

Coastal Features



Volume 16 Issue 3

SUMMER/FALL 2010

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The Newsletter of the Rhode Island Coastal Resources Management Council

CRMC approves Ocean SAMP

Council votes unanimously to adopt the landmark document

The R.I. Coastal Resources Management Council has approved the Ocean Special Area

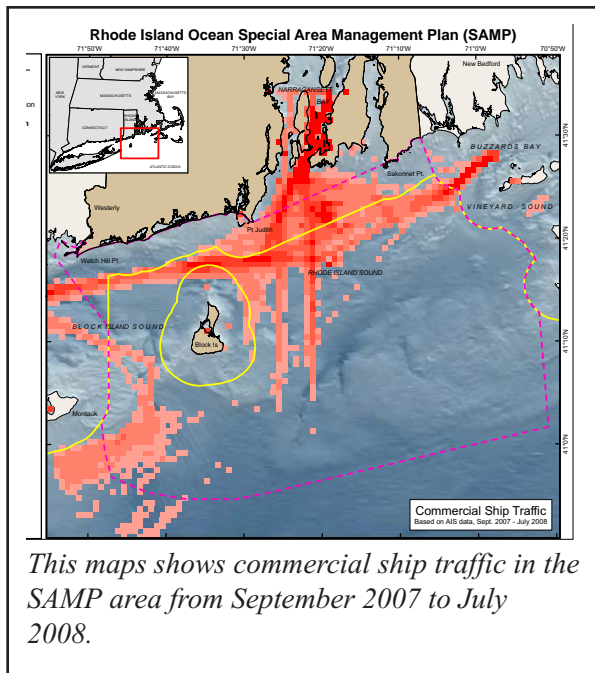
Management Plan, a national model for marine spatial planning and the first SAMP in the state to zone offshore waters for future uses and preservation.

The Council unanimously approved the

landmark document, the largest SAMP ever developed by the CRMC and University of Rhode Island, at its

October 19 meeting. The Ocean SAMP spans approximately 1,467 square miles over portions of Block Island Sound, Rhode

Island Sound and the Atlantic Ocean. The CRMC, together with the URI Graduate School of Oceanogra-



This map shows commercial ship traffic in the SAMP area from September 2007 to July 2008.

phy and Coastal Resources Center, R.I. Sea Grant, Roger Williams University and numerous stakeholders, organizations,

federal and state agencies, developed the 946-page document in two years. "The CRMC is extremely lucky to have a respected institution of higher learn-

(Continued on Page 3)

Aquaculture still growing in RI

Rhode Island's aquaculture industry continued to steadily grow in 2009, according to the Coastal Resources Management Council's annual status report, "Aquaculture in Rhode Island."

In 2009, the farm gate value (the value for the product paid to the farmer) of the state's aquaculture products increased to just over \$1.7 million (\$1,785,135). The industry growth and value have continued to grow since the total

(Continued on Page 5)

New aquatic invasive species found in RI

The first Asian shrimp has been discovered in Rhode Island waters, thanks to the detective work of an amateur naturalist and invasives monitoring volunteer.

The shrimp, *Palaemon macrodactylus*, was discovered in the Providence River in August. Ray Hartenstine, who volunteers for the R.I. Coastal Resources Management Council's Aquatic Invasive Species Monitoring Project, discovered a number of the shrimp near Gardner Jackson Park in the Providence River in August. Hartenstine also discovered the Asian Clam at Worden Pond in 2007 (though it was first reported in Tiogue Lake in Coventry in 1999).

The shrimp's identity was confirmed by Dr. Jim Carlton at the Marine Science Center at the Williams College/Mystic Seaport Maritime Studies Program in Mystic, Connecticut. Carlton is widely recognized as the world's leading marine bio-invasion expert.

The shrimp prefer to live in and around emergent marsh plants, have been responsible for the disappearance of native shrimp species in other states like California, and also have been known to carry fungi that could cause disease in native shrimp. The impacts of this invasive species on the native shrimp – an important food source for many fish species – could lead to ecosystem-level disturbances among native communities by providing a secondary food source to other species.

