



ANNUAL REPORT 2012

*The vision of
NJSGC is a
sustainable future
for New Jersey's
coastal environment.*

*Its mission is to
promote responsible
use of New Jersey's
coastal and marine
environment.*

The New Jersey Sea Grant Consortium (NJSGC) was founded by six State colleges in 1969 as a cooperative center for the study of marine and marine-related environmental science. Today it boasts a growing membership of colleges, universities and other organizations that share and support the vision and mission of the organization, making it one of the largest alliances of its kind in the state, region and the nation.

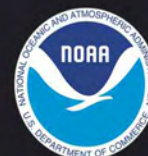
The NJSGC has contributed leading research in the fields of marine and coastal-related environmental science since 1976 and in recognition of its academic and scientific achievements, was awarded Sea Grant College status in 1989.

For over 40 years, the New Jersey Sea Grant Consortium has been the state's leading coastal connection. NJSGC supports research and education in marine and environmental science and develops innovative projects that offer residents and visitors the opportunity to better understand, appreciate, respect and connect with New Jersey's coastal resources.

While marine research and technology are the cornerstones of the Consortium's foundation, its goal is to put the results of the work it supports to practical use to find new ways for science to serve our coast. Some of NJSGC's success stories include developing cultured oyster seeds and disease resistant shellfish that helped revitalize and restore the state's oyster industry, capitalizing on new communication technologies to create better tools to predict and transmit warnings about potentially dangerous rip currents, and building better dunes and shoreline protection systems to help minimize future devastating property and shoreline damage.

Legislators, educators, scientists, boaters, beachgoers, anglers, commercial fishers, local business and tourism leaders, and basically anyone who lives, works and plays near New Jersey beaches and bays can all count on the New Jersey Sea Grant Consortium to help find solutions and answers to their coastal concerns and challenges. Learn more at njseagrant.org.

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Chairman's Message

On October 29, 2012, the future arrived in New Jersey. Superstorm Sandy rudely reminded us that New Jersey is coastal. Mother Nature will not be ignored, nor will she be taken lightly.

Sandy was especially dramatic for the New Jersey Sea Grant Consortium. The storm flooded the basement of our headquarters on Sandy Hook, displacing us for almost six months. Through the generosity of Monmouth University, and our trustee, President Paul Gaffney, staff found temporary quarters on campus to continue their work. When every excuse in the world existed to suspend our efforts, our staff pressed on. This report would be incomplete without acknowledging their Herculean efforts to serve New Jersey when New Jersey needed them most.

It should be no surprise to any visitor to these pages that our staff and member institutions were intensely researching the benefit of dunes before Sandy was on the radar. One of our core missions is coastal preservation, as I proudly reported to the Governor's staff when we met this summer. Indeed, if every (hurricane) cloud has a silver lining, Sandy pushed the Sea Grant Consortium front and center in the conversation of: "how can we be better prepared the next time?"

One recurring theme on these pages has been our ability to persevere in the face of trying economic times. We are a unique model under the federal Sea Grant umbrella because we embrace 23 members consisting of New Jersey colleges and universities. Under our auspices, the time and talent of marine scientists throughout the State work for the benefit of every citizen. No other Sea Grant participant can make such a claim.

On the eve of Sandy, the national Sea Grant review board

expressly acknowledged the unique place we hold. In its evaluation of our performance, we were recognized as being the top Sea Grant program in one important respect: we get more out of every dollar than any other program.

Our challenge in the year ahead is keep our foot on the maritime gas pedal even as access to financial resources remains tight. We are constantly searching for new ways to partner with member institutions and the State. Our goal, on your behalf, is to make sure federal funds earmarked for Sandy recovery are spent wisely. Our bench is deep with talent; we expect those writing the checks will tap our expertise. Rebuilding is important, but so is the practical research that will tell us where, when and how to rebuild.

Finally, I would be remiss not to acknowledge ten years of service provided by former Monmouth University President (and retired US Navy admiral) Paul Gaffney. The New Jersey Sea Grant Consortium has never had a better friend or protector. He may have retired from our board and from Monmouth University, but he can't hide. Whenever we need guidance or encouragement, we know who to call. On behalf of all of us, I offer President Gaffney our gratitude. Godspeed in your new endeavors.

And on behalf of the fine people who populate these pages, I am proud to offer this annual report.



DENNIS KEARNEY
Chairman
Board of Trustees

Executive Director's Message

Welcome to the New Jersey Sea Grant Consortium's 2012 annual report. Each year we look forward to this opportunity to tell you about the progress we've made towards our mission to advance greater understanding and wise utilization of New Jersey's marine and coastal resources. Through hands-on technical assistance, targeted research and a comprehensive set of education and outreach efforts, we hope you find the accomplishments presented herein responsive to the opportunities and challenges of living with the New Jersey coast.

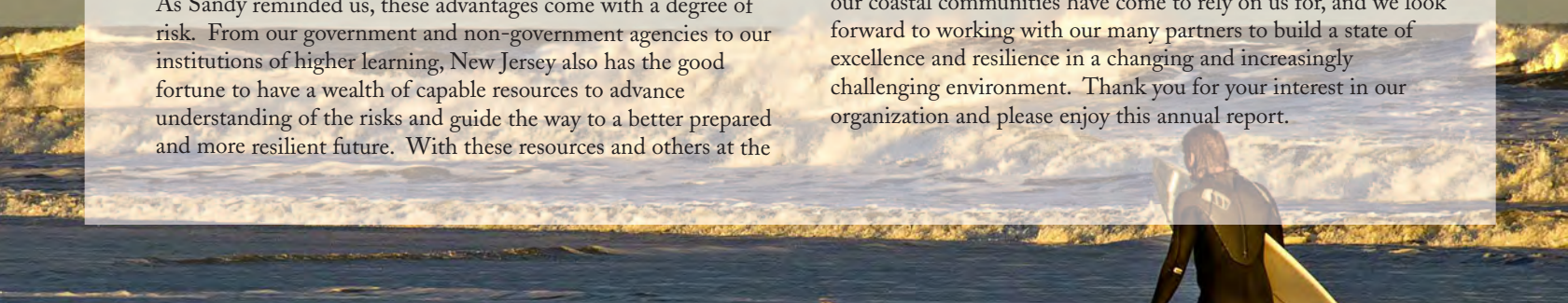
On October 29 those challenges became especially evident. Superstorm Sandy was a sobering reminder that nature and its power should never be underestimated. New Jersey has the good fortune of possessing 130 miles of ocean coast which offers us countless advantages including great places to live, work and play. As Sandy reminded us, these advantages come with a degree of risk. From our government and non-government agencies to our institutions of higher learning, New Jersey also has the good fortune to have a wealth of capable resources to advance understanding of the risks and guide the way to a better prepared and more resilient future. With these resources and others at the

disposal of our leaders, New Jersey's citizens and visitors should have every confidence that a "new" New Jersey will emerge that will be better prepared for future storm events. The NJSGC is here to assist and it is my greatest hope that our work not only had an impact on what our leaders were able to do to assist their constituents following the storm, but also laid the groundwork for a more resilient and sustainable future.

There is no question that New Jersey will recover. We look forward to continuing to provide the services and training that our coastal communities have come to rely on us for, and we look forward to working with our many partners to build a state of excellence and resilience in a changing and increasingly challenging environment. Thank you for your interest in our organization and please enjoy this annual report.



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Coastal Communities Agent

Jon Miller
Coastal Processes Specialist

Jillian Thompson
Water Resources Agent

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The New Jersey Sea Grant College Program

The mission of the New Jersey Sea Grant Consortium (NJS GC) is to provide research and outreach programs that promote better understanding, conservation and use of New Jersey's coastal resources. By working closely with coastal communities, marine researchers, water dependent industries, government agencies, citizen groups, students, teachers, schools and individuals, the NJS GC fosters environmental stewardship, long-term economic development and responsible use of New Jersey's coastal and ocean resources. NJS GC is part of a nationwide network of 34 state programs supported by the National Sea Grant College Program within the National Oceanic and Atmospheric Administration. Most of the 34 state programs are hosted by a single academic institution; however, as a consortium, NJS GC is able to utilize the intellectual power and knowledge of its 23 member institutions to achieve its mission. As a consortium, NJS GC's ability to meet its mission, including the goals and outcomes of its strategic and implementation plans, is greatly enhanced.

