CI Support:** \$500 and director's time, 3-4 days monthly
 - **CI Partners (oversight):** National Park Service, Department of the Interior
 - **ROI:** \$2,134,434

National Park Service Duty-Stationed Personnel at URI



The CI initiated and co-wrote a report with the four northeast programs managed at URI by National Park Service duty-stationed personnel. These include the North Atlantic Coast Cooperative Ecosystem Studies Unit, the Northeast Coastal and Barrier Network Inventory and Monitoring Division, the Climate Change Response Program, and the Field Technical Support Center. These programs provide support to the University in the form of grants, internships, field experience, classes, career counseling, and service on graduate committees. A full overview of their contributions and value to URI is outlined in *Partnership for the Environment: National Park Service Contributions to the University of Rhode Island* (2017). <http://ci.uri.edu/publications/>

- **CI Support:** \$750 NPS (NPS residence value report design and distribution)
- **CI Partners:** National Park Service
- **ROI:** See <http://ci.uri.edu/2018/04/19/nps-uri-partnership-report/> for grants and services specifics.

Narragansett Bay Estuary Program



CI director chairs Steering Committee, Executive Committee, and Communications/Media Committee as well as working in partnership with host entity, the New England Interstate Water Pollution Control Commission (NEIWPC); CI assistant director serves on Steering Committee. The role of the Steering Committee is to provide guidance on bi-state work to protect and preserve Narragansett Bay and its watershed through partnerships that conserve and restore natural resources, enhance water quality, and promote community engagement. CI director is now working on wrapping up oversight of adherence to and development of processes in keeping with the EPA-approved Corrective Action Plan, which was initiated and promoted by the CI director as essential to improvement of the efficacy and value of the NBEP in keeping with National Estuary Program guidelines.

- CI director promoted and supported development of Science Advisory Committee to which a number of URI researchers were appointed including Committee Chair Dr. John King (CI associate advisory director) who has played a key role in transforming the legitimacy of NBEP’s reputation for solid scientific analysis and reporting.
- NBEP completed the EPA-required Status and Trends Report, *The State of Narragansett Bay and Its Watershed*, both the technical and summary reports. CI director provided management and budgetary oversight, CI assistant director provided editorial review, CI associate scientist, Dr. Charles Roman, provided scientific and editorial review of the 500-page document with NEIWPC and a lesser portion of CI support. Dr. John King provided leadership with regard to organization, consistency, and scientific expertise.
 - **CI Support:** director, 3-5 days monthly; assistant director, 1 day monthly; associate scientist Roman, 1 month of technical review
 - **CI Partners:** U.S. Environmental Protection Agency (funding and oversight of the National Estuary Program), New England Interstate Water Pollution Control Commission (host entity), Narragansett Bay Estuary Program Executive and Steering Committees comprised of 24 bi-state representatives from state agencies, universities, and nongovernmental organizations in Rhode Island and Massachusetts.
 - **ROI:** CI mission is to partner with state, regional, and federal agencies to monitor and manage estuaries and watersheds for ecological health and compliance with state and federal guidelines. Following the Corrective Action Plan, NBEP is now better positioned to deliver its obligations driven by the Clean Water Act. In addition, URI has benefited by interdisciplinary relationships created through the SAC and leading to Southeast New England Program (SNEP) grant funding proposal pending.

Scientific Support for Environmental Emergency Response (SSEER)



CI maintains an MOU with the RI Department of Environmental Management (RIDEM), Office of Emergency Response, to improve environmental emergency preparedness in Rhode Island by enabling RIDEM to deploy university research scientists, professional staff, and graduate students to assess, reduce, or remediate threats—largely in a natural or manmade disaster—to public health and safety, and the environment. The CI works with RIDEM’s Office of Emergency Management to hold an annual training for SSEER personnel.

- Continuation of annual workshop for SSEER scientists and students trained to be deployed in a natural or manmade disaster. Workshop goals are to refresh awareness and skills, review Incident Command System (ICS) and deployment protocol, recruit and train new members. CI director or her designee works with Jim Ball, director RIDEM/OEM. <http://web.uri.edu/coastalinstitute/ventures/sseer/>
- CI director and digital media and systems management specialist worked with Dr. Peter August and a retired West Warwick Police detective to develop appropriate Chain of Custody protocols and training for SSEER personnel. Dr. August is provided partial summer salary to “deepen the bench” during hurricane season, which ensures oversight of SSEER commitments in the director’s absence.
- Continue to deliver and expand SSEER speaker series.

- **CI Support:** director, digital media/systems specialist staff time, \$15,000 P. August summer salary
- **CI Partners:** RI Department of Environmental Management, Office of Emergency Management, CELS, GSO, specialists in complementary areas from state and private colleges and universities, NOAA
- **ROI:** Meets CI’s mission in service of the State of Rhode Island; funding provided by RIDEM or next tier lead agency in a qualified event.

The Coastal Institute advances knowledge by providing training and support to CI Senior Fellows and other collaborators to increase scientific understanding of our coasts and communities. The CI supports interdisciplinary research and the scientists who conduct that research through Senior Fellows programs, grants-in-aid, and opportunities to collaborate on projects that support the mission of the CI. The CI also sponsors workshops and professional development opportunities to support and produce effective and competitive research.

SUPPORT OF CONFERENCES AND SUMMITS

CI sponsors scientific and management conferences that highlight the ecology, resilience, and/or management of Narragansett Bay and its coast and watershed. The conferences, in turn, are a showcase for URI scientists and students as well as important opportunities for partnership building, sharing of research, and dissemination of solutions.

Land and Water Conservation Summit



CI is a lead sponsor of this annual, daylong conference that provides information, skills, and connections to conservation NGOs, watershed councils, town managers, regulators, and individuals interested in land, watershed, riverine systems, fresh and saltwater quality, and estuary conservation. In addition, the CI director assists with conference planning and serves as emcee. CI assistant director prepares

poster, digital media/system specialist prepares display table, and all participate in daylong summit.

- Sponsored, attended, planned, and emceed the 2017 Summit held March 11, 2017. ~350 attendees.
- Sponsored, attended, planned, and emceed for the 2018 Summit held March 10, 2018. ~420 attendees.
- Committed to support of future summits

- **CI Support:** \$1,000 annually, staff time
- **CI Partners:** Rhode Island Audubon, Rhode Island Land Trust Council
- **ROI:** Meets CI mission to advance knowledge and develop solutions to environmental problems in coastal ecosystems. Attendees have included elected officials, e.g., mayors, town managers, Governor Raimondo, and Senator Sheldon Whitehouse (D-RI).

Coastal and Estuarine Research Federation Biannual Meeting



CI was a supporter of the 2017 biannual CERF conference held in Providence, RI, November 5-9, 2017. This conference brought together over 1,500 researchers from around the world, and particularly highlighted the Narragansett Bay estuary and the excellent work being done here.

- CI was a CERF sponsor and all staff attended the 2017 conference.
 - Director co-wrote, directed, and produced *It's A Shore Thing: A Coastal Cabaret* for the closing ceremony. Digital media/system specialist served as stage manager.
 - Director planned and spoke at 2017 CERF Inclusion Lunch, focusing on challenges faced by underrepresented people in the sciences—LGBTQ, women, Latinos, African Americans, among other groups.
 - Assistant director and digital media/systems specialist posted and hosted display in the Exhibit Hall featuring the work of the CI.
- Assistant director developed a poster with digital media/systems specialist that they presented on the CI Coastal Resilience Demonstration Sites.
- **CI Support:** \$2,720
 - **CI partners:** EPA-Atlantic Ecology Division, URI Foundation
 - **ROI:** CI demonstrated range of pathways to communicate science in engaging ways.

