



A Newsletter from the New Jersey Sea Grant Consortium

Conference Addresses State's Coastal Sustainability Needs



Margot Walsh,
Executive
Director, JSP

Christopher Daggett,
President, CEO
Dodge Foundation

Carin Franzini,
CEO, NJ Economic
Development Authority

Monmouth University, attracted more than 100 attendees from business and industry, communities, state and local governments, academia, non-governmental organizations, and other sectors. The aim was to gather representatives of the region's diverse economic interests to see how they can

The New Jersey Sea Grant Consortium (NJS GC) was one of the host organizations for a recent conference coordinated by the Jersey Shore Partnership to discuss the state's sustainable future in light of sea level rise, climate change, ecosystem impairments, aging infrastructure and budget constraints. The conference, held in early February at

work together to support the economy while protecting the environment.



Michael Aron moderated a roundtable presentation.

Opening remarks were presented by Christopher Daggett, President and Chief Executive Officer of the Dodge Foundation followed by roundtable presentations moderated by Michael Aron, Senior Political Correspondent of NJN News to help identify the significant contributions and

importance of New Jersey's coastal and ocean economic sectors: Travel & Tourism, Fisheries, Ecosystem Services, Renewable Energy, Marine Trades, Business Development. The luncheon keynote speaker was Carin Franzini, Chief Executive Officer of the New Jersey Economic Development Authority.

A conference overview summarizing the day's discussions and recommended actions for building a sustainable coastal future for New Jersey will be published in late spring.

NJS GC to Host Summer Institute for Teachers

The NJS GC will be hosting a week-long workshop for Red Bank teachers this summer to help them integrate Sandy Hook-based marine science research into their classrooms. The initiative is part of a multi-partner National Science Foundation project involving the NJS GC, Rutgers University, Brookdale Community College, The National Park Service and The Sandy Hook Foundation.

The three main areas of research that will be incorporated into the institute will be Sandy



Hook's geomorphology, particularly the migration and deposition of sand and its impact on the park's coastal environments; climate change and the potential impact of sea level rise within the park; and the mapping of Sandy Hook's nearshore habitats.

Anticipated outcomes of the institute are collaboration between teachers, environmental educators, administrators, and scientists; the development of new geoscience teaching modules that feature hands-on access to real-world research; new teaching resources that link students with active geoscience research projects; and alignment of education products and activities with the New Jersey core curriculum content standards.

By incorporating real-world science and technology with local, field-based research, the NJS GC and its partners hope to not only advance each teacher's ability to teach science but to also boost student interest and proficiency in the sciences.



Pouring on the Praise for Rain Garden Projects

NJSGC Water Resource Agents Amy Boyajian and Jillian Thompson were recently recognized for two outstanding rain garden projects.

The Rutgers Cooperative Extension Water Resources Program and the Native Plant Society of New Jersey were awarded the New Jersey American Society of Landscape Architecture (NJASLA) Merit Award for Landscape Architecture Communications for their *Rain Garden Manual of New Jersey*. The NJSGC Water Resources Program team also received the Environmental Enhancement Award for the *Holmdel Village Elementary School Rain Garden Program*, along with project partner Omni Environmental.

Both awards were presented at the NJASLA Award Ceremony in January at Trump Taj Mahal Casino, Atlantic City, New Jersey.

Brian Friedlich, Omni Environmental LLC; Amy Boyajian, NJSGC Water Resources Program; Jeremiah Bergstrom, Water Resources Program and Erica Sollberger, President, NJASLA



NJ Clean Marina Facility Receives National Recognition

Bridge Marina in Lake Hopatcong, New Jersey, the first freshwater facility in the state to be designated a Clean Marina, earned another impressive title, according to Michael J. Danko, NJSGC's Marine Recreation Agent – Fisheries & Boating. The facility was named 2010 Marina of the Year in a highly competitive, coveted annual award presented by *Marina Dock Age* magazine, one of the industry's leading publications.

Danko, who worked closely with Bridge Marina owner Ray Fernandez to prepare the facility for Clean Marina status in 2009, said the *Dock Age* award was well deserved.

