

# Coastal Features

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## INSIDE THIS ISSUE:

CRMC Partners with Indonesia CZM Program	1
Section 312 Final Evaluation Findings for RI CRMP	1
Commentary on Dredging by CRMC Chair Tikoian	4
Coastal Pollution Curriculum for Middle Schools	6
Updated Contact List of RI Harbor Masters	7

## Section 312 Final Evaluation Findings

Section 312 of the federal Coastal Zone Management Act of 1972, as amended (CZMA), requires 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. As such, an OCRM Evaluation Team conducted a site visit to Rhode Island during April 17-21, 2000 to assess the performance of the state's coastal resources management program (CRMP) for the period October 1996 through April 2000. The team consisted of two OCRM officials, Marjorie Ernst of the Director's Office, and Helen Farr, Coastal Management Specialist, Coastal

## CRMC Forms Coastal Zone Management Partnership with Indonesia

**N**ARRAGANSETT – The smallest state in the union and one of the largest archipelagos on the planet forged a five-year partnership to share their coastal zone management expertise when the CRMC signed a Memorandum of Understanding to that effect on September 30, 2000 at the Coastal Resources Center.

This new venture grew from the Indonesia Coastal Resources Management Project (CRMP), a seven-year coastal management project jointly funded by the US Agency for International Development and the Government of Indonesia. This project is implemented through the University of Rhode Island's Coastal Resources Center. The MOU is on page three of this issue.



*CRMC Executive Director Grover Fugate signs the MOU that makes Rhode Island and Indonesia coastal zone management partners. Looking on are co-signers Michael Tikoian (l), Chair, CRMC, and Dr. Ir. Rokhmin Dahuri (r), Director General, Directorate for Coastal Beaches and Small Islands Affairs, Ministry of Marine Affairs and Fisheries.*

Programs Division. Steve Oivanki, Chief of the Mississippi Coastal Management Program was also selected as part of the team to provide a state CRMP perspective to the evaluation.

As a basis to assess Rhode Island's CRMP, the OCRM team contacted nearly 40 individuals that represented a wide range of interests: CRMC's Executive Director and staff, CRMC Council members, Rhode Island state and federal legislators, federal, state, and local governmental agency representatives, academics, and representatives of several non-governmental interest groups.

*(continued on page 2)*

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A final evaluation report was produced by OCRM that assessed the CRMP in terms of Program Accomplishments, and reported their Findings and Recommendations.

### *Program Accomplishments*

Numerous CRMC regulatory initiatives are cited as enhancements to the CRMP: 1) developing a State Programmatic General Permit to streamline CRMC and US Army Corps of Engineers jurisdiction; 2) promulgating Rules and Regulations governing the Protection and Management of Freshwater Wetlands in the Vicinity of the Coast; and, 3) major revisions to Harbor Management Plan guidance and regulations. The report also notes that CRMC continues to lead the nation in its efforts to apply Special Area Management Plans as effective tools to cooperatively manage coastal resources with all levels of government, the public, and academia.

CRMC's efforts to protect submerged aquatic vegetation (SAV), and develop a coordinated coastal habitat restoration program (see Coastal Features Volume 8, Number 4) are recognized as important steps toward fostering a cooperative approach to coastal resource protection. Regarding SAV, the report states that CRMC has taken the initial step of designating conservation areas within the bay and specifically within the boundary of the Narragansett Bay National Estuarine Research Reserve. The report also notes that the efforts of CRMC and its partners - the RI Department of Environmental Management (RIDEM) and Save The Bay - toward developing a coastal habitat restoration program, "received a substantial boost...(through) a competitive grant to develop the Rhode Island Coastal Habitat Restoration Plan and Information System."

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Public trust advances such as the incorporation of public access as an element to be addressed by local governments when updating their harbor management plans are also acknowledged as enhancing the CRMP. Of particular note is the approval of Rhode Island's coastal nonpoint source pollution control program. The full approval granted by NOAA and the EPA during April 2000 made Rhode Island only the second state in the nation to receive such recognition.