2017 Estuary Research Workshop: Limiting Factors Beyond Nitrogen



CI co-hosted workshop with the New England Interstate Water Pollution Control Commission (NEIWPCC), bringing together over 100 experts, administrators, and advocates from across New England who conduct or oversee estuary research and monitoring. The purpose was to discuss nutrients (with an emphasis on phosphorous) that are potentially limiting in, and detrimental to, the Northeast's estuaries (September 12, 2017). <http://neiwpc.org/our-programs/assessment-and-research/regional-research-initiative/2017-estuary-research-workshop/>

- **CI Support:** Staff time assistant director and digital media/systems specialist
- **CI Partners:** New England Interstate Water Pollution Control Commission
- **ROI:** Strengthened URI's ties with NEIWPCC for future partnership, outreach, and funding opportunities.

30th Annual NIEHS Superfund Research Program Meeting



NIEHS hosted its annual workshop for Superfund Research Programs across the country on December 6-8, 2017 in Philadelphia, PA, with a theme of Fundamental Research for Innovation and Health. CI Two of the three CI staff attended as Research Translation Team (RTC) members, part of the \$8 million NIEHS SRP award.

- Attended the annual meeting with other representatives of the URI STEEP Center.
- Assistant Director prepared and presented a poster on an overview of

URI STEEP, one of the four newly funded SRP centers.

- **CI Support:** Staff time: assistant director; media systems specialist
- **CI Partners:** Harvard T. H. Chan School of Public Health, Silent Spring Institute
- **ROI:** Introduced RTC and CI to broader NIEHS SRP centers.

National Humanities Conference



National Humanities Alliance

CI director keynote speaker on panel for National Endowment for the Humanities annual conference in Boston, MA. *The Humanities and 21st-Century Challenges*. November 2, 2017.

- **CI Support:** director time
- **CI Partners:** RI Council for the Humanities
- **ROI:** Continue to build relationship with and potential funding from RICH/NEH for *Economic History of Narragansett Bay* (tentative title).

SUPPORT OF LECTURE SERIES

CI supports several lecture series at URI to promote the dissemination of scientific information, promote inter- and intra-institution collaborations, and support graduate student education.

Scott W. Nixon Lecture



CI hosts an annual lecture in memory of Dr. Scott W. Nixon, a world-renowned biological oceanographer who spent his career at the URI Graduate School of Oceanography. Guest lecturers from around the world deliver a keynote lecture and attend a series of daytime and evening events available to URI researchers and graduate students as well as the general public (<https://ci.uri.edu/ci-projects/lectures-and-workshops/>).

- In 2018, CI added a mentoring dinner for untenured early career women scientists, which the CI plans to grow into a series of ongoing mentoring workshops such as the CI director presented as part of the ADVANCE CT mentoring efforts.
- Hosted the fifth annual lecture with keynote speaker Dr. Susan Lozier, Ronie-Richele Garcia-Johnson Professor of Earth and Ocean Sciences, Nicholas School of the Environment, Duke University (April 12 - April 14, 2017).
- Hosted the sixth annual lecture with keynote speaker Dr. Robinson W. Fulweiler, Associate Professor and Director of the BU Marine Program, Boston University (April 4 - April 5, 2018).
- **CI Support:** \$6,000 average annually, staff time
- **CI Partners:** GSO and EPA-AED serve as members of selection committee
- **ROI:** Distribution of excellent science through live streaming event and archiving on CI's YouTube Channel [www.youtube.com/user/CoastURI]

Coastal State Series



CI supports this annual series of four lectures focused on the state and future of coastal Rhode Island (<http://seagrant.gso.uri.edu/special-programs/coastal-state-discussion-series/>). The series was held in spring semesters 2017 and 2018.

- **CI Support:** \$750 average annual for refreshments that attract larger audiences of undergraduates, graduate students, faculty and the interested public

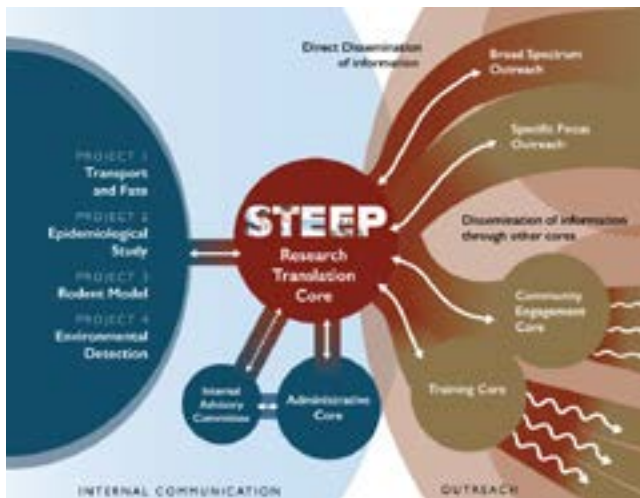
- **CI Partners:** Rhode Island Sea Grant (sponsor), URI Graduate School of Oceanography

- **ROI:** Meets CI mission of dissemination of science to enrich undergraduate and graduate education with new insights.

INVOLVEMENT IN GRANT PROPOSALS

CI collaborates on research and outreach grant proposals to a variety of funding sources including federal agencies and nonprofit organizations.

National Institute of Environmental Health Sciences Superfund Research Program



CI serves as lead of the Research Translation Core of STEEP (Sources, Transport, Exposure, Effects of PFASs) Superfund Research Program. This interdisciplinary and multi-institutional grant draws on the expertise of several URI colleges and units, including GSO, CELS (Watershed Watch), COE, Pharmacy, and the CI; Harvard T.H. Chan School of Public Health, Department of Environmental Health; and Silent Spring Institute to conduct research on emerging contaminants (PFASs) that impact environmental and human health and engage the general public in the findings and potential prevention or lessening of adverse health impacts.

— Assisted R. Lohmann with interdisciplinary meetings with Brown SRP, consultants, and emerging SRP team. Provided ongoing team meeting refreshments and a dinner for guest consultants and potential partners.

- Worked intensively with PI Rainer Lohmann to prepare, write, revise, and submit SRP proposal. Worked with designer to develop an array of diagrams, logo, and tables to emphasize key points and team history.
- Provided onsite support for SRP reporting, hiring of project coordination staff, and overall organization to support PI Lohmann while he was on sabbatical and working from India and then Germany.
- Planned, supported, and coordinated a Press Conference and Kick-Off Community Event held on December 4, 2017, which resulted in extensive media coverage.
- Launched URI STEEP website to reviewers: www.uri.edu/steep. Media launch will occur on May 8, 2018.
- Attended national and local conferences to learn administrative requirements to support PI Lohmann.
- Developed one-pagers, press releases, well water testing flyers and other materials for public engagement on Cape Cod.

- Developing concepts for podcasts and short videos for website
- Developing Spring Science Day and associated materials for Community Engagement Core to take place in Hyannis, MA, at Cape Cod study site.
- Developing novel uses of social media to drive Millennials and GenZs to the website and to repurpose effective explanations for the public using everyday language.
- Status: Awarded August 2017 (\$8 million over 5 years).

- **CI Support:** \$3,000, staff time

- **CI Partners:** GSO, CELS, COE, Pharmacy, Harvard T. H. Chan School of Public Health, Dept of Environmental Health, and Silent Spring Institute

- **ROI:** 5-years overhead return, modest percentage of staff salary, and prominent use of research translation, web and poster design, presentation of events (and training), and social media skills to address a serious threat to public health and the environment

National Institute of Environmental Health Sciences Centers for Oceans and Human Health Program



CI served as lead for Community Engagement and Research Translation Core of this interdisciplinary grant, focusing on the exploration, research, and identification of emerging HABs in the Great Lakes. This grant pulled together interdisciplinary expertise from URI.