NJS GC's strategic and implementation plans were developed with input from New Jersey's coastal stakeholders regarding their needs within the state. The plans are aligned with National Sea Grant's strategic and implementation plans in order to increase the impact of NJS GC's activities at state, regional and national levels. In 2012, NJS GC also continued its regional and national participation in Sea Grant through

regional research planning (New York Bight and Mid-Atlantic), the Mid-Atlantic Sea Grant Extension Program, Assembly of Sea Grant Extension Program Leaders and the Sea Grant Association.

NJS GC invests in high-priority, stakeholder-driven research through competitive grants to scientists and educators throughout New Jersey. It maintains a standing stakeholder-driven Sea Grant Advisory Board that advises not only for research priorities but also for extension, education and communications activities. Similarly, the Sea Grant Advisory Committee, a standing committee of the NJS GC Board of Trustees, offers advice and guidance and strengthens the link between NJS GC staff and the Board of Trustees.

NJS GC awards approximately one third of its federal dollars annually to research that addresses coastal and marine issues including coastal community resiliency, coastal processes, coastal ecosystems, water quality and fisheries. Researchers examine both the natural and human impacts on these systems. The collective expertise and interaction of NJS GC's extension agents, educators and communications specialists in conjunction with our Sea Grant-funded investigators provide the foundation for the timely, relevant and meaningful dissemination of research results that can be applied by our coastal stakeholders.



Omnibus Research Awards

Dr. Kenneth W. Able, Dr. Thomas M. Grothues

Rutgers, The State University of New Jersey

**The Decline of Winter Flounder:
Influences of Changes in Connectivity Between
Estuaries and the Inner Continental Shelf**

R/6210-0014



Dr. Michael J. Kennish, Dr. Benjamin Fertig

Rutgers, The State University of New Jersey

**Evaluating Ecological and Social Impacts of New Jersey
Legislation Regulating Fertilizer Nitrogen Loads to
Barnegat Bay – Little Egg Harbor Estuary by Using
Isotopic Signatures, Seagrass Demographics, Social
Response and Communications**

R/6210-0013



Dr. Robin Leichenko, Dr. Richard G. Lathrop Jr.

Rutgers, The State University of New Jersey

**Economic Vulnerability to Climate Change on the
Jersey Shore: Promoting Adaptation, Resilience and
Sustainability in Coastal New Jersey**

R/6210-0012

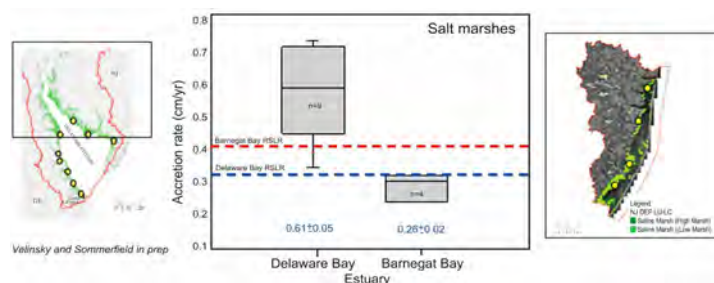


Dr. David Velinsky, Dr. Tracy Quirk

*The Academy of Natural Sciences of
Drexel University*

**The Influence of Estuary Geomorphology on
Accretion of Coastal Wetlands: A Potential for
Priority Planning for New Jersey Coastal Areas
Vulnerable to Sea Level Rise**

R/6210-0011



Development Research

Dr. David Bushek

*Rutgers University – Haskin Shellfish
Research Laboratory*

**Comparative Analysis of Bivalve Clearance
Rates for Restoration Management**

Dr. Louise Wootton

Georgian Court University

**Developing the Sampling Protocols and
Competencies Needed to Monitor
Effectiveness of a Rain Garden Designed for
Nitrogen Removal**

EXTENSION PROGRAM

DR. PETER ROWE - Director of Research and Extension

The NJSGC Extension Program had an active and productive year in 2012. Extension staff engaged coastal stakeholder communities within the state, region and the nation by delivering new, continuing and expanded projects. Agents and specialists met and provided technical assistance to coastal stakeholders both individually and in groups via educational activities and tours, invited presentations at conferences, workshops, symposia, seminars and outreach events, and also through memberships on boards, advisory councils, committees and associations. Extension staff enthusiastically received thousands of visitors at NJSGC's two-day public outreach event, Ocean Fun Days. Extension staff was also instrumental in reaching out to stakeholders in order to develop the NJSGC's 2014-17 strategic plan.

The Extension Program saw changes to its staff in 2012. Coastal Communities Agent, Caroline McLaughlin, and Water Resources Agent, Jillian Thompson, both took their skills and expertise to other organizations outside the state. Jessica Brown came on board, teaming up with Amy Boyajian to continue extension activities in water resources. In addition to Director Dr. Peter Rowe, full-time staff at Sandy Hook included Michael Danko, Assistant Extension Director and Marine Recreation Agent, and until late fall of 2012, Ms. McLaughlin. The Extension Program maintained its successful Memoranda of

Agreement (MOA) with Stevens Institute of Technology to retain the services of Dr. Jon Miller, Coastal Processes Specialist. Another MOA with Rutgers University Cooperative Extension supported two Water Resources Agents, Ms. Boyajian and Ms. Brown. Lisa Calvo, Shellfish Aquaculture Program Coordinator, entered her second year supported by a National

Strategic Investment (NSI) Aquaculture Extension Grant through an MOA with Rutgers University.

Dr. Rowe continued his involvement in Sea Grant Extension at the regional and national level. Members of the Extension staff were active participants at the Mid-

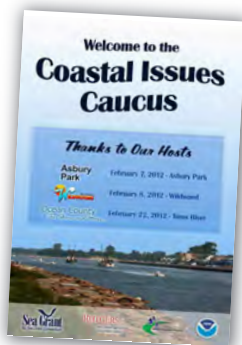
Atlantic Sea Grant Extension meeting held in Rehoboth, Delaware in April. This meeting led to new collaborations with sister programs in the mid-Atlantic

region including the transfer of stormwater management best practices with the Delaware and Maryland Sea Grant Extension Programs.

The Extension Program continued its success in obtaining grants and contracts. From the State of New Jersey, Michael Danko received funds to continue the Clean Vessel Act and Clean Marina Programs. Through a new Coastal Communities Climate Adaptation Initiative award, Mr. Danko has begun reaching out to coastal businesses to increase their understanding and awareness of the impacts of climate change. An Aquatic Invasive Species Mid-Atlantic award with the other Mid-Atlantic Sea Grant programs allowed him to reach out to anglers to obtain data on aquatic invasive species knowledge and best practices in the live bait trade. The National Strategic Investment with Rutgers University for shellfish aquaculture extension also completed its second full year. Ms. Calvo and Ms. McLaughlin received funding to promote community supported fisheries and aquaculture through a USDA grant. Dr. Rowe received funds to develop a legal symposium on coastal issues in the mid-Atlantic and, through Delaware Sea Grant, to provide coastal communities on the Delaware Bay with information on hazard resiliency in response to climate change. Both of these activities will be completed next year.

On October 29, 2012, New Jersey took a direct hit by Superstorm Sandy. The storm had direct impact on the infrastructure of the NJSGC on Sandy Hook and the lives of the people who work there. Despite these hardships, extension staff immediately became engaged with Sandy recovery by reaching out to their stakeholders including coastal communities, marinas and watermen. Activities included providing economic damage assessment through surveys to state and federal agencies and the assessment of beach and dune loss. These activities will continue and grow in 2013.

The following summaries highlight the projects and activities of the Extension Program's agents and specialists in 2012.





DR. JON MILLER - Coastal Processes Specialist

Rip Currents

NJSGC took rip current education and awareness to a new level of excellence in 2012. In addition to the signage program which has been responsible for supplying over 2,000 rip current safety signs and over 30,000 brochures to coastal communities since 2004, NJSGC launched two new programs in 2012.

The first was a collaborative effort with the Girl Scouts of the Jersey Shore and the Jersey Shore Partnership. Through the project, Girl Scout troops participated in a variety of activities including inventorying the existing rip current signs, providing and applying quick



response (QR) tags to them and participating in several sand art contests where the designed projects had a rip current safety theme.

