

# URBAN COAST INSTITUTE



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## DIRECTOR'S MESSAGE

### Administration Adopts National Ocean Policy

By Tony MacDonald

On July 19 2010 President Obama signed an Executive Order (E.O.) establishing a National Policy for the Stewardship of the Ocean, Coasts, and Great Lakes, and creating a National Ocean Council (N.O.C.) to improve coordination and strengthen ocean governance and management of ocean resources. The Policy adopts the final recommendations on the Interagency Ocean Policy Task Force, and directs the Federal agencies to take action to implement them. The Task Force was led by the Council on Environmental Quality and included 24 senior-level policy officials from across the Federal Government.

The objective of the E.O. is to establish a consistent national policy to

- ensure the protection, maintenance, and restoration of the health of ocean, coastal, and Great Lakes ecosystems and resources
- enhance the sustainability of ocean and coastal economies
- preserve our maritime heritage, support sustainable uses and access,
- provide for adaptive management to enhance our understanding of and capacity to respond to climate change and ocean acidification, and
- coordinate with national security and foreign policy interests.

The Executive Order also provides for coordination with state and local governments, and the development of Coastal and Marine Spatial Plans that can reduce conflicts and enhance decision-making at the regional level. The Policy seeks to enable more integrated, ecosystem-based approaches to

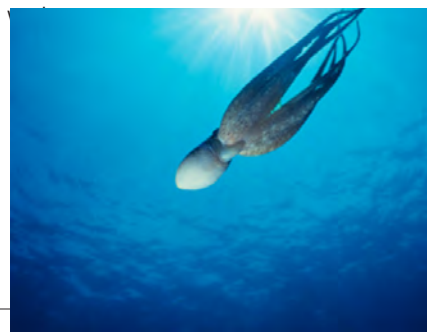
sustainable management and conservation across multiple sectors and potential uses of the ocean.

In September, President Paul G. Gaffney and I and other members of the Joint Ocean Commission Initiative (JOCI) met with the co-chairs of the National Ocean Policy, Nancy Sutley, Director of the Council on Environmental Quality and Dr. John Holdren, the Director of White House Office of Science and Technology Policy to urge aggressive action and funding support, as needed to implement the National Ocean Policy. For a copy of the E.O. and Final Recommendations see:

<https://obamawhitehouse.archives.gov/administration/eop/oceans/policy>

### Report Recommends Action on Adaptation to Climate Change

The Administration's Interagency Climate Change Adaptation Task Force released a report on October 14 titled "Progress Report of the Interagency Climate Change Adaptation Task Force." Potential climate impacts on coastal communities include sea level rise and inundation, more frequent and intense storms, ecological shifts, ocean acidification, alteration and loss of coastal habitats, increased vulnerability of coastal communities and critical infrastructure, and saltwater intrusion. The UCI is currently



## Report Recommends Action to Climate Change continued

ing with NJ DEP and local communities to reduce community vulnerability and increase community resilience in the face of sea level rise and potentially more threatening coastal storms. (See article below.) The Task Force recommended that the Federal Government implement the following actions to help the Nation better understand and prepare for climate change:

- make adaptation a standard part of agency planning,
- ensure scientific information about the impacts of climate change is easily accessible,
- align Federal efforts to respond to climate impacts that cut across jurisdictions and missions, such as those that threaten water resources, public health, oceans and coasts, and communities,
- develop a U.S. strategy to support international adaptation to help developing countries reduce their vulnerability to climate change, and
- build strong partnerships to support local, state, and tribal decision makers in improving management of places and infrastructure most likely to be affected by climate change.

By Spring 2011, the Task Force will establish a partnership committee of local, state, and tribal representatives to consult with the Federal Government to implement the recommended actions. Agencies will develop and implement strategic plans that identify how and where adaptation should be incorporated into their programs, policies, and regulations.

The Task Force will continue to meet over the next year as an interagency forum for discussing the Federal Government's adaptation approach and to support and monitor the implementation of recommended actions in the Progress Report.

## UCI and State News

### UCI Receives \$250,000 in Federal Funds

The UCI began work on a \$250,000 federal grant for the National Oceanic and Atmospheric Administration on September 1st 2010. The grant was announced at a press conference at the Belmar Marina with Senator Frank Lautenberg, Representative Frank Pallone, Monmouth President Paul Gaffney, UCI Director Tony MacDonald, Belmar Mayor Ken Pringle and other UCI supporters and University officials in attendance. This new funding will help support the UCI's goals in protecting and restoring the coastal waters in Monmouth and Ocean counties.