Submitted March 2017; status, not awarded, January 2018.

- **CI Support:** Director, assistant director, and digital media/systems specialist staff time

- **CI Partners:** GSO, Pharmacy

- **ROI:** developed interdisciplinary team with relationships to build upon to encourage future grants.

U.S. EPA Southeast New England Program: Improving Environmental Monitoring



CI was subawardee on grant to RI Department of Environmental Management to analyze and report on environmental monitoring data. The project was to:

- Investigate the interaction between freshwater flow from the major rivers into Narragansett Bay and hypoxia in the upper bay, resulting in two technical reports that have been submitted to RIDEM;
- Develop a new website for the RI Environmental Monitoring Collaborative (www.rimonitoring.org), which is chaired by the CI, to inform the general public and state decision-makers on the importance of long-term monitoring; and

- Bring together local experts at Toward Comprehensive Monitoring of Narragansett Bay workshop (October 19, 2017) to discuss current monitoring gaps that need to be filled in order to make effective management decisions, including published workshop proceedings that can be found at www.rimonitoring.org.

- **CI Support:** assistant director (subaward lead), digital media/systems specialist and director staff time. Freshwater flow report, research associate Dr. Q. Kellogg

- **CI Partners:** EPA-AED, RIDEM, Environmental Monitoring Collaborative, GSO, CELS

- **ROI:** Staff time digital media/systems specialist and students

U.S. EPA Southeast New England Program: Climate Change Response Demonstration Site



CI served as lead on a grant proposal focused on planning for sea level rise and storm surge for coastal ecosystems.

— Submitted: Preproposal March 30, 2018

— Status: Invited to submit full proposal April 26, 2018

● **CI Support:** staff time

● **CI Partners:** Save the Bay, the URI Coastal Resource Center, and the towns of Barrington and Warren, RI, URI faculty

● **ROI:** Planned to enhance the Climate Change Response Demonstration Site focused on mixed use, potential funding \$156,416.

CI Student Support



Left to right: graduate students: Tara Franey — Teresa Schwemmer — Jamie Puelo
undergrads: Aislyne Calianos— Becky Gumbrewicz

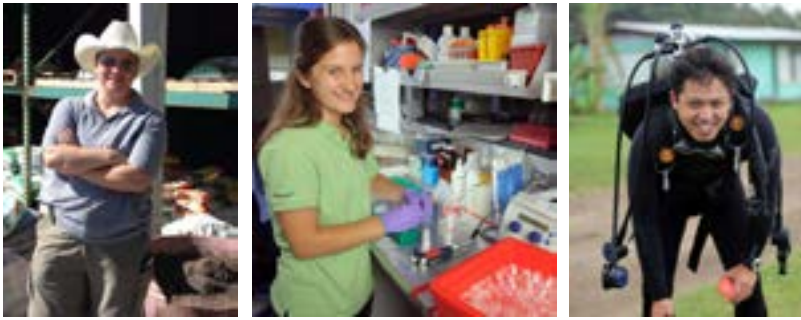
CI employs undergraduate and graduate students to work on a per-project basis on items including development of communication tools including primers and presentations, development and ongoing updating of and additions to website to translate climate change for the RI general public, and convey results of environmental monitoring to the RI state and federal representatives. Every effort is made to provide student employees with more of a paid internship model than a job. Students have used CI experience to enhance their grad school, internship, and fellowship applications.

● **CI Support:** staff time, student salaries \$15,247 (FY18) and \$19,895.17 (FY17)

● **CI Partners:** Student employees are invited to plan events and meet scholars, artists, fishermen, and researchers. They are invited to mentoring events and treated as a team members.

● **ROI:** Enhances the experience of employed students, introduces them to a wide range of career options, enhances their CV, encourages young scientists and marine affairs students, etc. to engage in both research and complementary outreach.

The Nature Conservancy / Coastal Institute Global Marine Research Awards



CI funds competitive award with The Nature Conservancy. Recipients for 2017 & 2018 were (left to right) Amber Hardy, Rebecca Stevick, Paul Carvalho.

- **CI Support:** \$12,000 annually
- **CI Partners:** The Nature Conservancy
- **ROI:** supports research work to advance the conservation and restoration of marine and coastal ecosystems.

Fulweiler Award: Research on Nitrogen Uptake Cycle in Narragansett Bay Support



CI joined with RISG to alternately fund three of six years of annual research focused on the Narragansett Bay Nitrogen Uptake Cycle research of Dr. Robinson "Wally" Fulweiler, which relies heavily on data collected by S.W. Nixon et al. since 1974. Fulweiler is employing nitrogen flux measures as she tries to tease out nitrogen reduction vs. temperature increase responses. This research—"Narragansett Bay Benthic Fluxes — A Barometer of Change"—is critical to a deeper understanding of climate change impacts Narragansett Bay.

- **CI Support:** \$18,000 over three years
- **CI Partners:** RISG, Fulweiler Lab at Boston University
- **ROI:** Much needed understanding of the nitrogen cycle in Narragansett Bay, which

has significant economic impacts on fisheries, tourism, and water quality among other issues of habitat and ecological health

Climate Response Demonstration Sites



CI began an ongoing initiative to establish three demonstration sites throughout the state to test and demonstrate how coastal resiliency to climate change can be improved.

Natural Area: Napatree Point led by Dr. Peter August



CI established its first demonstration site at the Napatree Point Conservation Area in Westerly, RI. Napatree Point was once the site of 39 summer “cottages” that were destroyed in the 1938 Hurricane. Following that natural disaster, a conservation area was established and construction not allowed. This site demonstrates how natural areas can heal and adapt to impacts from climate change. <https://ci.uri.edu/demonstration/>

- Supported removal of invasives and planting of Rhode Island native plants, grasses, and trees in effort to reduce and close walking paths that cut through the vegetation outside of designated trails.
- CI produced and scripted a trilogy of videos highlighting the ecological importance of Napatree Point and the research that is conducted there: *Change: Tracking the Shifting Shoreline*, *Connected: Wildlife of the Barrier Beach*; and *Discovery: People in Nature at Napatree*. The trio was premiered at the Livery in Watch Hill, RI and can be viewed on the CI YouTube Channel. www.youtube.com/user/CoastURI
- Monitoring abiotic and biotic factors in the Napatree Lagoon to better understand the interactions among important species such as horseshoe crabs and piping plovers, among others. Results can be found in Chapters 15-17 of the 2017 State of Napatree Report: http://www.edc.uri.edu/PERSONAL/PETE/napatree/son2017_final/.
- **CI Support:** \$10,000 leveraging grant, assistant director conducts monitoring studies of lagoon onsite
- **CI Partners:** Watch Hill Conservancy, Watch Hill Fire District, RI Natural History Survey – Rhody Native Program, RI Coastal Resources Management Council, RI Department of Environmental Management
- **ROI:** Developing best practices for coastal resilience by observing and collecting data on “natural area” left to recover on its own with little to no human interference.

Urban Ports: led by Dr. Austin Becker



Focused on coastal resiliency of an urban hub and vulnerability of the Port of Providence—a port critical to all New England—to demonstrate ways in which business and industry that depend on being located on the water are vulnerable and to develop practices to mitigate the impacts of climate change and increase resilience.