In addition to the Asian shrimp, the European shrimp, *Palaemon elegans*, the first of its kind to invade North America, was discovered in Salem, Massachusetts marina in July. The discovery was made during a Rapid Assessment Survey led in that state by Carlton. The survey was another in a series of follow-ups to the first ever conducted on the East Coast by Carlton in 2000. This year's included international teams of top marine taxonomic experts, who this year investigated numerous sites from Rhode Island to Maine.

CRMC staff participated in this year's survey while the team was in Rhode Island. The team investigated marinas, boat basins and fishing areas in Cranston, Newport, North Kingstown and South Kingstown, looking under docks and piers and scouring the coast on July 25 and 26. The monitoring was coordinated by the CRMC, which adopted its RI Aquatic Invasive Species Management Plan (RIAIS Plan) in January 2008. The plan calls for the continued support of these surveys, in an effort to keep the state's invasive species database updated.

In addition to the shrimp, species that have invaded Rhode Island waters include the European green crab, Asian shore crab, lace bryozoan, *Codium fragile*, a green algae, the red macroalgae *Grateloupia turuturu*, various colonial and solitary sea squirts, and several shellfish pathogens. Other invasive species of concern (due to their proximity to Rhode Island and/or those with a high potential for environmental and economic damage) include the following:

- * Veined Rapa whelk
- * Chinese Mitten crab
- * Suminoe oyster
- * Pacific oyster
- * Caulerpa sp.
- * Japanese kelp

The RIAIS Plan also addresses freshwater invaders, such as aquatic macrophytes like variable water-milfoil and curly pondweed, which have become established and are spreading in lakes and ponds. Introduced *Phragmites australis* and purple loosestrife are also spreading, clogging waterways and pushing out native species.

“On behalf of the CRMC, I'd like to thank Mr. Hartenstine for his diligence in discovering this new invasive species,” said CRMC Chairman Michael M. Tikoian. “Having dedicated volunteers like Mr. Hartenstine will ensure the effectiveness of our monitoring program.”

Ocean SAMP, *continued from Page 1*

October 21, celebrating the completion of the SAMP. “Through the University of Rhode Island and its Graduate School of Oceanography and Coastal Resources Center, the CRMC has formed a priceless partnership with an unparalleled team. The resources and people at URI have allowed the CRMC to realize many of its programmatic and policy efforts over the years, and were integral to the creation and realization of the Ocean SAMP. I thank the team of researchers and staff at URI for all they did and continue to do.”

A team of 47 URI staff – including scientists, policy makers and educators – worked on the SAMP’s creation with CRMC staff and others. The SAMP team held monthly stakeholder meetings to vet chapter content, research findings and keep the public involved in the process. It also conducted workshops on each of the SAMP chapters, where members of the public could comment and provide suggestions and feedback to chapter authors and CRMC staff.

Using the best available science and working with well-informed and committed resource users, researchers, environmental and civic organizations, and local, state and federal government agencies, the SAMP provides a comprehensive understanding of

the complex and rich ecosystem of Rhode Island’s offshore waters. The document covers topics including ecology, global climate change, cultural and historic resources, fisheries, recreation and tourism, marine transportation, navigation and infrastructure, renewable energy and other offshore development, future uses, existing statutes, regulations and policies, and policies of the Ocean SAMP.

“This day has been two years in the making, and as chairman, I’m proud to say that the Coastal Resources Management Council now has a landmark document to show for the monumental efforts of so many,” Tikoian said. “I’d like to recognize our Executive Director Grover Fugate and URI CRC’s Jennifer McCann and the other members of the Ocean SAMP team, as well as the members of the Ocean SAMP Subcommittee – Paul Lemont, Don Gomez, David Abedon and our legal counsel Brian Goldman – and the other members of the Council. Thank you all.”