"Bridge Marina is an important contributor to the New Jersey marine industry, with a sharp focus on protecting New Jersey's marine resources. When Bridge successfully earned recognition as New Jersey's first and only freshwater certified Clean Marina, it demonstrated a real commitment to protecting the environment by implementing practices that control pollution, enhance the surrounding environment, and encourage responsible boating practices."

NJSGC's Michael Danko Speaks at International Conference

Michael J. Danko, NJSGC's Marine Recreation Agent – Fisheries & Boating, was an invited speaker at the January International Marina & Boatyard Conference in Fort Lauderdale. The annual event provides marina and boatyard owners, operators, and managers, dockmasters, harbor masters, and others in the marina industry a chance to exchange ideas, obtain information and attend educational seminars on new trends and best



Michael J. Danko

management practices.

Danko presented a talk on "Wash Wastewater Requirements at Marinas" during a National Clean Marina Workshop organized by Virginia Sea Grant for the opening day of the conference. According to Danko, the National Sea Grant Program was well represented at the workshop with five programs from across the country providing presentations. Other workshop participants and attendees included international marina operators and marine trades representatives.

To view the presentation and learn more about NJSGC's Marina Industry Enhancement program visit njseagrant.org

Coastal Communities Climate Adaptation Initiative

Coastal communities across the nation are faced with the challenge of how to adapt to coastal inundation associated with climate change and sea level rise. As part of the National Sea Grant Coastal Communities Climate Adaptation Initiative, the NJSGC and its partners, New Jersey Department of Environmental Protection Office of Coastal Management, Monmouth University's Urban Coast Institute and Stevens Institute of Technology, conducted community-based, climate adaptation demonstration projects in Cape May Point, Little Silver and Oceanport, New Jersey. The objective of these projects was to provide the participating communities with an

assessment of their vulnerabilities to help local decision-makers identify opportunities to improve their resiliency to coastal hazards and sea level rise. To accomplish this goal, virtual mapping was used to illustrate the potential scenarios for coastal inundation along with facilitated questionnaires that evaluated the communities' existing planning strategies. The findings from these activities were summarized in a special report that will be shared with the participating towns as well as planners and managers throughout New Jersey's coastal zone communities.

Jersey Shore Girl Scouts Launch Rip Current Outreach Project

The NJSGC is working with the Girl Scouts of the Jersey Shore on a rip current awareness project to educate swimmers and the general public on the dangers of rip currents, how to spot them, how to avoid them and, if necessary, how to escape them. The project's focus is to research rip current information, prepare a presentation and include an advocacy component. Participating Scouts will prepare a presentation for children and/or adults through a variety of media to educate them about the potential dangers of rip currents.

Each girl/group/troop must also research what their community already does to alert or educate swimmers to the dangers of rip currents. Then they must give a presentation, formally or informally to their city/town councils or mayors with their presentation materials

and request support from the town.

To assist the Scouts, the NJSGC is planning information sessions to give them background information on rip currents. The sessions will involve a half-day Sandy Hook field trip in the beach environment focusing on waves and currents and a follow-up program at Stevens Institute of Technology including video, an experiment demonstration and Rip Current Jeopardy. For more information about the project, visit <http://www.girlscoutsjs.org/clubs-and-girl-activities/rip-currents.html>



Oceans To Go Adds Oil Spill Topic

The NJSGC Education Department's *Oceans to Go* Program which offers programs for in-school, after-school and family science nights, has incorporated the timely topic of oil spills into its curriculum. The

new program is titled "Estuaries and Oil Spills" and focuses on the health of estuaries as vital ecosystems and the effects that a catastrophe such as an oil spill could induce.

The subject was inspired by a presentation given to NJSGC staffers last fall by Caitlin Reilly from

the LSU Sea Grant Extension Service. Reilly discussed her time spent participating in the last year's Gulf Coast oil spill restoration efforts and provided information about activities from an oil-spill curriculum for schoolchildren she developed. The NJSGC Education Department staff incorporated some of Reilly's suggestions into their program which combines lecture, experiments, and activities including the opportunity to observe live marine animals. Activities include but are not limited to: oil spill and clean up simulations; a card game featuring interrelationships between marine organisms and the adverse effects of oil contamination; mixing of estuarine waters based on various densities; a marsh metaphor game; and a watershed stewardship activity. All of the activities foster hands-on learning and are completely interactive.