- Long range study complete and storm scenario website established: <https://www.portofprovidenceresilience.org/>
- **CI Support:** \$4,000 leveraging grant, associate scientist Dr. Charles Roman for assistance in development of NOAA proposal

- **CI Partners:** Marine Affairs, CRMC, Department of Landscape Architecture
- **ROI:** development of best practices to protect port infrastructure and prevent loss of services and potential release of contaminants

Mixed-Use: co-led by Dr. Charles Roman

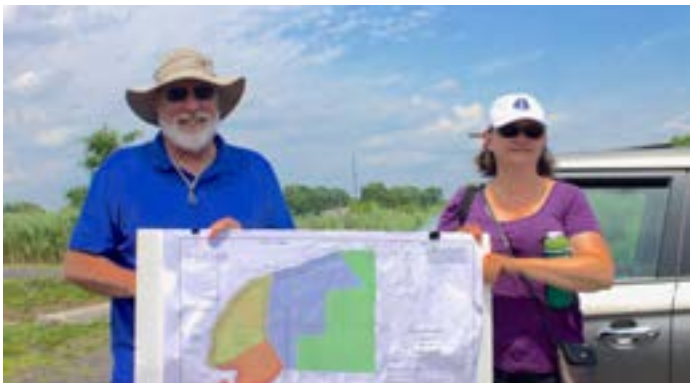


There are parallel threats from climate change to the neighboring towns of Warren and Barrington, yet distinct challenges due to their array of economic uses and concerns. CI supports a mixed-use site to demonstrate how coastal communities with an array of residential, business, municipal, and economic interests can work together to improve resiliency.

- Held public information sessions in the towns of Barrington and Warren
- Secured grant funding from Quebec-Labrador Foundation Marine & Coastal Conservation Program to support municipal meetings.

- **CI Support:** Staff time for associate scientist and digital media/systems specialist
- **CI Partners:** Town of Warren, Town of Barrington, URI Coastal Resources Center, Save the Bay, RI Coastal Resources Management Council, CELS, GSO
- **ROI:** In keeping with the CI mission to develop and test best practices for coastal management. Currently invited to submit full proposal for SNEP grant in support of this project.

CI Senior Fellows



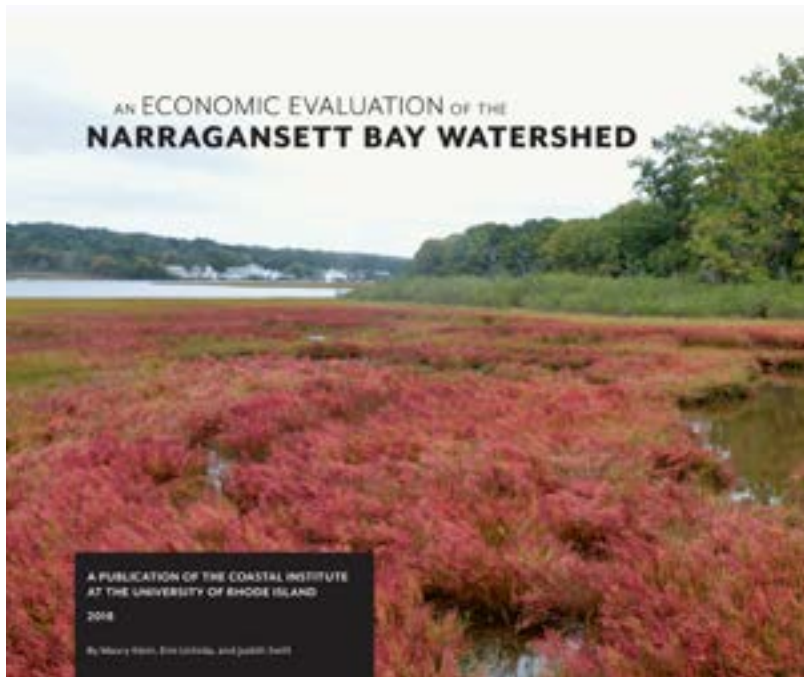
CI fosters and facilitates interaction with Senior Fellows who constitute the collective expertise that can be brought to bear in resolving environmental problems in coastal ecosystems. Senior Fellows are from URI, Brown, RIDEM, Harvard, National Park Service, Roger Williams University, Narragansett Bay Estuary Program, NGOs, and freelance entrepreneurial studios. Serve as consultants to director on CI projects and investments, provide scientific, humanities, and artistic expertise for outreach products.

— Senior Fellows list: <https://ci.uri.edu/fellows/current-senior-fellows/>.

- Awarded Grants-In-Aid to URI CI Senior Fellows totaling over \$128,847 (FY2017) and \$146,808 (FY2018) in College of Arts and Sciences, College of the Environment and Life Sciences (Departments: Biological Sciences, Environmental and Natural Resource Economics, Natural Resources Science, Landscape Architecture, Cell and Molecular Biology; Environmental Data Center), Graduate School of Oceanography (Coastal Resources Center, Inner Space Center, Office of Marine Programs, RI Sea Grant).
 - Examples include proposal development, research publication, critical equipment purchase and/or repair, hiring undergraduate and graduate students for coastal projects/research; purchasing display equipment, field gear, drones, and cameras; and support of websites, whitepapers, conferences, and professional development for large grant management.
 - July 20, 2017 annual meeting included fieldtrip to the Sachuest Point National Wildlife Refuge (viewing of saltmarsh restoration), the CI Demonstration Site in Warren, RI (vulnerable wastewater treatment plant and vulnerable capped contaminated land adjacent to river), and provided a yearly update on CI initiatives, funding, and future plans.
 - Planning July 19, 2018 annual meeting including a daylong fieldtrip to the Wild & Scenic Taunton and the Historic Blackstone Rivers.
- **CI Support:** \$1,200 annual average (GIA support in body of text), CI staff and students

- **CI Partners:** varies each year with field trip site, e.g., Save the Bay, NPS, agricultural sites, experimental contaminant removal sites, and other environmental partners from the RI's south shore coastal ponds to the Upper Watershed.
- **ROI:** CI Sr. Fellow fieldtrips are a vivid exercise in disciplinary crosspollination. Several CI proposals have grown out of these daylong discussions that encourage scientists to meet colleagues from other departments, colleges, and institutions.

Economic Value of Rhode Island Coastal Zone



CI has been working with associate project director, Dr. Emi Uchida, to develop the first three stages of a commitment to complete a comprehensive economic report for the State of Rhode Island, with a series of assessments to assign value to the bay, salt marshes, beaches, watersheds, riverine systems, conserved lands, and the coastal zone in general as well as marine trades, tourism, aesthetic impacts on multiplier effect, ecosystem services, etc. Such a comprehensive report is both long overdue and crucial to economic planning and initiatives that will not run contrary to protection of the environment, and will address projected impacts of climate change and worthwhile investments for long-term resiliency. The sudden reduction of CI overhead to 15% from 18.4% seriously impacted the planned progression for this project. Consequently, the

CI reconfigured the project outputs to allow a longer period to accrue grant or foundation funds to meet each section.

Three products will be forthcoming within the next six months:

- An Economic History of Narragansett Bay and Its Watershed by Professor Emeritus Dr. Maury Klein, a highly regarded American business historian. The first draft is complete and under review for any missing or incomplete ecological links. Once a fine edit is completed, appropriate images added, and the layout completed, this book will be headed to press. CI is still seeking sufficient printing funds to allow free copies to the interested general public.
- A series of articles by Dr. Emi Uchida et al. itemizing the value of myriad activities related to the bay and its watershed, e.g., tourism, fisheries, water quality, etc.
- An assessment of the bay and its value added by Dr. Corey Lang based on an analysis of housing market data surrounding its shores.

- **CI Support:** \$87,800 to date (grad student support, housing database, faculty summer salary, author of economic history, and staff time director, digital media/systems management)
- **CI Partners:** ENRE, Providence Journal, RI Historical Society, Stanford University, CI staff and students
- **ROI:** From the Governor to the General Assembly, there is keen interest in this project, which will have an impact on the investment in coastal resilience and management.