Next Steps

For state waters adoption, the Ocean SAMP will be submitted to the R.I. Secretary of State. The CRMC will then seek approval from the National Oceanic and Atmospheric Administration (NOAA) for formal inclusion of

the SAMP into the federally-approved R.I. Coastal Resources Management Program (RICRMP). Securing this adoption – something the CRMC does with all applicable SAMPs – will allow the CRMC to exercise federal consistency within state waters, as provided for in the Federal Coastal Zone Management Act (CZMA).

For federal waters adoption, the CRMC will request a geographical boundary expansion to its federal consistency boundary by documenting in advance that certain licenses, permits, leases, etc., will have a foreseeable effect on the state’s coastal zone. The CRMC Will also establish formal agreements with key federal agencies by obtaining the geographical boundary extension approval from NOAA; continuing close coordination with the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE, formerly MMS) through the Atlantic Governor’s Consortium; and establishing a formal working relationship with the Federal Energy Regulatory Commission (FERC).

The full Ocean SAMP document is available online in its draft form at www.crmc.ri.gov, under Spotlight, or on the official SAMP web site: <http://seagrant.gso.uri.edu/oceansamp/>. The final version of the document will be available online in early December.

Fugate honored with NOAA award

Rhode Island Coastal Resources Management Council Executive Director Grover J. Fugate was recently honored with The Susan Snow-Cotter Award for Excellence in Ocean and Coastal Resource Management from the National Oceanic and Atmospheric Administration (NOAA). Fugate has served as the executive director of CRMC for 24 years.

According to NOAA, the award – one of the Walter B. Jones Memorial Awards – is given to individuals who have “initiated innovated practices and brought positive change to the

management of ocean or coastal resources at either the state or national level.” The criteria for this prestigious award include: effectiveness in advancing the goals of the Coastal Zone Management Act (CZMA) or National Marine Sanctuaries Act (NMSA); effectiveness in increasing public awareness of ocean, estuarine and coastal issues; use of innovative approaches, techniques or programs to advance the goals of the CZMA or NMSA; and transferability of activity to other ocean or coastal resource management programs. The award is open to those who work with state

coastal management programs, national estuarine research reserves and national marine sanctuaries.

The University of Rhode Island Coastal Resources Center, which nominated Fugate for the honor, credited him with being a “formidable leader in ensuring that our state’s coastal and ocean resources regulatory and planning processes are marked by innovative practice and positive change.

“In his nearly 25 years serving at the helm of the state’s coastal management regulatory agency, Grover has consistently employed his trademark skills – astute technical knowledge, commitment to public benefit and deft political navigation, as well as patience and humor – to foster the creation of regula-

tory codes and policies upon which are predicated numerous state activities that protect and manage ocean and coastal resources and further the goals of the Coastal Zone Management Act,” URI CRC said in its nomination.

The award also lauds Fugate for his work on the CRMC’s Special Area Management Plans (SAMPs), which are region-specific, tailor-made ecosystem-based management strategies that are consistent with the CRMC’s legislative mandate to pre-

serve and restore ecological systems. The CRMC coordinates with local municipalities, as well as government agencies and community organizations, to prepare the SAMPs and implement them. Under the current executive director, the CRMC has developed six other SAMPs all over the state, including the Greenwich Bay SAMP.

The CRMC is currently leading a \$7 million effort to develop the Ocean SAMP, which will provide a guidance document for the state, region and the nation in managing offshore renewable energy resources. As the country’s first application of

the SAMP mechanism to an offshore marine ecosystem, Fugate, as project manager, is ensuring that the Ocean SAMP serves as a model for creating a single regulatory vehicle to manage both state and federal waters in this regard. The Ocean SAMP started in 2008, with research and public education taking place in 2009, and a policy document is slated for final CRMC adoption during the summer of 2010.

“Congratulations to our executive director,” said CRMC Chairman Michael M. Tikoian. “Grover has worked tirelessly on the Ocean SAMP in coordination with URI. Such collective accomplishments are a tribute to our state.”