The initial response from teachers and other group leaders who have opted to include the oil-spill segment in their NJSGC programs has been extremely positive.



Summer Camp Showcases Revitalized Waterfront

The NJSGC Education Department is working with the Town of Perth Amboy's Recreation Program to enrich their summer camp program by focusing on the town's waterfront. Perth Amboy's refurbished waterfront now includes a walkway and fishing areas and the town invited NJSGC to help encourage public use of these assets by educating local children about them. Diana Burich, K-12 Program Coordinator and Rose Higgins, College & Special Programs Coordinator, are coordinating the special program for NJSGC. The outdoor sessions, scheduled for the last week of July, will involve children in hands-on activities designed to reinforce the fact that an estuary like Raritan Bay, located right in each student's backyard, is one of the most highly productive ecosystems on earth. To introduce students to the diversity of marine life in the Raritan Bay, the NJSGC will show students how to use special nets and microscopes to collect and observe plankton and other marine organisms. A "Web of Life"

simulation game will teach students about the importance of plankton and its role as the foundation of the entire marine food web. The interactive demonstration, "Marsh in a Pan" will be also included to allow students to gain a better understanding of point and non-point source pollution and the importance of keeping their neighborhood clean. Between 150 and 200 youngsters are expected to take part in the pilot program along the Raritan in the beach area by Sadowski Park.



Fellowships Offer On-The-Job Marine and Coastal Career Training

The NJSJC has just finished evaluating applications for two National Oceanic and Atmospheric Administration (NOAA) National fellowships that prepare current and recent graduate students in New Jersey for future careers in coastal and marine science or management. The program received one application for the NOAA/Sea Grant John A. Knauss Fellowship and five for the NOAA Coastal Service Center's Coastal Management Fellowship.

The National Sea Grant College Program's Dean John A. Knauss Marine Policy Fellowship, established in 1979, provides a unique educational experience to students who have an interest in ocean, coastal and Great Lakes resources and in the national policy decisions affecting those resources. The program matches highly qualified graduate students with host organizations and agencies in the legislative and executive branch of government in the Washington,

D.C. area for a one year paid fellowship. The program is named in honor of one of Sea Grant's founders, former NOAA Administrator, John A. Knauss.

The Coastal Management Fellowship was established in 1996 to provide on-the-job education and training opportunities in coastal resource management and policy for postgraduate students and provide project assistance to state coastal zone management programs. The program matches postgraduate students with state coastal zone programs to work on projects proposed by the state and selected by the fellowship sponsor, the NOAA Coastal Services Center. The NJDEP Coastal Management Program will support one of the Coastal Management Fellows on a two-year project titled "Developing a Stakeholder Framework and Decision Support Tools for Coastal and Marine Spatial Planning."

Potential New Research Projects Begin Review Process

The NJSJC received 18 pre-proposals from seven of its member institutions in response to a request for proposals solicited in November 2010. The research project pre-proposals will be considered for potential inclusion in the NJSJC Omnibus Proposal Package for 2012-2014. The pre-proposals address research needs that were identified by the organization's stakeholder-driven Sea Grant Advisory Board and fall within four main categories established by the National Sea Grant Office: Healthy Coastal Ecosystems; Safe, Sustainable

Seafood Supply; Sustainable Coastal Development; and Hazard Resilient Coastal Communities. The pre-proposals will be reviewed by a Scientific Advisory Committee composed of academic and agency scientists from the Mid-Atlantic region outside of New Jersey. Those selected for continuance to full proposals will be determined by end of March. It's expected that three full proposals will ultimately be selected for funding beginning in February 2012.



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Printed on Recycled Paper

This publication is the result of work sponsored by New Jersey Sea Grant with funds from the National Oceanic and Atmospheric Administration (NOAA) Office of Sea Grant, U.S. Department of Commerce, under NOAA grant #NA100AR4170075 and the New Jersey Sea Grant Consortium. The statements, findings, conclusions, and recommendations are those of the author(s) and do not necessarily reflect the views of New Jersey Sea Grant or the U. S. Department of Commerce. NJSJC-11-791