The CI continues to encourage and support annual Data Carpentry Bootcamps and rhodyRstats workshops in order to increase data science literacy across disciplines and encourage academic growth and facility in the management and manipulation of big data.

- Held two multi-day workshops in 2017 with attendance from a diverse range of academic disciplines.
 - Kick-off of an annual rhodyRstats speaker series, featuring big data scientist Jasmine Dumas (<https://ci.uri.edu/2017/04/19/jasmine-dumas-kicked-off-careers-r-speaker-series-adventures-crafting-data-science-career/>)
 - Encouraged development of a new “R” course, BIO 593, which was jointly taught in Fall 2017 by Dr. Jeffrey Hollister, EPA-AED, Dr. Rachel Schwartz, Biological Sciences, and Dr. Harrison Dekker, Library Science. (https://rhodyrstats.github.io/special_topics_in_r/2017/09/15/welcome-bio-593.html)
 - CI plans to support regional “R” conference in Providence, Fall 2018
- **CI Support:** \$5,000 average annually, staff time
 - **CI Partners:** EPA-AED, Data Carpentry Bootcamps, URI BioSci & Library Science
 - **ROI:** There are a growing number of schools with data science focused programs. Three examples are BIDS and UC-Berkeley (<https://bids.berkeley.edu/>), eScience at UW (<http://escience.washington.edu/>) and Data Science Institute at Columbia (<http://datascience.columbia.edu/>). The CI’s investments in bootcamps and workshops are well worth it and exciting as we watch social scientists, scientists, humanists, and artists gain proficiency.

The Coastal Institute translates science to make coastal issues understandable and accessible to the non-scientist through varied communication strategies, and community outreach and engagement. One of the most important—and oft overlooked—aspects of scientific research is making the results readily available to the general public. To effectively engage our coastal communities, technical scientific language typical of peer-reviewed publications must be translated and distilled into comprehensible messages accessible to all.

Coastal Images: The Work of Eric Lutes



Featured the first showing of *Science and the Sea*, a painting of the R/V Endeavor

Eric Lutes is a professional actor with extensive stage, screen, and TV credits to his name. But he has returned to his roots as a painter—primarily in oils—and to the coasts of his childhood along RI’s south shore. A URI alumnus, he graciously narrated the videos referenced in the Nap-tree section and is donating a significant portion of the price of his painting of the R/V Endeavor to ensure she lives on at GSO once the research vessel is no longer in service. This is timely indeed since she is due to “retire” in 2020. Lutes was anxious to memorialize the R/V Endeavor. The opening of his show included a discussion of his work with three people

whose sea legs are most likely to be found on a range of pleasure, working or research boats. Dennis Nixon of RISG discussed the choices in Lutes’ sailboat paintings; Jody King, a passionate shellfisherman, discussed the various skiffs and his insistence on a sparkling clean boat versus the charm of age and wear in some of Lutes’ paintings; and David Smith discussed research vessels and his hours spent on the R/V Endeavor. The exhibit remained up through the GSO Open House and several paintings are on a year’s loan to the CI.

- **CI Support:** \$1500
- **CI Partners:** Eric Lutes, GSO, RISG, and Jody King
- **ROI:** Much is now made of STEM to STEAM and the CI is committed to providing artistic interpretations of the beauty of marine life and our coastal waters. Art promotes emotional learning and can plant a seed of responsive caring in the public that may lead them to greater curiosity about the science.

Napatree Point Video Trilogy



Working with Shed Light Productions, CI Director produced and scripted a trilogy of videos highlighting the ecological importance of Napatree Point and the research that is conducted there: *Change: Tracking the Shifting Shoreline*, *Connected: Wildlife of the Barrier Beach*; and *Discovery: People in Nature at Napatree*. These videos are available on the CI YouTube Channel (www.youtube.com/user/CoastURI), and are shown on a loop to visitors at a restored 19th century horse and carriage livery in Watch Hill, RI, and will be available to Napatree visitors as they enter the barrier spit and are directed by signage to learn about its ecology, geology, and community history on their smartphones.

- **CI Support:** \$20,275 education video production
- **CI Partners:** Watch Hill Fire District, Watch Hill Historic Society
- **ROI:** This unique Climate Change Resilience Demonstration Site will help to educate the public in habitat and ecological etiquette through the combination of viewing these videos in their actual setting. This is a penultimate demonstration of the CI's mission.

41° North Rhode Island's Ocean and Coastal Magazine



CI partners with Rhode Island Sea Grant to publish Rhode Island's ocean and coastal magazine that examines climate change, marine commerce and recreation, ecology and habitats, ocean planning, and the history of the state's coastal and marine landscape. To conceptualize, research, fund, edit, design, and layout the magazine for distribution, CI Director and digital media/systems specialist partner with RISG's Monica Allard-Cox who serves as editor-in-chief. *41° North* has transitioned from a purely scientific endeavor with a limited readership to a transdisciplinary publication with a broad audience of 16,000. Goals outlined and achieved include professional distribution updated design, reconfigured layout, and improved quality of writing for an interested public.

— Winter 2017 issue focused on the economy; <http://41nmagazine.seagrant.gso.uri.edu/winter-2017/>

— Winter 2018 issue focused on geology; <http://41nmagazine.seagrant.gso.uri.edu/current-issue/>



- **CI Support:** \$11,000 average per issue
- **CI Partners:** Rhode Island Sea Grant, GSO
- **ROI:** Acknowledgement from the public through focus groups, surveys, unsolicited mail, and a successful recent addition of donations demonstrate that the formula is working, once again meeting both the CI's and RISG's missions.

Watershed Counts



CI co-coordinates with the Narragansett Bay Estuary Program a broad coalition of agencies, universities, and NGOs that have committed to work together to examine and report regularly on the condition of the land and water resources of the Narragansett Bay Watershed Region as a service to the general public.

— Released 2017 report with a focus on climate change and Narragansett Bay: *Warming Waters and Oysters, Sea Level Rise and Salt Marshes, Increasing Storms and Coastal Homes* (September 2017), with coverage in a dozen news outlets including Governor’s Bay Day.

— Watershed Counts will not be produced in Summer 2018 given that Status and Trends has finally been completed and, despite

very positive reviews of the publication, the CI Director plans to determine Watershed Counts’ future direction with the incoming NBEP program director. Plans are to update the Watershed Counts website in 2018. <http://www.watershedcounts.org/>

● **CI Support:** \$7,5000 annual average support plus considerable staff time. CI assistant director coordinates with digital media/systems specialist, director and associate scientist assisting.

● **CI Partners:** Narragansett Bay Estuary Program (co-coordinator), over 70 WC partners

● **ROI:** Served as an essential stopgap when NBEP’s Status and Trends was on hold. WC kept its finger on the pulse of Narragansett Bay but once S&T got underway with the reconfigured NBEP, WC evolved into a series of engaging stories that wove science into examples of how successes and challenges were impacting Narragansett Bay and its watershed for good or for ill. WC’s output and funding is uncertain for the foreseeable future.

RI Environmental Monitoring Collaborative



CI director or designee chairs this remaining standing committee of the RI Bays, Rivers, and Watersheds Coordination Team in accordance with state law to coordinate environmental monitoring efforts across the state and engage a wide range of institutions and agencies. CI assistant director serves as the designee chair of the EMC and produces an annual report.

— Hired MESM graduate student to assist with development of new website, planning of monitoring workshop, and writing of workshop proceedings (SNEP grant-funded).

— Held biannual meetings for the RIEMC to discuss monitoring plans and results as well as possible areas of collaboration.

— Planned and hosted a workshop focusing on comprehensive monitoring of Narragansett Bay, including identification and prioritization of monitoring gaps (October 2017).

— Launching new website in May 2018: www.rimonitoring.org.