Photo courtesy of: NOAA

CRMC Executive Director Grover J. Fugate was presented with the Susan Snow-Cotter Award for Excellence in Ocean and Coastal Resource Management from NOAA. At left is Sarah Cooksey, administrator of Delaware Coastal Programs and Coastal States Organization delegate.

Aquaculture, *continued from Page 1*

value of Rhode Island aquaculture exceeded \$1 million for the first time in 2006. In comparison, in 2007 the value was almost \$1.6 million (\$1,587,857). According to the report, the number of farms in Rhode Island also grew in 2009 from 30 to 33 farms, which increased the acreage under cultivation to 134.5 acres. Oysters remained the aquaculture product of choice in 2009, with nearly 3 million oysters sold for consumption.

The value of aquaculture products for restoration was \$936,243 this past year. The combined farm gate value of aquaculture products for consumption and restoration was approximately \$2.7 million, according to the report. The CRMC Working Group on Aquaculture Regulations reconvened in 2007 and began work on a long-term aquaculture development plan.

In 2009, the working group deliberations report was released and posted on the CRMC website at:

http://www.crmc.ri.gov/aquaculture/riaquaworking-group/CRMC_WG_Aqua-

new Aquaculture Coordinator David Beutel, who joined the staff in April 2009.

“The 2009 annual CRMC report shows that while the aquaculture industry

isn’t the largest in Rhode Island, it continues to experience steady growth,” said CRMC Chairman Michael M. Tikoian. “We credit our streamlined regulations and policies, as well as our good working relationship with industry members, for this continued growth.”



Photo courtesy of: Mr. Chris Warfel

Oysters shown close up in a mesh bag on Trims Pond on Block Island.

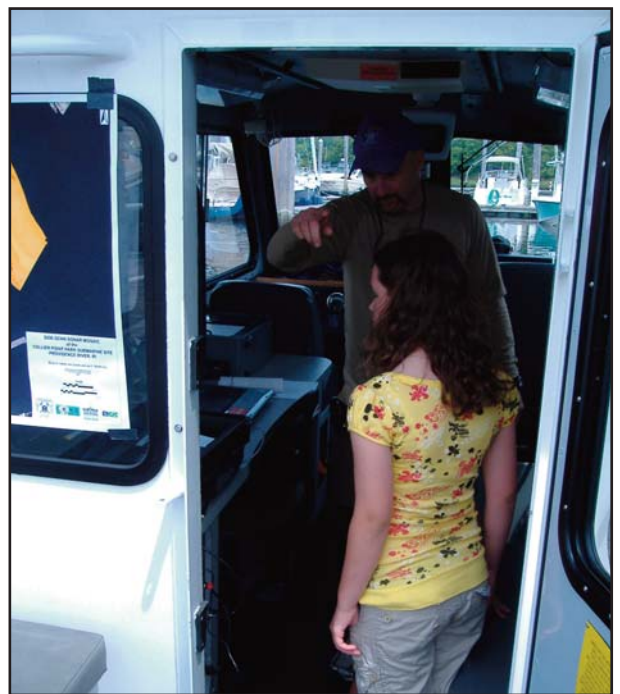
Plan.pdf, and the working group’s recommendations for regulation changes were implemented by the Council in November. The permit review process was also modified by CRMC staff, in coordination with the R.I. Department of Environmental Management, to reduce the time required for review. This year’s report was prepared by the CRMC’s

The full report is available at the CRMC’s web site, www.crmc.ri.gov, under Aquaculture.

Coastal Features is published by the RI Coastal Resources Management Council. It is financed in part by a grant from the National Oceanic and Atmospheric Administration pursuant to the Coastal Zone Management Act, as amended.

This issue of Coastal Features was compiled and edited by Laura Ricketson-Dwyer. To comment on any article or to make address changes please contact the CRMC.

CRMC Photo Page



As part of Boating Safety Day, Brian Oakley of URI, above left photo, on the right, and CRMC Dredge Coordinator Dan Goulet, top right photo, provided tours and information of the R/V Jack Reed, its on-board equipment including side-scan sonar, and information about some of the tasks the CRMC staff undertake on the research vessel. The event, organized and hosted by the marina, the City of East Providence Harbormaster, Town of Barrington Harbormaster, and US Coast Guard, included the participation of 21 organizations and 13 vessels.