The Institute's water quality program, which has eight stations in the Navesink, Shark, Manasquan, and Shrewsbury rivers and the Raritan, Barnegat and Manahawkin bays, has already benefited from this grant. This water quality monitoring program "...has already helped spur efforts to clean up the Barnegat Bay," noted Tim Dillingham, the executive director of the American Littoral Society. The grant will also help fund the UCI's benthic mapping and habitat characterization initiative which will address marine ecosystem issues on a regional level, along with identifying coastal areas in need of restoration. The University research vessel Seahawk and marina provided a fitting setting for the announcement.



At the Belmar press conference, Tony MacDonald, Director of UCI, shows Senator Frank Lautenberg the specific areas that will benefit from the institute's protection. The Seahawk and her crew service the many UCI eco-projects in Monmouth and Ocean counties.

### UCI hosts Forum on Barnegat Bay

The UCI held a forum on September 22, 2010 to discuss challenges in taking action to restore and protect the Barnegat Bay. Speakers included Alan Steinberg, UCI Public Scholar in Residence and former EPA Region 2 Regional Administrator, Stan Hales, Executive Director of the Barnegat Bay Partnership, and Tim Dillingham, Executive Director of the American Littoral Society. The NJ Senate and Assembly are considering taking action on several bills to reverse the ongoing pollution and degradation, while the NJ DEP Commissioner has indicated that taking action to restore the Bay is a priority.

Yet, there is still no consensus for taking action. All speakers stressed that the failing health and productivity of the Bay will have significant negative effects on Ocean County's economy if no action is taken. Pollutant and nutrient flow into the bay are the main concerns surrounding the water body's health. The proposals for legislation call for a new Ocean County stormwater authority that would be funded by local ratepayers; however that is not supported by County Officials and local legislators. Action on the bill is considered unlikely. Other state legislation would limit the time and concentration of fertilizer application, which would help impede flow of nutrients affecting the basic ecology of the bay. State legislators are currently negotiating with fertilizer manufacturers, landscapers, environmentalists and other stakeholder to try to reach consensus on fertilizer limits. All of the forum participants expressed concern that without aggressive action at the local, state and federal level it will be difficult, if not impossible to reduce the decline of the Bay.







## Green Ports and Blue Harbors Conference

The UCI Director, Tony MacDonald worked with the American Association of Port Authorities to organize a Green Ports and Blue Harbors Workshop that was held on August 11<sup>th</sup> in Washington, DC. The Workshop brought port officials from Los Angeles, New York and other ports around the country together with senior administration and environmental representatives to discuss how the National

Ocean Policy and proposed coastal and marine spatial planning will impact ports marine transportation, and enhance stewardship of ocean resources and sustainable ports and maritime transportation. The participants also discussed the potential impacts and response of ports to climate and shoreline change. Mr. MacDonald served as the facilitator and moderator of the workshop

**“The workshop brought port officials from LA, NY and other ports around the country together. Representatives discussed how the National Ocean Policy will impact ports and enhance stewardship of ocean resources”**

## New Jersey Clean Marina Program

The NJ DEP and NJ Sea Grant Consortium (NJS GC) have added 11 marinas to the state’s Clean Marina program, bringing the total to 40. Clean Marinas are certified as using best management practices to protect New Jersey’s marine resources and health of New Jersey’s waters.

Since 2005 the DEP’s Office of Coastal Management and Watershed Restoration and the New Jersey Sea Grant Consortium have encouraged marinas to improve practices such as installation of systems to collect water used in washing, recycling shrink wrap used in boat storage, developing environmental emergency response plans, posting signs to educate marina users about environmental protection, implementing training for proper fueling, and taking steps to prevent oil, antifreeze and other fluids from fouling the water

Certified marinas are eligible to participate for grants to help them achieve their best management practice objectives. NJ DEP and NJS GC are working with another 40 operators who have pledged to work toward this designation. For more information about the Program and to see the entire list of New Jersey’s Clean Marinas, visit <http://www.njcleanmarina.org/>.