● **CI Support:** \$500 annual average, CI assistant director, staff time

● **CI Partners:** RI Department of Environmental Management (vice-chair), Narragansett Bay Commission (vice-chair), and 18 additional partners from state and federal agencies, nongovernmental organizations, and academia

● **ROI:** EMC mandates the CI to provide a collective report on data from state agencies annually. This process is a valuable service in that it provides the public with awareness of the health of their environment. It also provides the state government, both the Executive and the General Assembly, with specific information signaling the success or failure of any investment and heralds a warning if data reveal a troubling trend.



CI developed this site as part of the RI Sea Grant-funded Climate Change Collaborative. CI provided additional funding and manages website to make complex, climate science concepts accessible to the general public through the use of everyday language, short videos, cartoons, photographs, and clear explanations to convey the major threats posed by climate change and what residents can do to prepare.

- Update news stories weekly to ensure new content for returning visitors.
 - Used by Rhode Island and New England high school and college instructors in classroom instruction; Google Analytics shows users stay onsite longer than the standard 2-3 minutes and discerns that there are legitimate users from around the world, including considerable use in several urban areas of India.
 - Led to invitation for CI to participate in panel discussions, educational events, and other activities centered around climate change.
 - Site is in urgent need of additional updating and development of new webpages on how small business can prepare for climate change, the history of major hurricanes in Rhode Island, updates on how and what is possible through technological and geoengineering solutions to climate change. New pages are under design to target Millennials and Gen Zs.
- **CI Support:** \$40,000 development, \$5,000 annual maintenance
 - **CI Partners:** (Original partners: Coastal Resources Center, the Harrington School of Communication and Media, the Cancer Prevention Research Center, the Graduate School of Oceanography, and the College of the Environment and Life Sciences with a grant from RI Sea Grant). Current partners are GSO, CELS, and the Harrington School of Communication and Media.
 - **ROI:** Meets the CI Mission of adaptation to manage coastal zones.

Institute Personnel

CI staff

Professor Judith Swift, director (Communication Studies, Theatre; Unlimited Appointment in Film Media, Honors Professor) Position is half-time appointment during academic year and fulltime in the summer. During academic year, director also teaches one Honors course each semester, serves on graduate committees, mentors students for Honors thesis projects, provides significant service, and directs at least one production in a professional theatre annually, which is creative activity external to the CI.

Dr. Nicole Rohr, assistant director

Amber Neville, MLS, digital media/systems specialist

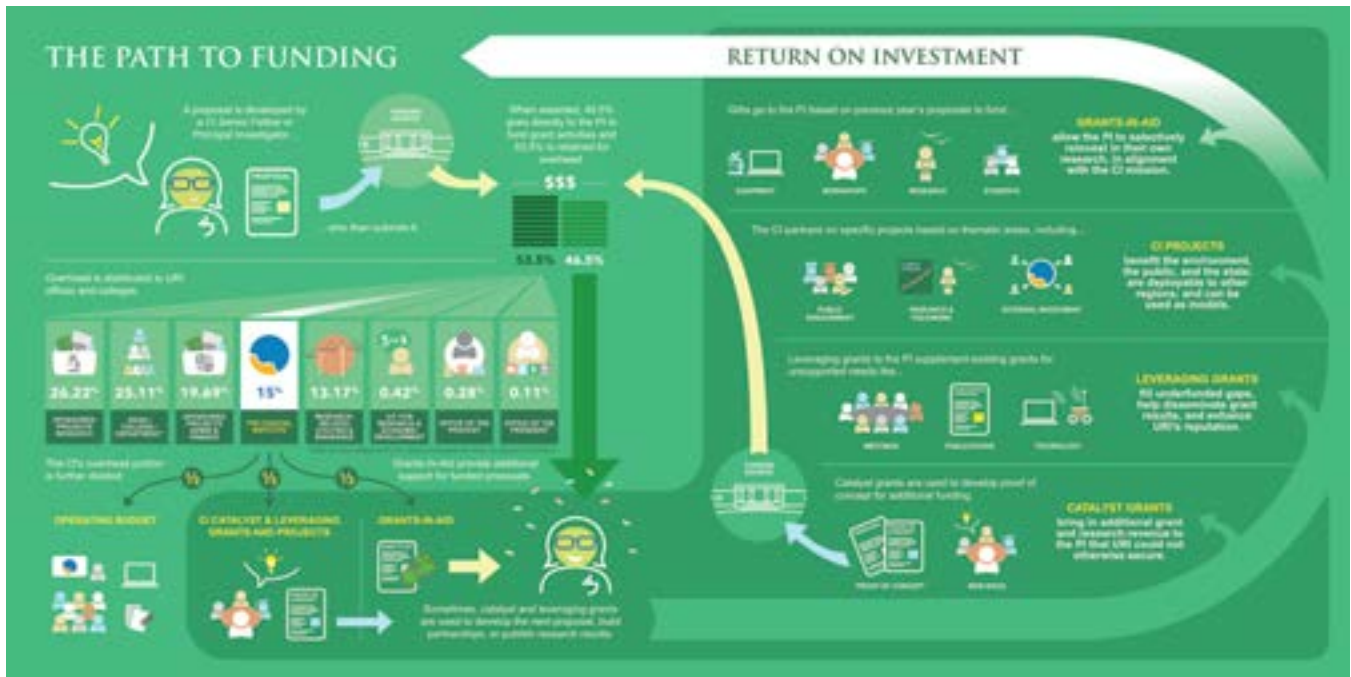
Dr. Q Kellogg, research associate IV (part-time, grant-funded)

Dr. Charles Roman, CI associate scientist, NRS adjunct faculty (part-time salary and grant-funded)

Associate Directors

- Dr. Arthur Gold serves as advisory associate director.
- Dr. Emi Uchida serves as project associate director.
- Dr. John King serves as advisory associate director.

Student Employees: see page 12



Grants-in-Aid

One of the primary privileges afforded to CI Senior Fellows affiliated with URI is the opportunity to apply for a Grant-in-Aid (GIA). Coastal Institute Senior Fellows are eligible to apply for a GIA approximately up to the amount that equals one-third of the overhead returned to the Coastal Institute related to that Senior Fellow’s funded proposal(s). A specific amount available for GIA’s is emailed to all funded Senior Fellows annually as soon as the returned overhead balance becomes available in August or September. These funds may be used to support activities related to an ongoing funded CI proposal or applied to research or activities aligned with current or future research in keeping with the Coastal Institute mission. Not all requests are approved. Requests must meet the CI mission and relate to funded research.

We have a \$25 million award now to work in the Philippines which is yet another example that CI GIA support has helped bring in tens of millions of dollars in grants, a great return on investment. Philippines, Ghana, Malawi. That is over 50 million!

—Brian Crawford, Senior Coastal Resources Manager, Coastal Resources Center

The Coastal Institute (CI) Grants in Aid (GIA) fund have been of great value to me, as the principal investigator (PI), and my team members. Over the 2018 and 2019 fiscal years, we have been able to replace outdated computers, which we would otherwise not have been able to do. We have been able to cover travel expenses to participate and lead major international meetings and events in partnership with UNESCO and other international institutions. This has been especially fruitful, as our participation has helped to position the University as a global leader in ocean science education. In addition, we were the only University representatives at the United Nations Ocean Conference held in June at UN headquarters in New York, where we led an education event. If it were not for our CI GIA funds, we would not have been able to participate in these activities. As a PI with no University travel support and very limited operational funds, the CI GIA is essential to us for carrying on business. It also allows us to more effectively compete for external funding.

—Gail Scowcroft, Inner Space Center, GSO

GIA have generally been used for unanticipated/unbudgeted expenses like equipment repairs and/or purchases. We have in recent years repaired our research vessels transmission, our cryogenic magnetometers electronics, and purchased part a marine survey magnetometer with these funds.