The Nature Conservancy, through Trust Fund monies administered by the CRMC, performed one of two shellfish transplants in Rhode Island, with the assistance of the RI DEM, RISA and volunteers. Below, volunteers remove clams from Mill Cove in Wickford to be moved to Ninigret Pond. The second transplant was from Greenwich Cove to the pond.



CRMC Photo Page

NOAA evaluates CRMC in 312 review

The Rhode Island Coastal Resources Management Council (CRMC) is adhering to the obligations of its coastal program and has made positive changes in the last five years, though there are avenues for improvement, according to the recent report from the National Oceanic and Atmospheric Administration (NOAA) Office of Ocean and Coastal Resource Management.

The recent evaluation findings for the Rhode Island Coastal Resources Management Program (RICRMP) and CRMC outlined accomplishments in the areas of programmatic coordination and partnerships, coastal habitat, water quality, climate change, and coastal-dependent uses and community development. NOAA evaluated CRMC activities from November 2005 through February 2010.

NOAA applauded the CRMC in maintaining many long-term partnerships that are responsible for much of the successful work on the Aquidneck Island and Ocean Special Area Management Plans (SAMPs), development of aquaculture regulations, the Clean Marina Program, and coordinated permitting that took place during the evaluation period.

The CRMC also developed and adopted the Urban Coastal Greenway policy, aimed to streamline the regulatory process and to create more flexibility in the redevelopment of the Metro Bay Region (includes Pawtucket, Providence, East Providence and Cranston) and encourages economic development, expanded public access and the management, protection and restoration of valuable coastal habitats.

According to NOAA's findings, the Council has taken significant steps through funding efforts, partnerships to eliminate invasive aquatic species and to restore eelgrass, and revisions to the submerged aquatic vegetation regulations. The Council was also recently recognized nationally by Coastal America for habitat restoration work.

In regard to water quality efforts, the CRMC developed a Clean Marina Program and is working with the RI Department of Environmental Management (RI DEM) to develop a new Stormwater Design and Installation Standards Manual, and is also developing a suburban buffer design manual, all to help improve water quality in Rhode Island's coastal waters, the report states.

During the review period, the Council adopted policies and regulations to address the effects of sea level rise, including regulations and a section of the Metro Bay SAMP dedicated to addressing sea level rise in that region.

NOAA applauded the CRMC for its success in using the SAMP process to assist coastal communities in planning ways to integrate and accommodate smart growth techniques, economic development, protection of coastal resources and the provision of public access. The report also noted the development of the Ocean SAMP, in partnership with many federal agencies and stakeholder groups, as a comprehensive plan for Rhode Island's offshore waters.

"The CRMC has developed and continues to maintain a wide range of partnerships and collaborates with organizations on almost every coastal program activity and initiative," the report states. "Through the development of the Urban Coastal Greenways policy, funding efforts, revisions to the CRMC submerged aquatic vegetation regulations, and work to eliminate invasive aquatic species and to restore eelgrass, the CRMC has worked to preserve, protect, and restore coastal habitat."

Section 312 of the Coastal Zone Management Act (CZMA) required NOAA's Office of Ocean and Coastal Resource Management (OCRM) to conduct periodic evaluations of the performance of states and territories with federally-approved coastal management programs. The full report is online at www.crmc.ri.gov.



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 Robert Driscoll

Grover J. Fugate, Executive Director
 Brian A. Goldman, Legal Counsel



Officials celebrated the adoption of the Ocean SAMP in a ceremony on October 21 at URI's Graduate School of Oceanography. Seated from left to right are Senate President M. Theresa Paiva-Weed, Senator Jack Reed (D-RI), URI GSO Dean David Farmer, (former) Governor J. Joseph Garrahy, Governor Donald L. Carcieri and, standing, is CRMC Chairman Michael M. Tikoian.

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