Finally, the report acknowledges the CRMC's leadership role in developing a statewide dredging and dredge material management plan as "particularly noteworthy." With the 1996 enactment of The Marine Infrastructure Maintenance Act (MIMA), the CRMC was designated as the lead agency for dredging issues in the state. The legislation mandates a state dredging policy, regulatory framework, and statewide dredging and disposal plan. The CRMC has instituted an open process for voicing stakeholder concerns and fostering public education. As mandated by MIMA, a Technical Advisory Committee has been formed that has served as a forum to report scientific data. It has also served to develop a strategic process to meet state dredging needs in concert with a process initiated in 1993 for the US Army Corps of Engineers to dredge the Providence River shipping channel. But the effort is hampered by the lack of funding or permanent staff positions authorized by the General Assembly to the CRMC. Budgetary constraints also affect other elements of Rhode Island's CRMP. ✦

### *Findings and Recommendations*

In addition to the accomplishments discussed above, five areas were noted where Rhode Island's CRMP could be strengthened.

1. Staffing shortages: a full-time education and outreach coordinator and a full-time dredging program development coordinator.
2. Geographic Information System and Internet-based World Wide Web technologies must be fully incorporated as a part of CRMC's program implementation.
3. The CRMC is encouraged to work with RIDEM to devise pilot projects and joint strategies to meet shared needs for applied research, environmental monitoring, GIS applications, and staff support to provide management oversight for a growing number of coastal restoration projects.
4. The CRMC needs to coordinate with the RIDEM to resolve their approaches for regulating new and replacement individual sewage disposal systems within the Salt Ponds Region and Narrow River Special Area Management Plan areas.
5. The CRMC should work with OCRM and the National Marine Fisheries Service to determine protocols for influencing Fishery Management Plans via the state's Federal Consistency authority/work with RIDEM to investigate reincorporating fisheries regulatory component into the CRMP. ✦

**Memorandum of Understanding  
Between  
Coastal Resources Management Council  
Wakefield, Rhode Island  
And  
Lampung Province Planning Board (BAPPEDA), Indonesia**

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**Whereas**, the Coastal Resources Management Council (CRMC) has a 30 year history of planning and implementing an integrated program for preserving, protecting, developing, and where possible restoring the coastal resources of Rhode Island for this and succeeding generations; and

**Whereas**, Rhode Island is part of the US National Oceanic and Atmospheric Administration's National Coastal Management Program and the State program is implemented through the CRMC; and

**Whereas**, the federal government through the National Oceanic and Atmospheric Administration and the US Agency for International Development are interested in sharing internationally the experience of the National Coastal Management Program; and

**Whereas**, the Coastal Resources Management Council is interested in sharing its experience and in learning from the experience of other programs around the world; and

**Whereas**, the Government of Indonesia is cooperating with the Government of the United States of America as partners in the Indonesia Coastal Resources Management Project (CRMP), a seven-year coastal management project funded jointly by the US Agency for International Development and the Government of Indonesia and implemented through the University of Rhode Island's Coastal Resources Center; and

**Whereas**, the Province of Lampung is the focus for the CRMP program to manage coastal lands and waters and Lampung BAPPEDA is interested in sharing its experience and in learning from the experience of other programs around the world.

**Now Therefore Be It Resolved That**

- a) The Coastal Resources Management Council and Province of Lampung BAPPEDA agree to explore ways to share experience and information related to management, restoration and protection of coasts, estuaries, bays, and water sheds.
- b) Cooperation may include any programmatic or scientific initiative that is of mutual interest, such as:
  - Exchange visits; and
  - Review of studies and plans; and
  - Other activities deemed of mutual benefit.