The other project was the development of a rip current app to improve communication among lifeguards and emergency management personnel. The app was developed by a talented group of computer science students at Stevens Institute of Technology. The app was tested by a dozen New Jersey communities in 2012 and was highlighted by several media outlets including the Weather Channel during its Rip Current Week coverage. The coastal processes specialist was invited to Silver Spring, Maryland and Minneapolis, Minnesota to present the app to a wider audience including NOAA, the National Weather Service and the United States Lifesaving Association.

Superstorm Sandy

In the aftermath of Superstorm Sandy, NJSGC's Coastal Processes Specialist found himself on the front lines trying to help New Jersey's communities recover and rebuild with resilience in mind. Immediately after the storm, Dr. Miller toured the devastation with representatives from FEMA, the State of New Jersey, and New York City, to provide local expertise and context to the storm impacts and to assist in identifying solutions. In addition, Dr. Miller was invited by several communities including Toms River Township and Bay Head to discuss shore protection options to prevent future disasters. Perhaps more importantly, he was invited to provide testimony before several committees of the State Legislature on the recovery effort and attempts to provide commentary on several bills designed to increase hazard resiliency in our coastal communities. The press also relied heavily on Dr. Miller's expertise as he was regularly asked to provide commentary on topics ranging from coastal storms, to climate change, to community preparedness. Thanks in part to his efforts, New Jersey is well on its way to recovery and is moving forward with a more sustainable future in mind.

MICHAEL DANKO - Marine Recreation Agent

New Jersey Clean Marina Program

The NJSGC Extension Program continued its partnership with the New Jersey Department of Environmental Protection Office of Coastal Management to implement the New Jersey Clean Marina Program to minimize the impact recreational boating



activities have on the environment. Over 160 marinas have participated in Clean Marina related workshops, 249 marinas have received the guidebook and 48 marinas have been recognized as Clean Marinas. Marinas have implemented best management practices to reduce spills that occur during fueling, capture water from hull washing, use dustless sanders, improve recycling efforts, collect mercury containing devices, develop emergency response plans, educate boaters and install pumpout facilities. These efforts have improved coastal water quality, enhanced recreational boating and helped sustain businesses.



NJSGC continued its effort to prevent sewage and other discharges from vessels and provide information on boating access sites through NJBoating.org.

NJBoating.org is a new website that was launched in 2012 through a joint press announcement with the New Jersey Department of Environmental Protection.

The website is the result of the efforts of the members of the New Jersey Clean Vessel Act Program. The website contains a comprehensive list of pumpout facilities and boat ramps open to the public as well as information on boating best practices, recreational fishing regulations, Barnegat Bay, boating safety and other boating and fishing related information.



AMY BOYAJIAN, JILLIAN THOMPSON and JESSICA BROWN - Water Resources Agents

The Water Resource Agents dedicated their time and energy toward promoting best management practices that result in improved water quality in our watersheds and by making known the connection between healthy watersheds and healthy estuarine and coastal waters. Their extension activities targeted communities, municipal officials, schools, watershed groups and individuals interested in promoting improved water quality of watersheds, including New Jersey's coastal waters. These impacts were the result of expanding current programs, developing new ones, increasing partnerships, and leveraging funding. Leveraged funding for projects was provided by USDA, USEPA, NJDEP, Hamilton Township and the Camden County Municipal Utilities Authority.

Rain garden programs included Rain Garden Landscaper Training, Stormwater Management in Your Backyard, and Stormwater Management in Your Schoolyard, which reached over 1400 individuals, and conserved over 200,000 gallons of water. The Rain Garden Landscaper Training program strengthened regional partnerships with presentations given in Lewes, Delaware as part of a Delaware Sea Grant workshop and at US EPA Region 3 in Philadelphia, Pennsylvania. Rain Barrel programs included the Rain Barrel Art Program/"One Barrel at a Time Co-op" and the "Build a Rain



Barrel" Workshops. Through these programs over 2400 people were reached and over 1.7 million gallons of rainwater was conserved. The water resources team expanded the Green Infrastructure for Environmental Justice Communities program to the underserved communities of Newark and Camden. Additional programs were developed to help train volunteers to collect data for watershed restoration plans and educate municipal officials on stormwater management compliance. The Green Infrastructure programs reached over 970 people with over 50 projects installed. The programs have expanded geographically beyond New Jersey with presentations, installations and workshops given in Delaware, Pennsylvania and New York. The agents also were involved with a NJSGC-funded Program



Development project at Georgian Court University in partnership with the Rutgers Cooperative Extension's Water Resources Program on the development of rain gardens designed to remove nitrogen from stormwater.

LISA CALVO – Shellfish Aquaculture Program Coordinator

Shellfish Aquaculture Situation and Outlook Survey

There is no consistent annual reporting program for shellfish aquaculture in New Jersey and the economic importance of the industry remains undocumented and poorly understood. In the wake of recent natural disasters, the need for documentation regarding the scope and economic value of the industry is more important than ever. In 2012, the NJSGC's Shellfish Aquaculture Program Coordinator developed and launched an annual survey to address this issue for shellfish aquaculture in New Jersey. The Shellfish Aquaculture Situation and Outlook Survey is modeled after a successful survey program conducted by the Virginia Institute of Marine Science and Virginia Sea Grant. This survey will prove vital in understanding the importance of New Jersey's aquaculture industry to the economy and will help industry members gain support for key issues.

Twenty-three shellfish growers participated in the New Jersey survey. The hard clam industry was not well captured, but nearly all of the State's oyster growers participated, providing important statistics on the growing industry. Based on the survey, the total number of cultured oysters produced and sold as market sized oysters in 2012 was 1.5 million. These oysters yielded an average price of \$0.51 and were primarily sold wholesale. As of January 2013, the farms participating in the survey reported having 16.8 million field planted oysters. Oyster growers project that 2.6 million oysters will be harvested in 2013.

Cape Shore Oyster Growers Cooperative

In the last 15 years, oyster aquaculture has emerged as a vital industry in Delaware Bay, New Jersey. In contrast to the wild oyster fishery, which is located in the mid-to-upper bay, New Jersey's oyster farms are primarily located in the saltier waters of the lower bay. The lower bay area has extensive intertidal sand flats, known as the Cape Shore flats. These flats present an ideal environment for rack and bag oyster culture systems that are accessed from the beach at low tide. The bags and cages are stocked with hatchery produced oyster seed or wild caught oyster seed. The lower bay growing area is characterized by high quality clean waters that are rich with just the right combination of nutrients and salt enabling the production of consistently high quality delicious oysters.

The geographic centralization of most of New Jersey's oyster farms in the lower Delaware Bay creates an ideal opportunity for farmers to work cooperatively as they produce consistently high quality oysters in similar growing conditions. In January 2012, Rutgers University and the NJSGC Extension Program hosted a workshop on cooperative approaches to shellfish aquaculture. The workshop prompted a group of oyster growers to explore the possibility of forming a cooperative. Working with NJSGC's Aquaculture Program Coordinator, industry members formed a steering committee and formed the framework for the Cape Shore Oyster Growers Cooperative. The cooperative has been registered as a 308B Cooperative in Minnesota (as Delaware Bay Oyster Growers Cooperative), where there is a robust legal climate for farmer cooperatives. Finalization of incorporation documents is in process.

The guiding principles of the Cooperative are to: (1) establish a supportive community of oyster growers who will work together to provide fresh, high-quality cultured oysters to local and regional markets; and (2) adopt science-based best management practices to improve production efficiencies and ensure environmentally responsible and sustainable farming. The Co-op will evolve to serve marketing, purchasing, infrastructure and professional service needs of its members. The Co-op is particularly interested in serving specialty niche markets such as food cooperatives and upscale restaurants.



COMMUNICATIONS

Communications is a core program component that delivers diversified creative and production services to the New Jersey Sea Grant Consortium. The Communications Department functions as an in-house publishing, advertising and marketing agency for the organization and is responsible for effectively conveying information to the media, individuals and targeted user groups. Much of the information is marine science oriented and often based on NJSGC's own research and program activities. But Communications also integrates information input from other agencies, organizations and stakeholders who are working to increase understanding of New Jersey's coastal ocean environment.

The Communications team designs, produces and distributes publications and other resource materials to appropriate audiences and embraces all means and mediums including conventional print, electronic technology, radio and TV, web and social media to develop the most innovative and creative methods possible of transmitting and sharing information.