—John King, GSO

GIA funds serve as a critical means of building the expertise of our team in a variety of areas -- from the art of storytelling, to project management skill-building, to leadership strengthening -- our team of coastal managers truly benefit from being able through these funds to grow themselves professionally, and that's a benefit for the audiences we serve as well.

—Jennifer McCann, Director, U.S. Coastal Programs, URI Coastal Resources Center

CI Project Funding

*Coastal Institute **leverage** grants have made it possible to successfully compete for Rhode Island Coastal and Estuarine Habitat Restoration grant funds over three different granting cycles. Our work restoring dune vegetation in the Napatree Point Conservation Area to support pollinator species would not happen were it not for leverage and **catalyst** grant funding from the CI.*

—Dr. Peter August

Leveraging Grants

Senior Fellows, individuals sponsored by a Fellow, e.g., students, or others whose project focus is in alignment with the mission of the Coastal Institute, may apply for funds to enhance sponsored projects. The range of grants varies widely and could support the development of a complex database crucial to the funded research or a luncheon for a site visit of the funding agency. Applications are rolling and depend upon the availability of funds.

Catalyst grants

Senior Fellows, individuals sponsored by a Fellow, e.g., students, or others whose project focus is in alignment with the mission of the Coastal Institute, may apply for funds to support the investigation of a concept or theory. This could include the use of focus groups to test a particular outreach approach or engaging in a small research project that tests a given hypothesis and provides sufficient “proof of concept” to enable the researchers to seek significant funding from an agency or foundation.

Reporting Structure

The director of the Coastal Institute reports to the Provost and Vice President for Academic Affairs. This reporting structure was intentional in the conceptual model and structure submitted to and approved by the then Office of Higher Education and RI Board of Governors for Higher Education to protect and maintain the interdisciplinary and multi-agency mission of the CI. While that remains the formal reporting structure, the CI director has with the Provost’s approval developed a CI Advisory Group consisting of a GSO-based associate director, a CELS-based associate director, an associate project director whose social science or science discipline is project-related and therefore shifts from time to time, and the associate scientist. These associates are called upon to review CI initiatives, provide feedback on future projects under consideration, review catalyst or leveraging grant proposals and provide guidance as to ways the CI should focus to fulfill its mission in a dynamic environment. In accord with the Provost’s approval, associate directors will continue to provide advice and feedback. In addition, the director meets with the director of RIDEM, NBEP, and EPA Region I and EPA-AED to discuss gaps and needs in keeping with the CI’s mission. The close association with NBEP is also helpful to keep the big picture in mind, as is the CI director’s role as director of the North Atlantic Coast CESU, and the leadership of NBEP with which comes the regional perspective of the host entity, NEIWPCC.


Coastal Institute Activities – 2017 to Spring 2018

Year	Season	Role	Title
2017	Spring	co-produced	<i>41°N Rhode Island's Ocean and Coastal Magazine, Economy</i> . VOL 10 NO 1, 2017. Partner: Rhode Island Sea Grant.
2017	Spring	coordinated & hosted	Book Discussion: <i>Rhode Island's Shellfish Heritage: An Ecological History</i> . Speakers: Sarah Schumann and John Harvey. Location: Warwick Public Library
2017	Spring	participated	Assessment of MASS BAYS Estuary Program Grants Award Process Committee. Location: Boston, MA.
2017	Spring	participated	Review of NBEP Corrective Action Plan with EPA Region 1 and NEIWPC. Location: Boston, MA.
2017	Spring	participated	Coastal Institute/The Nature Conservancy Student Award Review. Location: CI Conference Room, Bay Campus.
2017	Spring	sponsored, participated & emceed	Conference, 14th Annual Land & Water Conservation Summit. Location: URI Memorial Union.
2017	Spring	facilitation & conflict resolution	Worked with one regional agency to guide updating of organizational mission and intra-organization conflict. Location: Boston, MA.
2017	Spring	presented	Invited Lecture, <i>Managing for the Present, Preparing for the Future: personal journey to professional application</i> . Location: Wellesley College, Wellesley, MA.
2017	Spring	presented	Invited Lecture, <i>Managing for the Present, Preparing for the Future: personal journey to professional application</i> . Location: Mitchell College, New London, CT.
2017	Spring	coordinated & sponsored	Lecture, <i>5th Annual Scott W. Nixon Lecture: A 21st Century Look at the Global Ocean Conveyor Belt</i> . Speaker: Dr. Susan Lozier.
2017	Spring	presented	<i>Environmental Leadership: From Inspiration to Oppression</i> . URI MESM Program, CI Bldg., Kingston.
2017	Spring	coordinated & sponsored	Lecture, <i>Adventures in Crafting a Data Science Career: Careers in R speaker series</i> . Speaker: Jasmine Dumas. Location: CI Auditorium
2017	Spring	coordinated & sponsored	Workshop, <i>Research as Fundamental to Excellence in Outreach</i> . Speaker: Maury Klein. Location: URI Bay Campus.
2017	Spring	presented	URI Graduate Conference Plenary Speaker,
2017	Spring	presented	Symposium, <i>The Global Ocean: Racial Geographies and the Oceanic Humanities</i> . Location: URI Kingston
2017	Summer	coordinated & presented	Public Workshop, <i>Climate Response</i> . Partners: URI CRC, CRMC, Save the Bay, Town of Barrington. Location: Barrington, RI.
2017	Summer	coordinated & sponsored	Workshop, <i>Summer 2017 Data Carpentry Workshop, June 7th & 8th</i> . Partner: rhydyRstats. Location: URI Kingston.
2017	Summer	coordinated & sponsored	Public Lecture, <i>Premiere of Napatree Point Video Trilogy</i> . Partner: Napatree Point Conservation Area. Location: The Livery, Watch Hill, RI.
2017	Fall	presented	Keynote: <i>It's A Hard Wind's Gonna Blow: Climate Change Impacts in the Northeast</i> . Convocation Learning Council of Temple Beth-El. Location: Providence, RI
2017	Fall	coordinated & sponsored	Workshop, <i>Data Carpentry, August 31st & September 1st</i> . Partner: rhydyRstats. Location: URI Kingston
2017	Fall	coordinated & presented	Debrief session, <i>SSEER Network Invited to Debrief 9/8</i> . Location: CI Kingston
2017	Fall	sponsored & participated	Workshop, <i>2017 Estuary Research Workshop</i> . Partner: NEIWPC. Location: CI Bay Campus
2017	Fall	coordinated & sponsored	Special Exhibit, <i>Oct. 14-15 Coastal Images: The Work of Eric Lutes</i> (Invited Opening & during GSO Open House.) Location: URI Bay Campus.
2017	Fall	participated emcee	Press Conference, release of <i>State of Narragansett Bay and Its Watershed</i> . Location: Save the Bay, Providence, RI.