**Implementation:** Implementation of each cooperative activity shall be contingent on the approval of both parties to undertake the activity. Once specific activities are approved by both parties, a letter of agreement will be developed which outlines and clearly defines the roles, responsibilities and contributions of each party in relation to the specific activity. Once signed by both parties, this document shall serve as the operating instrument of the cooperative activity.

**Termination:** Either party may, at any time, terminate this agreement.

**Term:** This Memorandum of Understanding shall remain valid for a period of five (5) years from the date of signing and can be extended/renewed by mutual consent as evidenced by an exchange of letters to that effect.



# Editorial

Recent commentary and op-ed pieces regarding the Providence River Shipping Channel Maintenance Dredge Project has prompted me to provide some perspective not only on this subject, but also on dredging and dredged material disposal in Rhode Island generally.

As the state agency charged with the coordination of all dredging and dredged material management issues, the Coastal Resources Management Council has been extremely busy. We are legislatively responsible for the coordination of the interests of the state with regard to dredging, as well as acting on behalf of the state with the federal government and with other public bodies and private parties with regard to dredging. Our legislation also requires that we resolve issues related to the maintenance of dredged material and disposal and avoid future significant direct and indirect adverse impacts on the environment and economy of the state. We are actively pursuing these directives, most noticeably in the form of three major dredging and dredged material disposal initiatives. Each is extremely important to our state.

The first, the Providence River Shipping Channel Maintenance Dredge Project, is a significant undertaking that is necessary to ensure that Rhode Island's waterborne commerce is transported safely through state waters. Last dredged in the late sixties to early seventies, this is Narragansett Bay's major marine transportation highway. Since that time, the channel has shoaled as much as 16 feet. Given these conditions, navigation concerns are obvious, and the Coast Guard has imposed one-way traffic for the shipping channel. No one is questioning the need to dredge to restore the channel; we all agree that maintaining a safe and efficient navigation channel is paramount. What is being debated is the ultimate placement of the dredged material. Along with the Department of Environmental Management, we are leading such discussions with the Army Corps of Engineers - the project's manager - to find acceptable solutions.

Given its magnitude - the project is estimated at 4.5 million cubic yards - the Army Corps is considering

various proposals to dispose of the dredged material. We are concerned that the handling and disposal of this material is done in such a way as to be environmentally acceptable. One solution being discussed is to bury a portion of the material under the channel in what is known as a Confined Aquatic Disposal cell, similar to what was accomplished in Boston Harbor recently. To get an understanding of this disposal option, the Council and its staff, along with staff from the legislature, the Governor's office, and Save the Bay, traveled to Boston Harbor to witness this operation. We have also met with the Army Corps regional commander to express our environmental concerns. And, we have briefed and written

to our congressional delegation to keep them informed of this project. Narragansett Bay and Rhode Island's coastal resources are important to all of us. We will continue to ensure that this project is formulated with this in mind.

However, we are also an environmental regulatory agency charged with managing the uses that occur in our state's waters. If dredging is deemed necessary to ensure safe shipping and commerce, then we'll ensure that it - the dredging as well as the disposal of the dredged material - is conducted in the most environmentally sound manner in accordance with all regulations. The CRMC and the Department of Environmental Management are reviewing all aspects of this project to ensure that the project is completed in this way.

***"We recognize the importance of maintaining the marine infrastructure of the state. And we are committed to seeing this done in an environmentally sound manner. We are working daily on these issues and will continue to do so until we have a comprehensive coordinated dredge material management plan in place. However, until that time, we must move forward. Far too much is at stake not to."***

We recognize the importance of maintaining the state's marine infrastructure and have been providing the Army Corps with research, coordination among state and municipal agencies as well as with user and environmental groups, and policy direction to help find the most environmentally effective solution to maintain safe navigation. Maintaining safe navigation ultimately protects Narragansett Bay. This type of coordination also takes time. In fact, the Army Corps has purposely accepted the repeated requests of the environmental organizations to undertake additional studies to ensure that its decisions for this project are sound. That has

(Continued from page 1)

required an additional two years of work that will culminate this Spring with their release of a final Environmental Impact Statement. In the end, I believe that we'll have the necessary information to help us make sound decisions.