The 2012 New Jersey Sea Grant Consortium's Communications team included Director Kim Kosko,

full-time Communication Specialist Marsha Samuel and part-time Graphic Designer and Communication Associate, Rory Joyce. This small but dedicated and highly productive staff of talented media professionals were faced with additional challenges during the last quarter of 2012 when Superstorm Sandy uprooted them from their Sandy Hook home base and limited their access to critical technological tools they needed to execute their assignments and maintain their high level of productivity.

A special note of thanks and recognition needs to be given to Premier Graphics in Atlantic Highlands which offered equipment, office space, internet and phone access for conference calls and moral support to the Communications Staff for the duration of NJSGC's five months of "homelessness" following the storm.

While the Communications team played an integral role and contributed to the success of many NJSGC organization and department activities it also coordinated a number of stand-alone specific special events and projects in 2012 which included:

Tenth Annual State of the Shore Media Event

Representatives from dozens of television, radio, web and wire services, and newspaper outlets throughout the Tri-State area attended the Communication's Department's pre-summer premier media event. The *2012 New Jersey: Tenth Annual State of the Shore Report*, written and presented by Dr. Jon Miller, Coastal Process Specialist for the NJSGC was the showcase and anchor publication for the event.

Project partners included the NJDEP, NJ Division of Travel and Tourism, Stevens Institute of Technology and the Richard Stockton College Coastal Resource Center. Department of Environmental Protection Commissioner Bob Martin and Division of Travel and Tourism Executive Director Grace Hanlon were on hand to give remarks in support of the state's coastal health and thriving beach tourism industry. The event provided

millions of residents in New Jersey, New York, Pennsylvania and Connecticut with a reinforcing reminder about the importance of the State's coastal resources and their economic value to the State.

Dr. Thomas Herrington of Stevens Institute of Technology who wrote and delivered the first ever *Annual State of the Shore Report* in 2003 was a featured speaker. In a coincidental pre-Sandy themed agenda, Michael Augustyniak of the NJ Office of Emergency Management, Mary Colvin, FEMA Region II, and Dr. Stewart Farrell Director, Richard Stockton College Coastal Research Center provided overviews of state and federal coastal storm impacts and planning and response programs. NJSGC's reputation as an accurate and relevant information source about the condition of the State's beaches and current coastal issues was further strengthened by this much-anticipated, well attended annual media event.



New Jersey's Top Ten Beaches Survey and Coastal Prize Package Giveaway



The Consortium's popular New Jersey Top Ten Beaches survey project launched in 2008 in cooperation with the Richard Stockton College's Coastal Research Center was created to make people feel more connected to and protective of New Jersey's beaches. In 2012 New Jersey residents and beach lovers were once again asked to help rank the state's favorite shore

destinations in the Fifth Annual New Jersey Top Ten Beaches Poll. Visitors to njtoptenbeaches.org were also invited to take part in a simple, single-question poll that asked them to select which issue they felt would have the biggest impact on the future of coastal New Jersey. The single-question poll asked web site visitors to select from a list of twenty issues the one they felt would have the



biggest impact on New Jersey's coastal future. The poll responses provided valuable information that served as a catalyst for new project ideas for NJSGC. To thank participants NJSGC worked closely with key tourism representatives from coastal counties to coordinate a Jersey Coast Prize Packages giveaway. Website voters could opt to enter a drawing for one of four prize packages that featured merchandise and certificates for attractions and activities that can be enjoyed while down and around the shore.

The results of the mini-poll and winners on the Jersey Coast Prize Packages were announced at NJSGC's annual State of the Shore showcase media event along with the top vote getters in the Top Ten Beaches survey.

Rip Current Awareness: Innovative Partnerships Ripcur Smartphone Mobile App Project

Rip current related drownings are one of nature's deadliest phenomena, but sometimes receive less publicity than other natural hazards because our understanding of them is still somewhat limited.

Communications organized a special media event for NJSGC and Stevens Institute of Technology on June 6th in Spring Lake to officially introduce and demonstrate an exciting new smartphone mobile app developed by a team of Stevens Institute Computer Science Students. The device will help lifeguards track potentially deadly rip currents and assist the National Weather Service with data collecting and rip current warnings.



Spring Lake was one of the first New Jersey beach communities to test/use the mobile application and other pilot towns including Belmar and Lavallette were announced at the press conference.

The Ripcur App project was coordinated by NJSGC Coastal Processes Specialist Dr. Jon Miller of Stevens Institute. The press event and app itself received national and even international attention and interest and the story was picked up by most major TV networks and featured on a special segment on the Weather Channel.

Rip Current Awareness Asbury Park Press Conference

To coincide with National Rip Current Awareness Week, Communications worked with the City of Asbury Park and NOAA/NWS to hold a special press conference on the Asbury Park boardwalk to help promote rip current awareness and showcase the Girl Scouts of the Jersey Shore and their rip current projects.



The Stew Tweed Fisheries and Aquaculture Scholarship



NJSGC established a scholarship fund in 2008 to honor the memory of Stew Tweed who worked as a Marine Agent for the NJSGEP between 1978 and 2005. The scholarship is designed to perpetuate Stew's combined passion for shellfish culture and marine science education and for taking fisheries and marine-related technology and scientific information and finding ways to apply them to the real world of shellfish aquaculture and commercial fisheries. A generous group of industry leaders and individual benefactors recruited by Project Coordinator Kim Kosko established enough "seed" money to fund the aquaculture scholarship program. Each year, scholarships are awarded to support one graduating high-school senior (\$1,000) and one undergraduate/graduate student (\$1,500) pursuing studies or an outstanding research or technology project focusing on fisheries or aquaculture. The 2012 winners were Colleen Talty for the Undergraduate/Graduate Scholarship and Danielle Beers for the High School Scholarship. Congressman Frank Pallone (NJ-6th District) who once worked for New Jersey Sea Grant Extension and was a colleague of Stew Tweed presented the scholarship awards during NJSGC's Ocean Fun Days an annual education-oriented outreach event.

Awards and Accolades

NJSGC Communications accolades in 2012 included a prestigious APEX Award for the limited edition calendar, *New Jersey Shore Shots*, which featured winning photos from the first New Jersey Top Ten Beaches Photo contest held in 2011. Three of the state's most notable photographers representing southern (Al Campbell), central (Paul Scharff) and northern (Dwight Hiscano) New Jersey served as the panel of judges. They selected 24 photos from hundreds of entries and those finalists were posted on the New Jersey Top Ten Beaches website so visitors could vote for their favorite dozen photos, to be included in the calendar.



New Year, New Research

The New Jersey Sea Grant Consortium (NJSGC) recently submitted to 2012-14 Sea Grant Consortium Proposals to the National Sea Grant Program. In support of ongoing research, education and communication activities, the proposal also requests funding for two new research projects focusing on issues of high priority in New Jersey's coast. These include work within Hatteras Bay and Long Beach Sound, and the study of the effects of climate change on the coastal zone. The first research project is titled "The Effects of Winter Weather: Influence of Change in Community Structure, Function and the Four Coastal Shelf Ecosystems" and is led by Dr. Thomas Gotschall, Rutgers University, Institute of Marine and Coastal Sciences. The overall goal is to enhance the understanding of winter weather connectivity between structure and functional shellfisheries and address issues related to the effects of winter weather and management of its habitats.

Desktop Calendars Celebrate New Year and New Jersey's Coast

In response to the overwhelming popularity of the first edition of the 2012 Shore Shots calendar, the New Jersey Sea Grant Consortium will celebrate the New Year by offering downloadable monthly desktop calendars showcasing the winning photos from the New Jersey Top Ten Beaches Photo Contest. The limited supply of printed calendars can be ordered in the weeks of publication, as NJSGC will offer the images for download on its website. The first calendar, released on the organizational start day of January 1st, features a photo of the Hatteras Bay Lighthouse. The second calendar, released on January 15th, features a photo of the Long Beach Sound. The third calendar, released on January 29th, features a photo of the Hatteras Bay Lighthouse. The fourth calendar, released on February 12th, features a photo of the Long Beach Sound. The fifth calendar, released on February 26th, features a photo of the Hatteras Bay Lighthouse. The sixth calendar, released on March 12th, features a photo of the Long Beach Sound. The seventh calendar, released on March 26th, features a photo of the Hatteras Bay Lighthouse. The eighth calendar, released on April 9th, features a photo of the Long Beach Sound. The ninth calendar, released on April 23rd, features a photo of the Hatteras Bay Lighthouse. The tenth calendar, released on May 7th, features a photo of the Long Beach Sound. The eleventh calendar, released on May 21st, features a photo of the Hatteras Bay Lighthouse. The twelfth calendar, released on June 4th, features a photo of the Long Beach Sound.