▲ **Clean Marina’s are certified as using best management practices to protect New Jersey’s marine resources and preserve the health of our waters.**

▶ **UCI mentor, John Tiedemann mans the water collection device while students look on. The data collection is crucial to the health of the Tri-state waterways.**

## UCI Summer Monitoring and Mapping

**By James Nickels, UCI Marine Scientist** In addition to providing continued support for the UCI network of real time monitoring stations and near-shore, benthic mapping work, I was engaged to work this summer on the UCI vessel Seahawk to assist Tetra Tech, Inc. to support the US EPA Coastal Conditions Assessment Program. UCI along with summer research interns assisted in collecting fish, water and sediment from coastal locations in New York waters from Jamaica Bay and the Hudson River up to West Point. In New Jersey, we collected fish samples at 21 stations from Raritan Bay to Cape May and up the Delaware to Salem, NJ. The information will be included in a National Coastal Condition report, which will be issued next year.

I also mentored four students this summer from Rutgers University, University of Delaware, Mercer County Community College and Rumson Fair Haven High School as part of the School of Science Summer Research Program. Their work ranged from ongoing service, calibration and maintenance of the real-time water quality monitoring network ranging from Keyport to Long Beach Island and surveying in flood warning gauges on the Pompton River to establish their reference elevations, to working on multi-beam hydrographic surveys in the Navesink River.

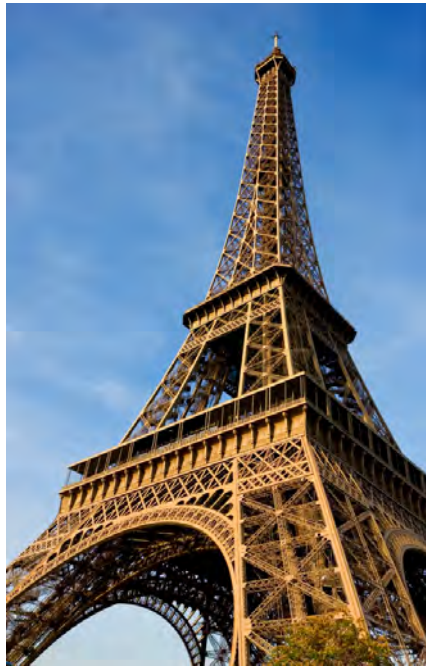
Monmouth is a supporter of area rowing and crew racing even though the University doesn’t have a team. The UCI helped design and layout the course for the first running of the Rumson Regatta Crew Race (Rowing) in September. On race day we deployed lane markers and provided a platform for race officials. Based on that race, the New Jersey Scholastic Rowing Association has asked us for assistance in course design and logistics for an upcoming all day high school event in the spring of 2011.

For more information contact James Nickels at [jnickels@monmouth.edu](mailto:jnickels@monmouth.edu)



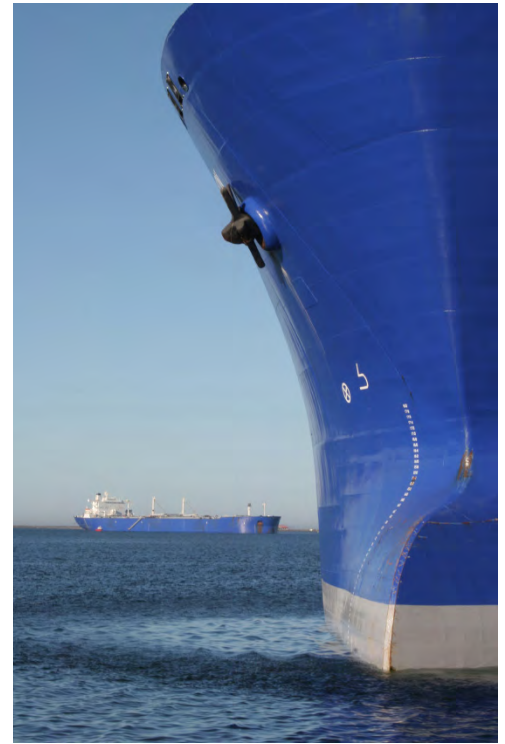
## Global Conference on Oceans, Coasts and Islands

On May 3<sup>rd</sup>, 2010 the 5<sup>th</sup> Global Conference on Oceans, Coasts, and Islands took place in Paris, France. The Urban Coast Institute director, Tony MacDonald, participated in the conference, while also organizing a session on Resilient Coastal Communities: Implementing Strategies for Adaptation to Sea Level Rise and Coastal Inundation. This session focused on coastal community adaptation responses, along with tools and information needs related to projected level sea rise and coastal inundation associated with coastal hazards and the resilience of coastal communities. A framework for coastal community hazard resilience is able to provide such coastal residents with the essential information, products, and model strategies to enable local communities to take action and adapt to sea level changes and inundation.