2017	Fall	coordinated & hosted	Workshop, <i>Toward Comprehensive Monitoring of Narragansett Bay</i> . Partners: RI Environmental Monitoring Collaborative, RIDEM, NBEP. Location: URI Bay Campus.
2017	Fall	attended	Conference, <i>RI Energy & Environmental Leaders Day</i> . Host: Senator Sheldon Whitehouse. Location: Providence, RI.
2017	Fall	presented	Plenary Speaker, <i>Climate Change and Hunger for Meaning-Making</i> . National Endowment for the Humanities Conference. Location: Boston, MA.
2017	Fall	participated	Invited Participant. 2nd Annual International Technical Workshop on Climate Risk: <i>Facing the Challenges of Managing Climate Solutions</i> . Location Kennebunk, Maine
2017	Fall	sponsored & participated	Conference, CERF 2017, <i>Coastal Science Inflection Point: Celebrating Successes, Learning from Challenges</i> . Location: Providence, RI
2017	Fall	presented	Speaker, Inclusion Lunch. Closing event: <i>It's a Shore Thing: A Coastal Cabaret</i> . Location: RI Convention Center, Providence, RI.
2017	Fall	conflict resolution	Worked with three organizations—federal, NGO advocacy, and land trust—to guide organizational clarity, mission, and leadership, intra-organization work plan, and organizational behavior. Location: RI and MA.
2017	Fall	facilitated	Facilitated daylong retreat. <i>Strategic Planning for Department of Biological Sciences</i> . Location: W. Alton Jones Campus.
2017	Fall	coordinated & hosted	Press Conference, <i>URI Leads \$8M NIEHS Superfund Grant</i> . Partners: Harvard T.H. Chan School of Public Health, Silent Spring Institute. Location: Providence, RI.
2017	Fall	coordinated & presented	Meeting, <i>STEEP Center Community Kick-off Meeting</i> . Partners: Harvard T.H. Chan School of Public Health, Silent Spring Institute. Location: Hyannis, MA
2017	Fall	coordinated, chaired & participated	Search Committee for NIEHS STEEP Superfund Research Coordinator. Location URI.
2017	Fall	attended	Meeting, <i>2017 SRP Annual Meeting (STEEP)</i> . Location: Philadelphia, PA.
2017	fall	facilitator	Department of Biological Science Strategic Planning Retreat, W. Alton Jones Campus
2018	Spring	co-produced	<i>41°N Rhode Island's Ocean and Coastal Magazine, Geology</i> . VOL 10 NO 2, 2018. Partner: Rhode Island Sea Grant.
2018	Spring	sponsored	2018 Southern New England Recreational Fishing Symposium: <i>The Magnuson-Stevens Act: How to Make It Work for Recreational Fishing</i> . Partners: RI Saltwater Anglers Foundation, Marine Fish Conservation Network. Location: Warwick, RI.
2018	Spring	participated	Narragansett Bay Estuary Program, Program Director Search Committee. Location: Providence, RI.
2018	Spring	coordinated & presented	Panel discussion. <i>Climate Response Public Information Session</i> . Partners: CRC, CRMC, Save the Bay, Town of Warren. Location: Warren Town Hall, RI.
2018	Spring	sponsored	2018 Southern New England Recreational Fishing Symposium: <i>The Magnuson-Stevens Act: How to Make It Work for Recreational Fishing</i> . Partners: RI Saltwater Anglers Foundation, Marine Fish Conservation Network. Location: Warwick, RI.
2018	Spring	coordinated & sponsored	Lecture, 6th Annual Scott W. Nixon Lecture: <i>"So Many Estuaries, So Little Time" - Narragansett Bay as a Model for Coastal Systems Under Change</i> . Speaker: Dr. Robinson W. Fulweiler.
2018	Spring	sponsored & participated	Conference, 15th Annual Land & Water Conservation Summit. Location: URI Memorial Union.
2018	Spring	attended	Meeting, <i>2018 Northeast Superfund Research Program Meeting in Woods Hole</i> . (STEEP Regional Meeting).
2018	Spring	presented	Trainee Colloquium by RTC Team: <i>Tailoring Science Communication for Diverse Audiences</i> . Location: Arvedesian Hall, URI Kingston.
2018	Spring	presented	Trainee Colloquium by RTC Team: <i>Environmental Justice, Social Equity, and the Politics of Environmental Regulation</i> . Location: Arvedesian Hall, URI Kingston.


Value Added of Grant-in-Aid, Leveraging and Catalyst Grants

Grants-in-Aid Reporting Form : Entry # 865
PI Full Name Peter August
Email pvaugust@uri.edu
College/Department CELS/NRS
Grant(s) Name (Source of GIA funds) Many contributing grants
Granting Agency/Foundation Many contributing projects
URI Project # 999
Project Title Baseline Data Acquisition and Monitoring in Support of the Napatree Point Conservation Area Demonstration Site
co_pis Dr. Nicole Rohr, URI CI Janice Sassi, CI Sr. Fellow Scott Rasmussen, URI NRS Greg Borynige, URI NRS Charles LaBash, URI NRS Dr. Lindsay Green-Gavrielidis
products_brief Baseline data for eelgrass and Napatree Lagoon
products_detailed Our GIA funds were used in two ways. First, they were used to develop baseline environmental data for the Napatree Point Conservation Area Demonstration site. This includes a continuation of monitoring nekton and seaweed in the Napatree Lagoon. This year we added two new studies - monitoring bat activity in the western end of Napatree and exploring the viability of mapping submerged aquatic vegetation

using drone imagery. The results of these studies are currently being analyzed and will be included in the 2017 State of Napatree Report. Second, my GIA funds were used to leverage \$15,000 of extramural funding from the RI CFMC for habitat restoration to enhance pollinator diversity in the eastern end of Napatree. For this project, GIA funds were used to support student participation and install 100 m of split rail fencing to keep visitors from entering restoration sites.
Credit By logo and text in all printed and graphic materials.
Post_Image  Caption: Greg Borynige and Christina Montello (undergraduate student) using a small Unmanned Aerial Vehicle to map submerged aquatic vegetation of Napatree Point. Description: Greg and Christina flying the DJI Phantom to determine the efficacy of this technology to map eelgrass
link1 http://www.napatreepoint.info
permission yes



Grants-in-Aid Reporting Form : Entry # 787
PI Full Name Brian Crawford
Email brian@crc.uri.edu
College/Department Coastal Resources Center, GSO
Grant(s) Name (Source of GIA funds) Ghana Sustainable Fisheries Management Project
Granting Agency/Foundation USAID Ghana
URI Project # 4801
Project Title Ghana Sustainable Fisheries Management Project
co_pis Donald Robadue, Ph.D. Coastal Resources Center GSO
products_brief Conference attendance and URI visit
products_detailed Justice Mensah, a GIS specialist on the Ghana Fisheries Project and URI alumnus received a major professional development boost through this GIA grant. He participated in the ESRI User Conference held in July in San Diego, and to work with Chris Damon from URI's EDC lab on use of UAVs for spatial mapping. He was introduced to new developments in UAV data processing techniques for Full Motion Video technology to view, organize & analyze video from UAVs in the GIS environment. This will be very useful as the project will collect UAV areal images for three major wetland complexes in coastal Ghana. Chris Damon and Aimee Mandeville also introduced him to Story maps - a very powerful communication tool for sharing information and knowledge with stakeholders and the world at large. Going forward, the local project team in Ghana can now draw on this tool for communicating project interventions, outcomes and success stories with partners, donors, government agencies and other stakeholders.

Credit Acknowledgement at
Post_Image  Caption: Justice Mensah, GIS Specialist for the Ghana SFMP Description: Justice Mensah, URI alumnus and GIS specialist on the URI-USAID Ghana Sustainable Fisheries Management Project at the ESRI GIS conference in San Diego, July, 2017.
permission yes





A. Fox

Science is a social enterprise, we communicate through the scientific literature, and we must do nothing to undermine the integrity of that communication. Both in sending and in receiving information, we must remain skeptical.

—Scott W. Nixon



Connect with the Coastal Institute

 **YouTube** www.youtube.com/user/CoastURI

 www.twitter.com/uri_coastalinst

 www.facebook.com/uricoastalinstitute

 www.instagram.com/uri_coastalinstitute

THE
UNIVERSITY
OF RHODE ISLAND

Coastal Institute
University of Rhode Island
Narragansett Bay Campus
Narragansett, RI 02882
(401) 874-6513

email: coastalinstitute@uri.edu

<https://ci.uri.edu>