SEAFOOD SHARE

SHARE	DESCRIPTION	PRODUCER
Scallops	Farmed	Viking Village
Hard clams	Farmed	Norfolk Neighbors
Mullica River Oysters	Wild	Mullica Shellfish
Spot	Farmed, Grown-out, Cut	Lund's or Viking Village
Crabs	Dressed, Fresh	Plantation Company
Lobsters	Dressed	Cape May Seafood
Oysters	Farmed	Lund's Shellfish
Crabs	Dressed	Lund's Shellfish
Chopped clams and chowder	Farmed	Lund's Shellfish

PRICE: \$20/Share. \$200/Share. To be paid in full by May 1, 2012.

SHARE SIZE: While the exact size of the share will vary weekly depending on the market, one share will generally be enough for two people. If you purchase more than one share, you will receive an additional seafood share and 10% of the season.

PICKUP: Usually beginning Saturday, June 9, 2012. Pickup for most Saturday mornings 9-12. If you are unable to pick up your share, please call us to make a pickup. Also, we cannot hold shares for anyone other than a small contact with them for pickup, along with a reasonable check or cash.

LOCATION: 585 Farm, 250 S. Main, 2nd Floor, Gateway, NJ 08215. Turn in driveway and it will be on your left. Please follow signs for C&A parking.

ADDITIONAL RESOURCES AND INFORMATION: Every two weeks, the arrival of seafood share will be accompanied by the availability of additional natural resources, such as a short description of the seafood products, the species being offered, recipe suggestions, an instructions for preparation. We will also notify subscribers of the availability of the share. Cooking Classes or Cook Tours. We hope that by "tasting the water" with the seafood shares we will increase the interest of local, fresh, and sustainable seafood to local consumers, support the livelihoods of small-scale local fishermen, and increase awareness of how important it is to broaden the base of the local food movement. For details, help us spread the word!

CONTACT INFORMATION: For additional information about the seafood share options, please contact Jennifer Lammara at jlammar@njsgc.com, Call Flinn at flinn@njsgc.com, or look for more information at SeafoodShare.com.



Reel in a Reward for your Winter Flounder Catch!

Researchers from Rutgers are tracking the movements of winter flounder. If you catch a fish with either of the devices pictured below please follow the instructions.

Archival Tag

Archival tag will be inserted in the head of the fish. Tag will be of the following type:

- Archival tag will be inserted in the head of the fish. Tag will be of the following type:
- Archival tag will be inserted in the head of the fish. Tag will be of the following type:
- Archival tag will be inserted in the head of the fish. Tag will be of the following type:

Dorsal Yellow Loop Tag

If you catch a fish that has a dorsal yellow loop tag, please follow the instructions below.

- Archival tag will be inserted in the head of the fish. Tag will be of the following type:
- Archival tag will be inserted in the head of the fish. Tag will be of the following type:
- Archival tag will be inserted in the head of the fish. Tag will be of the following type:

New Jersey Boater's RESOURCE GUIDE

Nautical Nuggets

Little Neck Clams

Reel in a Reward for your Winter Flounder Catch!

Archival Tag

Dorsal Yellow Loop Tag

Prohibited Species

Other Species: Possession Limit - TOTAL LENGTH

Species	Possession Limit - TOTAL LENGTH
Atlantic Croaker	36"
Atlantic Herring	36"
Atlantic Mackerel	36"
Atlantic Menhaden	36"
Atlantic Rockfish	36"
Atlantic Silverside	36"
Atlantic Striped Bass	36"
Atlantic Tomcod	36"
Atlantic Weakfish	36"
Atlantic Whitefish	36"
Atlantic Yellow Perch	36"
Atlantic Zander	36"
Atlantic Rockfish	36"
Atlantic Silverside	36"
Atlantic Striped Bass	36"
Atlantic Tomcod	36"
Atlantic Weakfish	36"
Atlantic Whitefish	36"
Atlantic Yellow Perch	36"
Atlantic Zander	36"

Blue Crab

Shark

Winter Flounder

Atlantic Croaker

Atlantic Herring

Atlantic Mackerel

Atlantic Menhaden

Atlantic Rockfish

Atlantic Silverside

Atlantic Striped Bass

Atlantic Tomcod

Atlantic Weakfish

Atlantic Whitefish

Atlantic Yellow Perch

Atlantic Zander

Atlantic Rockfish

Atlantic Silverside

Atlantic Striped Bass

Atlantic Tomcod

Atlantic Weakfish

Atlantic Whitefish

Atlantic Yellow Perch

Atlantic Zander

EDUCATION PROGRAM

Part of the mission of the NJSGC is to assure that New Jersey's citizens and visitors understand, value, and appreciate the marine and coastal environment that surrounds them. Each year, the staff of the Education Program at the NJSGC works towards that mission by conducting programs that advance ocean literacy, enrich science education and create awareness of key coastal issues. At the same time, stewardship for the environment is nurtured through teaching that uses the excitement of experiential learning to foster awareness, appreciation and behavioral change.

In 2012 the majority of the department's efforts were focused on school-aged children and their teachers. Besides conducting hundreds of guided field trips from NJSGC's Sandy Hook headquarters, education staff held programs for pre-K-12 audiences at New Jersey's schools, informal education centers and at after-school and out-of-school time childcare centers. These off-site presentations became especially important following Superstorm Sandy which closed NJSGC's Sandy Hook headquarters for the remainder of the year. In addition,

education program staff hosted courses in the marine sciences for New Jersey's undergraduate students, provided a variety of teacher training experiences for pre- and in-service educators and contributed to a number of marine and coastal related public outreach events including the coordination of NJSGC's own annual open house, Ocean Fun Days.



Education Program highlights for 2012:

The Coastal Experience

Despite Superstorm Sandy which ended NJSGC's field trip season prematurely, over 18,000 New Jersey schoolchildren participated in a diverse range of content-rich learning experiences on the beaches, bays and maritime forest habitats of Sandy Hook. Field trips were coordinated by staff members Diana Burich and Cindi Valkos along with a dedicated team of nearly forty marine science educators. Following Sandy, off-site presentations increased statewide over the fall and winter. A new partner, Our Lady of Mount Carmel 21st Century Learning Center in Asbury Park brought in the NJSGC for a ten-week series of after-school presentations to school-aged children led by staff member Rosemary Higgins.



Marine Science Summer Camps

In 2012, 156 children from grades 3 through 8 spent part of their summer vacations with NJSGC's educators. Led by Jessica Staats, extensive outdoor explorations were conducted followed by challenging laboratory investigations including squid and shark dissections. A new activity was introduced by NJSGC's K-12 Program Coordinator Diana Burich during which campers designed, built, and tested remotely operated underwater vehicles of their own design.

Pre-Service Internships

Two pre-service educators from NJSGC member institutions Monmouth University and Seton Hall University completed summer internships with education program staff in 2012. The future educators were provided with the chance to observe and assist NJSGC's team of marine educators and teach their own groups of visiting students. Each intern also developed a unit of study on a coastal topic and field tested lessons from it with students from the Consortium's marine science summer camp.

Congratulations to Seton Hall University intern Laura Degman who upon her graduation was hired to teach science in the Linden Public School District.

Project PATH

(Parents, Administrators, Teachers and Higher Education Faculty helping rural disadvantaged students stay on a pathway to a geoscience career): By exposing students while they are still young to geoscience careers, a future workforce will result that will be equipped to deal with local, state and national environmental and technical needs. This is the premise of Project PATH. For this project, NJSGC educators entered into a multi-year partnership led by Dr. William Slattery of Wright

State University (Dayton Ohio) to work with a group of 30 under-resourced students from rural Ohio over the course of their middle school years. During the summer of 2012, NJSGC educators provided a weeklong program in geoscience education focused on marine science and marine science careers to the students. The group included teachers, administrators, parents and university faculty from Ohio who worked alongside the students to become acquainted with the science of the ocean and research being conducted to increase understanding of its critical habitats. One highlight of the week was a visit to the James J. Howard Marine Sciences Laboratory where the group had the opportunity to meet with many of the NOAA research scientists working there.