The Global Conference on Oceans, Coasts and Islands was held in Paris France last spring. This session focused on coastal community adaptation responses, along with the tools and informational needs related to rising sea levels. Other topics discussed were coastal inundation and the resilience of coastal communities. Pictured left, an example of a beautiful beach in Algarve Portugal.

## International News



### UCI Director Joins European Union - U.S. Dialogue to Improve Ocean Management

Tony MacDonald, UCI Director, joined the Cooperation Across the Atlantic for Marine Governance Integration (CALAMAR) project as a member in the Oceans and Climate Change working group. This project will provide an opportunity to share various lessons learned in the design and implementation of ocean policy reforms in the U.S. and Europe. Mr. MacDonald will join several other experts from the US and Europe in a discussion on past efforts in shared ocean policy priorities, along with addressing future opportunities for improved transatlantic cooperation.

Topics include ocean-related mitigation strategies like shipping and alternative energy; coastal adaptation strategies including shoreline protection and planned retreat; and related scientific information with gaps in knowledge. Project members will attend CALAMAR workshops held on October 11- 12<sup>th</sup> in Paris, France and in April 2011 in Lisbon, Portugal. A final report on recommendations will be issued in June 2011.

## coastal facts



### Did you Know?

#### Eel grass was once used as house insulation by early settlers?

Eel grass, which grew in abundance in Barnegat Bay, was dried out and used for house insulation. It was known to be used in the Governor's summer mansion that is located in Island Beach State Park.

Unfortunately in the 1930's, a blight had wiped out the eel grass, which ended harvesting of the plant. Eel grass was odorless and non-flammable and marine biologists say Eel grass is making a gradual comeback.

Source: NJDEP



# Barnegat Bay Partnership Funds to Monitor Water Quality

By James Nickels, UCI Marine Scientist

The UCI has received a grant of \$78,000 from the Barnegat Bay Partnership for continued real-time water quality monitoring in Barnegat Bay. The grant will support the maintenance, operation and upgrading of sensors at four locations in Barnegat Bay: Mantoloking, Seaside Park, Barnegat Light (new Station) and Bonnet Island. A new web interface that displays the water quality monitoring has been designed by students working for the Monmouth Rapid Response Institute, and should be rolled out shortly at [www.monmouth.edu/uci/coastal-water-quality/](http://www.monmouth.edu/uci/coastal-water-quality/).

The grant will support the maintenance, operation and upgrading of sensors at four locations in Barnegat Bay.



## Future of the Ocean Symposium

free to the public

### Future of the Ocean Symposium Marine Biodiversity

Woodrow Wilson Hall Auditorium

Registration 9:30 a.m.

Welcome 10:00 a.m. Paul G. Gaffney II, President,  
Monmouth University

Symposium Commences

10:15 a.m. Moderated by Tony MacDonald

Director, Urban Coast Institute

Keynote Speakers

Carl Safina, PhD, President and Co-founder, Blue Ocean Institute

Dr. Paul Sandifer, Senior Science Advisor, National

Oceanic and Atmospheric Administration

Discussion 11:30 a.m.

the talk



reservations required

### Awards Luncheon Program

Versailles and Pompeii Rooms

Luncheon 12:00 p.m.

Awards and recipients

Champion of the Ocean Dr. Carl Safina from Blue Ocean Institute

Coastal and Ocean Leadership Award The Honorable Joseph M.

Kyrillos, Jr., New Jersey State Senator, District 13

Marine Educator of the Year John Wnek, Vice Principal, Marine  
Academy of Technology and Environmental Science (M.A.T.E.S.)