Following that, 15 Wright State masters-level science education majors participated in a three-day seminar at Sandy Hook led by NJSGC staff. The workshop provided the group with experiences, ideas and examples of ways to use marine science to build understanding and

excitement for science, technology, engineering and math (STEM) topics when they return to their K-12 classrooms in the fall. One highlight of the program was a sampling cruise aboard the NOAA research vessel Nauvoo co-taught by NJSGC educator Jessica Staats and Captain Peter Plantamura of the NOAA/National Marine Fisheries Service. Funding for Project PATH was provided by the National Science Foundation.



Geoscience Education at Sandy Hook

Despite the need to educate K-12 students on earth systems science (a recently added mandate in New Jersey's core curriculum content standards), New Jersey's teachers lack access to current research and applied, location specific teaching tools to inform themselves and their students on the discipline. To begin to close this gap, NJSGC staff members Claire Antonucci, Diana Burich and Mindy Voss teamed up with researchers and educators from Rutgers University to help teachers and administrators from Red Bank, New Jersey improve their earth systems science curricula through use of marine science content. As a follow-up to an intensive 2011 summer institute held at NJSGC headquarters, this team provided curriculum planning assistance and in-class support to the Red Bank group throughout the 2011/2012 school year. The collaboration resulted in the district-wide adoption of a new science curriculum for Grades 3-8 which includes local, place-based marine and coastal content throughout. In addition, Red Bank's educators developed lessons to integrate into the district's mathematics, language arts, and health classes that featured marine science themes. Funding for Geoscience Education at Sandy Hook was provided by the National Science Foundation.



Public Outreach/Ocean Fun Days

Each year, NJSGC's educators reach out to the public at a number of public events that focus on increasing ocean literacy or advancing environmental science education. In 2012, these events included the Barnegat Bay Festival, the New Jersey Science Teachers Convention, the New Jersey School-Age Care Coalition Conference, the Ocean County Environmental Educator's Roundtable, the Association of New Jersey's Environmental Educators Conference and Cape May's HarborFest. In addition, the Consortium's large-scale public outreach event, Ocean Fun Days, coordinated since its founding in 2004 by New Jersey Natural Gas and NJSGC's College and Special Programs Coordinator Rosemary Higgins, was held on May 19 and 20.

In 2012, Ocean Fun Days attracted over 12,000 attendees over two days. 56 like-minded groups (local and



regional environmental organizations, government and non-government agencies, colleges, universities and informal education centers, etc.) contributed exhibits and programs to educate the public regarding New Jersey's marine, coastal and estuarine resources. The 2012 event included classes in energy conservation, rip current safety, dune building and marine plant and animal identification. At Sandy Hook, the James J. Howard/NOAA Marine Fisheries Laboratory opened its doors to the public with NOAA researchers and scientists on hand to speak with all visitors. The NJSGC receives financial and in-kind support from the event's founding partner New Jersey Natural Gas which makes it possible to offer this event to the public at no charge. Additional 2012 Ocean Fun Days supporters were the Asbury Park Press, NJDEP, New Jersey Division of Parks and Forestry and the Sandy Hook Foundation.



Rip Current Awareness - An Innovative Partnership Continues

To better inform New Jersey's beachgoers on the dangers of rip currents, the Jersey Shore Partnership Foundation, Stevens Institute of Technology and NJSGC's educators teamed up for the second summer in a row with the Girl Scouts of the Jersey Shore (GSJS) in 2012. A video produced by two girls who participated in the 2011 program was completed in 2012 and can be viewed at http://www.youtube.com/watch?v=SIii2LvRR5k&feature=em-share_video_user.

In 2012 the project expanded to additional councils with girl scouts participating statewide to earn a "Break the Grip of the Rip" badge. To earn the badge, girl scouts visited beaches throughout New Jersey distributing rip current brochures and adding QR tags to rip current signs. The tag, when scanned by a SMART phone or I-pad, connects users to the rip current section of NJSGC's



website. To view these materials including a booklet for children co-developed by NJSGC staff member Mindy Voss and members of the GSJS, go to <http://www.njseagrant.org/extension/coastal-concerns/rip-current-awareness>. Funding for the rip current awareness program was provided by Jersey Central Power & Light, TD Bank and the Jersey Shore Partnership Foundation.

NEW JERSEY SEA GRANT CONSORTIUM, INC.

Financial Statements

September 30, 2012 and 2011

With Independent Auditors' Reports

New Jersey Sea Grant Consortium, Inc.
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September 30, 2012 and 2011

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Independent Auditors' Report

To the Board of Trustees,
New Jersey Sea Grant Consortium, Inc.:

We have audited the accompanying statements of financial position of New Jersey Sea Grant Consortium, Inc. as of September 30, 2012 and 2011 and the related statements of activities and changes in net assets, cash flows and functional expenses for the years then ended. These financial statements are the responsibility of New Jersey Sea Grant Consortium, Inc.'s management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of New Jersey Sea Grant Consortium, Inc. as of September 30, 2012 and 2011, and the changes in its net assets and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

In accordance with *Government Auditing Standards*, we have also issued a report dated April 15, 2013 on our consideration of New Jersey Sea Grant Consortium, Inc.'s internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be considered in assessing the results of our audit.



Our audit was conducted for the purpose of forming an opinion on the financial statements as a whole. The accompanying schedules of expenditures of federal awards and state financial assistance are presented for purposes of additional analysis as required by U.S. Office of Management and Budget Circular A-133, *Audits of States, Local Governments, and Non-Profit Organizations*, and are not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the financial statements as a whole.

WithumSmith+Brown, PC

April 15, 2013

New Jersey Sea Grant Consortium, Inc.
Statements of Financial Position
September 30, 2012 and 2011

	2012	2011
Assets		
Current assets		
Cash	\$ 436,014	\$ 667,279
Investments	519,159	516,290
Accounts receivable	16,251	8,585
Grants and contracts receivable	381,992	232,502
Prepaid expenses and other current assets	51,203	42,094
Total current assets	<u>1,404,619</u>	<u>1,466,750</u>
Property and equipment, net	<u>903,471</u>	<u>981,450</u>
	<u><u>\$ 2,308,090</u></u>	<u><u>\$ 2,448,200</u></u>
Liabilities and Net Assets		
Current liabilities		
Accounts payable and accrued expenses	\$ 95,881	\$ 122,036
Accrued rent	4,463	--
Due to subrecipients	248,759	--
Deferred revenue	54,131	79,233
Total current liabilities	<u>403,234</u>	<u>201,269</u>
Long-term liabilities		
Accrued rent, net of current portion	46,785	39,071
Net assets		
Unrestricted	1,850,334	2,207,860
Temporarily restricted	7,737	--
Total net assets	<u>1,858,071</u>	<u>2,207,860</u>
	<u><u>\$ 2,308,090</u></u>	<u><u>\$ 2,448,200</u></u>

The Notes to Financial Statements are an integral part of these statements.

New Jersey Sea Grant Consortium, Inc.
Statements of Activities and Changes in Net Assets
Years Ended September 30, 2012 and 2011

	2012			2011		
	Unrestricted	Temporarily Restricted	Total	Unrestricted	Temporarily Restricted	Total
Support and revenues						
Grants and contract revenue	\$ 1,569,199	\$ --	\$ 1,569,199	\$ 1,722,379	\$ --	\$ 1,722,379
Contributions	23,041	7,737	30,778	22,393	--	22,393
Educational and service program revenue	184,395	--	184,395	209,764	--	209,764
Membership dues	40,110	--	40,110	38,000	--	38,000
Interest income	3,667	--	3,667	7,351	--	7,351
Other income	35,978	--	35,978	21,344	--	21,344
	<u>1,856,390</u>	<u>7,737</u>	<u>1,864,127</u>	<u>2,021,231</u>	<u>--</u>	<u>2,021,231</u>
Expenses						
Program services						
Educational activities	299,421	--	299,421	429,419	--	429,419
Research activities	1,551,502	--	1,551,502	1,521,988	--	1,521,988
	<u>1,850,923</u>	<u>--</u>	<u>1,850,923</u>	<u>1,951,407</u>	<u>--</u>	<u>1,951,407</u>
General and administrative	362,993	--	362,993	358,219	--	358,219
	<u>2,213,916</u>	<u>--</u>	<u>2,213,916</u>	<u>2,309,626</u>	<u>--</u>	<u>2,309,626</u>
Changes in net assets	(357,526)	7,737	(349,789)	(288,395)	--	(288,395)
Net assets, beginning of year	<u>2,207,860</u>	<u>--</u>	<u>2,207,860</u>	<u>2,496,255</u>	<u>--</u>	<u>2,496,255</u>
Net assets, end of year	<u>\$ 1,850,334</u>	<u>\$ 7,737</u>	<u>\$ 1,858,071</u>	<u>\$ 2,207,860</u>	<u>\$ --</u>	<u>\$ 2,207,860</u>

The Notes to Financial Statements are an integral part of these statements.

New Jersey Sea Grant Consortium, Inc.
Statements of Cash Flows
Years Ended September 30, 2012 and 2011

	2012	2011
Cash flows from operating activities		
Changes in net assets	\$ (349,789)	\$ (288,395)
Adjustments to reconcile changes in net assets to net cash used by operating activities		
Depreciation	72,269	78,041
Bad debts	--	61,313
Loss on disposal of asset	5,709	2,786
Changes in net assets and liabilities		
Accounts receivable	(7,666)	(437)
Grants and contracts receivable	(149,490)	64,465
Prepaid expenses and other current assets	(9,108)	(2,894)
Accounts payable and accrued expenses	(26,155)	(4,947)
Due to subrecipients	248,759	--
Accrued rent	12,177	28,790
Deferred revenue	(25,102)	46,812
Net cash used by operating activities	<u>(228,396)</u>	<u>(14,466)</u>
Cash flows from investing activities		
Interest earned on investments	<u>(2,869)</u>	<u>(5,393)</u>
Net cash used by investing activities	<u>(2,869)</u>	<u>(5,393)</u>
Net decrease in cash	(231,265)	(19,859)
Cash		
Beginning of year	<u>667,279</u>	<u>687,138</u>
End of year	<u><u>\$ 436,014</u></u>	<u><u>\$ 667,279</u></u>

Supplemental disclosure of cash flow information

No amounts were paid for interest or income taxes for the years ended September 30, 2012 and 2011.

The Notes to Financial Statements are an integral part of these statements.

New Jersey Sea Grant Consortium, Inc.
Statements of Functional Expenses
Year Ended September 30, 2012

	Program Services			General and Administrative	Total
	Educational Activities	Research Activities	Total Program Services		
Salaries	\$ 143,272	\$ 505,311	\$ 648,583	\$ 131,462	\$ 780,045
Payroll taxes and benefits	33,865	167,201	201,066	37,990	239,056
Payments to subrecipients	--	765,822	765,822	--	765,822
Professional fees	26,739	28,331	55,070	96,986	152,056
Supplies	17,714	18,851	36,565	11,564	48,129
Advertising	1,343	2,533	3,876	--	3,876
Telephone	666	8,548	9,214	4,849	14,063
Postage	1,475	6,692	8,167	1,179	9,346
Occupancy	--	--	--	54,845	54,845
Repairs and maintenance	519	304	823	5,337	6,160
Printing	1,918	6,898	8,816	161	8,977
Fleet costs	--	7,500	7,500	--	7,500
Depreciation	55,547	12,401	67,948	4,321	72,269
Conference and training	10,332	13,887	24,219	2,649	26,868
Dues and subscriptions	97	573	670	5,526	6,196
Awards	--	6,650	6,650	--	6,650
Loss on disposal of assets	--	--	--	5,709	5,709
Miscellaneous	5,934	--	5,934	415	6,349
	<u>\$ 299,421</u>	<u>\$ 1,551,502</u>	<u>\$ 1,850,923</u>	<u>\$ 362,993</u>	<u>\$ 2,213,916</u>

The Notes to Financial Statements are an integral part of this statement.

New Jersey Sea Grant Consortium, Inc.
Statements of Functional Expenses
Year Ended September 30, 2011

	Program Services			General and Administrative	Total
	Educational Activities	Research Activities	Total Program Services		
Salaries	\$ 189,055	\$ 456,596	\$ 645,651	\$ 162,218	\$ 807,869
Payroll taxes and benefits	48,432	142,974	191,406	39,157	230,563
Payments to subrecipients	--	802,088	802,088	--	802,088
Professional fees	20,574	34,543	55,117	43,892	99,009
Supplies	19,589	17,540	37,129	13,790	50,919
Advertising	3,020	2,677	5,697	--	5,697
Telephone	--	9,051	9,051	5,789	14,840
Postage	2,384	4,942	7,326	1,422	8,748
Occupancy	--	--	--	70,008	70,008
Repairs and maintenance	--	565	565	2,680	3,245
Printing	5,810	10,591	16,401	2,349	18,750
Fleet costs	2,500	7,500	10,000	--	10,000
Depreciation	61,319	12,401	73,720	4,321	78,041
Conference and training	11,441	15,783	27,224	4,595	31,819
Dues and subscriptions	22	517	539	5,212	5,751
Awards	--	3,300	3,300	--	3,300
Bad debt expense	61,313	--	61,313	--	61,313
Loss on disposal of assets	--	--	--	2,786	2,786
Miscellaneous	3,960	920	4,880	--	4,880
	<u>\$ 429,419</u>	<u>\$ 1,521,988</u>	<u>\$ 1,951,407</u>	<u>\$ 358,219</u>	<u>\$ 2,309,626</u>

The Notes to Financial Statements are an integral part of this statement.

New Jersey Sea Grant Consortium, Inc.
Notes to Financial Statements
September 30, 2012 and 2011

1. Organization and Purpose

New Jersey Sea Grant Consortium, Inc ("NJSGC") is a 501(c)(3) institution dedicated to the care, conservation and sustainable-utilization of New Jersey's marine and coastal resources. The Sandy Hook-based Consortium currently consists of twenty-two colleges, universities and other organizations dedicated to advancing knowledge and stewardship of New Jersey's marine and coastal environment, and meets its mission through innovative research, education and extension programs.

New Jersey's coastline is a natural treasure and NJSGC is dedicated to understanding and caring for this resource. NJSGC programs range from sponsored research and marine science education for school-children to extension services for coastal municipalities, maritime businesses and the public.

Since the organization was founded in 1969, it has contributed leading research in the field of marine and environmental science. Since 1976, it has managed the New Jersey Sea Grant Program ("NJSGP"), part of a national network administered by the National Oceanic and Atmospheric Administration ("NOAA") that funds competitive research focusing on specific priority areas as well as education and outreach activities.

The Extension program at NJSGC provides useful information to people employed or interested in fields related to marine resources—fishermen, coastal engineers, maritime industry personnel, resource managers, decision makers, and the general public. Extension program personnel expertise includes biology, sociology, economics, public policy, and engineering. Each Extension program professional works directly with coastal communities and business professionals to transfer information and effect change by applying science-based information to daily decision-making.

The Education Program at NJSGC is committed to assuring that New Jerseyans understand, value, and appreciate their marine and coastal environment and are able to apply sound evidence and science-based information to make well-informed decisions regarding its use, management, and care. This is accomplished through the wide range of educational services and products that the Education Program provides. The Program's teaching and learning activities range from direct instruction such as field trips, camps, scout programs, in-school presentations, college coursework, public outreach events to information preparation and dissemination including fact sheets, posters, lesson plans, activity guides, video conferences, web-based publications and other teaching materials.

Learn more about the NJSGC by visiting njseagrant.org.

2. Summary of Significant Accounting Policies

Basis of Presentation

External financial reporting by not-for-profit organizations requires that resources be classified for accounting and reporting purposes into net asset categories according to externally (donor) imposed restrictions. The unrestricted net asset category represents net assets that are not subject to donor imposed restrictions, the temporarily restricted net asset category represents net assets that are subject to time or purpose donor imposed restrictions and the permanently restricted net asset category represents net assets that are subject to donor imposed restrictions that cannot be satisfied by either the passage of time or by actions of NJSGC. During the year ended September 30, 2012 NJSGC had accounting transactions in the unrestricted and temporarily restricted net asset category. During the year ended September 30, 2011 NJSGC had accounting transactions in the unrestricted net asset category.

Revenue and Support Recognition

NJSGC recognizes contributions as revenue when they are received or unconditionally pledged and records these revenues as unrestricted or restricted support according to donor stipulations that limit the use of these assets due to time or purpose restrictions. When a donor restriction expires, temporarily restricted net assets are reclassified and reported in the statements of activities and changes in net assets as net assets released from restrictions. However, the receipt of restricted contributions whose restrictions expire or are otherwise satisfied within the period of receipt are reported as unrestricted revenues in the statements of activities and changes in net assets.