Volunteer of the Year Award Steve Zeck, Dedicated volunteer,  
Jacques Cousteau National Estuarine Research Reserve

Business Attire • Reservations Required • Tickets \$125

[www.monmouth.edu/uci](http://www.monmouth.edu/uci)

the lunch

you are invited

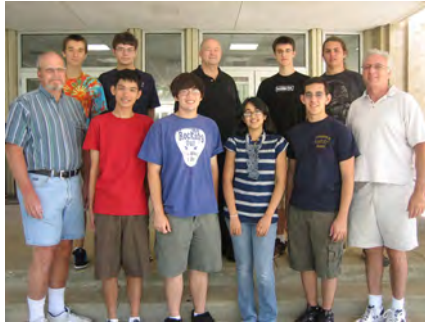
## UCI BRIEFS

### UCI Hosts Public Visiting Scholars: Alan Steinberg and Bradley Campbell

On September 15<sup>th</sup>, 2010 the Urban Coast Institute (UCI) announced that Alan Steinberg and Bradley M. Campbell will serve as the Public Scholars in Residence for 2010-11. Both Mr. Steinberg and Mr. Campbell have distinguished careers in public service and environmental management. Mr. Steinberg is a lawyer who formerly served as the EPA Region 2 Regional Administrator and Executive Director of the NJ Meadowlands Commission. Mr. Campbell, also a lawyer, was previously NJDEP Commissioner and EPA Region 7 Regional Administrator. The public scholars program provides an opportunity for scholars, practitioners, and leaders to share their expertise with Monmouth students and faculty, as well as providing support for UCI programs. The UCI Director, Tony MacDonald stated, "The public scholars will focus on the development and implementation of science-based policies and programs that support stewardship and sustainability of healthy productive and resilient coastal communities or the benefit of current and future generations." These visiting public scholars will be available to participate in classroom lectures, give public lectures, and be involved in public and University forums.

### Summer Research Grants In Memory of Heidi Lynn Sculthorpe

Beau Howard, a Monmouth University MBA student at the Monmouth University Leon Hess Business School was awarded a 2010 Heidi Lynn Sculthorpe Summer Research Grant. Mr. Howard is a resident of Freehold and received this grant to support his research on the legal and policy aspects of eminent domain in New Jersey coastal communities. His research will support an ongoing, multidisciplinary MU project titled Revitalizing the Coastal Community: Government Action, Private Rights, and Public Purpose. The grants are given in memory of Ms. Sculthorpe who was a lifelong resident of the Monmouth County shore area. Her father, Robert Sculthorpe, is a graduate of Monmouth University and Chairman of the University Board of Trustees. All grants are awarded based on the students' achievements and his or her goals for the research.



**RRI High School students with their mentors**

### Students Develop Early Flood Warning Prototype Website

The Urban Coast Institute worked with the Rapid Response Institute's (RRI) High School Summer Research Program this summer to develop a prototype website that will display real time flood sensor data for the Shrewsbury River Basin. This website prototype, dubbed the "Floodview," acquired real time sensor data and displayed the information in graphical and map-based modes. These projections allow the RRI and UCI to display useful information on this website such as evacuation routes and safety procedures. This website would also be useful to emergency management teams in declaring an emergency evacuation and various routes to safety, along with researchers that would be able to visualize trends over time.

### The UCI Host Local Officials from Russia

The Monmouth University Institute for Global Understanding and Political Science Department hosted four Russian local government officials, Igor Nikolayevich Cherenkov, Aleksey Mikhaylovich Kotenev, Grigoriy Ivanovich Mosolov and Yaragi Usmadiyevich Saydulayev for a week in September 2010. They are traveling throughout the tri-state area as a part of the Open World exchange program. This program offers exchange trips for professionals to strengthen ties between the two countries. UCI hosted the four officials on an environmental tour of the Navesink and Shrewsbury Rivers. After the tour, they attended the UCI's Barnegat Bay Forum where they learned about the various environmental issues and local community challenges in managing the Bay. The translator for the group stated, "We've had the chance to meet with municipal officials and compare our functions. We like the state and towns they've shown us, and the people have been very open and easy-going. We hope the trip has strengthened relations."

## URBAN COAST INSTITUTE

newsletter

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Director

Jim Nickels  
Marine Scientist

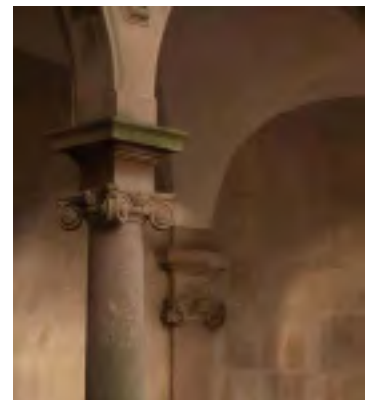
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