New Jersey Sea Grant Consortium, Inc.
Notes to Financial Statements
September 30, 2012 and 2011

NJSGC accounts for those contract revenues which have been determined to be exchange transactions in the statements of activities and changes in net assets to the extent that expenses have been incurred for the purpose specified by the grantor during the period. Program revenues received in advance of their usage are classified as deferred revenue in the statements of financial position. In applying this concept, the legal and contractual requirements of each individual contract are used as guidance.

Additional unrestricted revenues are obtained from educational and service program revenue, membership dues, and investment income. These revenues are used to offset program expenses as well as the cost of property and equipment acquisitions and general and administrative expenses.

Income Taxes

NJSGC is exempt from Federal income taxes under Section 501(c)(3) of the Internal Revenue Code. Accordingly the financial statements do not reflect a provision for Federal income taxes. NJSGC has no uncertain tax positions at September 30, 2012 and 2011. There are no open tax years prior to 2009. In addition, there was no interest or penalties related to income taxes included in the financial statements.

Valuation of Long-Lived Assets

In accordance with the accounting pronouncements related to accounting for the impairment or disposal of long-lived assets, NJSGC reviews long-lived assets, including property and equipment, for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable. Management has determined that no assessment was required for the periods presented in these financial statements.

Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

Advertising

Advertising is expensed in the period incurred. Advertising amounted to \$3,876 and \$5,697 at September 30, 2012 and 2011, respectively.

Property, Equipment and Depreciation

Property and equipment of \$5,000 or greater is capitalized and recorded at cost, except for donated items which are recorded at fair value at the date of donation. At the time of retirement or other disposition of assets, the cost and accumulated depreciation are removed from the accounts and any gains or losses are reflected in the statements of activities and changes in net assets. When an asset is sold or retired, the cost and accumulated depreciation are removed from the respective accounts. Maintenance and repairs are charged to operations as incurred.

Depreciation is provided over the estimated useful lives of the assets using the straight-line method. Assets class lives are as follows:

Description	Estimated Life (Years)
Building improvements	5-20
Marine equipment	3-12
Machinery and equipment	5-12

New Jersey Sea Grant Consortium, Inc.
Notes to Financial Statements
September 30, 2012 and 2011

Expense Classification

The expenses of NJSGC are presented in the statements of activities and changes in net assets under the following classifications which describe NJSGC program activities:

Educational activities – supports the educational goals of NJSGC by planning and conducting a wide range of K-12, college, teacher, and public education programs.

Research activities – aids and encourages scholarly activities in marine related subjects through cost reimbursement contracts.

All expenses which were not directly associated with the above service categories, are categorized as general and administrative expenses. Additionally, there is a de minimis amount of fundraising expense that has been included in general and administrative expenses.

Reclassification

Certain amounts from the 2011 financial statements have been reclassified to conform to the 2012 presentation. Such reclassification had no effect on the change in unrestricted net assets previously reported.

3. Grants and Contracts Receivable and Deferred Revenue

NJSGC operates under various grants and contracts. At September 30, 2012 and 2011, NJSGC was due certain amounts from funding sources which resulted from expenditures incurred in excess of payments received. In addition, NJSGC received advances from certain funding sources which represent payments in excess of expenditures incurred which have been recorded as deferred revenue. The following details the grants and contracts receivable and deferred revenue at September 30:

Grants and Contracts Receivable		
	2012	2011
Funding Agency		
U.S. Department of Commerce		
National Oceanic and Atmospheric Administration		
Sea Grant Programs	\$ 248,841	\$ 138,482
U.S. Department of the Interior Fish and Wildlife Service	21,282	--
National Science Foundation	7,257	--
State of New Jersey - Department of Environmental Protection	88,984	--
Department of Transportation Maritime Resources	--	94,020
Other	15,628	--
	<u>\$ 381,992</u>	<u>\$ 232,502</u>

Deferred Revenue		
Funding Agency		
U.S. Department of Commerce		
National Oceanic and Atmospheric Administration		
Sea Grant Programs	\$ 26,314	\$ 9,675
Department of Transportation Maritime Resources	--	2,144
State of New Jersey - Department of Environmental Protection	--	67,414
State of New Jersey - Department of Agriculture	20,447	--
Other	7,370	--
	<u>\$ 54,131</u>	<u>\$ 79,233</u>

New Jersey Sea Grant Consortium, Inc.
Notes to Financial Statements
September 30, 2012 and 2011

4. Recurring Fair Value Measurements

NJSGC has provided fair value disclosure information for relevant assets and liabilities in these financial statements. The following table summarizes assets (liabilities) which have been accounted for at fair value on a recurring basis as of September 30, along with the basis for the determination of fair value:

	Total	Quoted Prices in Active Markets (Level 1)	Observable Measurement Criteria (Level 2)	Unobservable Measurement Criteria (Level 3)
2012				
Certificates of deposit	<u>\$ 519,159</u>	<u>\$ --</u>	<u>\$ 519,159</u>	<u>\$ --</u>
2011				
Certificates of deposit	<u>\$ 516,290</u>	<u>\$ --</u>	<u>\$ 516,290</u>	<u>\$ --</u>

For applicable assets subject to this pronouncement, NJSGC values such assets using quoted market prices in active markets (Level 1) for identical assets to the extent possible. To the extent possible that such markets are not available, NJSGC values such assets using observable measurement criteria, including quoted market prices of similar assets in active and inactive markets and other corroborated factors (Level 2). In the event that quoted market prices in active markets and other observable measurement criteria are not available, NJSGC develops measurement criteria based on the best information available (Level 3).

5. Property and Equipment

Property and equipment, shown net of accumulated depreciation at September 30, consisted of the following:

	2012	2011
Building improvements	\$ 1,157,887	\$ 1,157,887
Marine equipment	21,870	21,870
Machinery and equipment	<u>136,100</u>	<u>156,080</u>
	1,315,857	1,335,837
Less: Accumulated depreciation	<u>412,386</u>	<u>354,387</u>
	<u>\$ 903,471</u>	<u>\$ 981,450</u>

Depreciation expense totaled \$72,269 and \$78,041 for the years ended September 30, 2012 and 2011, respectively.

6. Line of Credit

NJSGC maintains a revolving line of credit of \$250,000, which is being extended month to month until the bank receives financial statements at which time the line is expected to be fully renewed and bear interest at the bank's prime rate plus .50 percent. The line of credit is secured by the accounts receivable, grants and contracts receivable and equipment of NJSGC. NJSGC had no amounts outstanding at September 30, 2012 and 2011 and there were no draw downs on the line during the years ended September 30, 2012 and 2011.

New Jersey Sea Grant Consortium, Inc.
Notes to Financial Statements
September 30, 2012 and 2011

7. Retirement Plan

NJSGC has a 403(b) contributory defined contribution retirement plan (the "Plan") for those employees who meet the eligibility requirements. Employees must have one year of service and 1,000 hours to be eligible for the Plan. Participants must contribute a minimum of 2 percent of eligible salaries in order to receive a 6 percent contribution from NJSGC to the Plan. Pension expense amounted to \$36,667 and \$40,929 for the years ended September 30, 2012 and 2011, respectively.

8. Leased Facilities

NJSGC occupies facilities owned by the National Park Service at Fort Hancock, New Jersey. NJSGC pays for all operating costs including, but not limited to, utilities, repairs and maintenance. NJSGC entered into a twenty-year lease agreement expiring June 30, 2025, which was amended in 2012 and calls for minimum lease payments of \$3,383 per year. Rental expense for these facilities for the years ended September 30, 2012 and 2011 was \$18,177 and \$34,008, respectively.

9. Concentrations of Credit Risk

Financial investments which potentially subject NJSGC to concentrations of credit risk consist of cash and receivables. In an attempt to limit the credit risk, NJSGC places all funds with high quality financial institutions. Management has not experienced any losses. Receivables are due from various governmental agencies with whom NJSGC has a long history of collecting payments, which reduces the credit risk. For the years ended September 30, 2012 and 2011, NJSGC received 68 percent and 57 percent of its revenues from Federal agencies and 17 percent and 22 percent from state agencies, respectively.

10. Subsequent Events

NJSGC has evaluated subsequent events occurring after the statement of financial position date through the date of April 15, 2013, which is the date the financial statements were available to be issued. Based on this evaluation, NJSGC has determined that no subsequent events have occurred, which require disclosure in or adjustment to the financial statements.