Secondly, we are studying and coordinating ways to provide reasonable dredged material disposal options for the marinas, yacht clubs and boatyards in our state. In 1996, the General Assembly passed the Marine Infrastructure Maintenance Act, which designated the CRMC as the state agency responsible to coordinate the interests relating to dredging, and also directed the CRMC to find an open water disposal site in Narragansett Bay for sediments dredged from the state's marinas, yacht clubs and boatyards that are deemed suitable for in-water disposal. We recognize the recreational value that marinas, yacht clubs, and boatyards provide Rhode Islanders, and we also recognize the value that each provides to our tourism base. This is why it is important to effectuate disposal options that help these industries maintain their viability.

To help the CRMC locate potential in-water disposal sites, the Act created the Coastal Resources Advisory Committee. The committee was composed of representatives from: the University of Rhode Island Graduate School of Oceanography; the URI College of Resources Development; the National Sea Grant College Program; the Army Corps of Engineers; the EPA Narragansett Bay laboratory; the CRMC; the director of DEM; the Rhode Island Marine Trade Association; Save the Bay; and both the Rhode Island Shellfish and Ocean State Fishermen's Associations. This committee immediately began to meet to investigate possible in-water disposal options to meet the directive of the Act. With the committee's input, the CRMC commissioned a study on dredged material disposal sites. A report was completed and released in 1999.

And, finally, we have begun the necessary steps to securing long-term dredged material disposal options for all marine industry users. This actually is the last mandate of the General Assembly's Marine Infrastructure Maintenance Act: locate an open-water dredged material disposal site for all marine users. Given the volumes of data being generated through the Providence River Shipping Channel Maintenance Dredge Project, we have been and will continue to work with our state and federal partners to explore the possibility of the long-term value

of any open-water disposal site that is considered for this project. In fact, one million dollars has been secured for the EPA to study potential long-term dredged material disposal sites. In addition, we are working to secure funding for a dredge material management plan that will provide a series of options for dredge material disposal including upland and beneficial reuse.

We recognize the importance of maintaining the marine infrastructure of the state. And we are committed to seeing this done in an environmentally sound manner. We are working daily on these issues and will continue to do so until we have a comprehensive coordinated dredged material management plan in place. However, until that time, we must move forward. Far too much is at stake not to.

As I believe you now understand, the coastal resources of this state are extremely important to us. We are committed to their protection and management. Our federal partner, the National Oceanic and Atmospheric Administration's Office of Coastal Resource Management has recognized the Rhode Island Coastal Resources Management Program as one of the best in the country in managing its coastal resources. We have one of the best programs because we incorporate science and research into management decisions. Our review of any subsequent dredging project will be factual and made with a good understanding of the scientific data generated for that project. And I am confident that the CRMC will use all its resources to find the right solution for the management of dredged material for our state. ✦

*Michael M. Tikoian, Chairman  
Coastal Resources Management Council*



# Coastal Pollution Education Curriculum

## Offered by Audubon Society of Rhode Island



**S**MITHFIELD – The Audubon Society of Rhode Island has developed a curriculum on coastal pollution for middle school students and teachers called “Bay Animals Like it Clean and Salty,” or BALICAS for short. The curriculum was co-authored by Sandra Ryack-Bell, Eugenia Marks, and Ellen Forman. Ms. Marks, RI Audubon’s Director of Policy and Publications, said that BALICAS is “based on the educational concepts in *Turning Points*,” a Carnegie Foundation report. She also cited *Project 2061: Science for All Americans*, by the American Association for the Advancement of Science, as an important source for the curriculum. Said Marks, “BALICAS brings real world scientific inquiry into the classroom.”

A curriculum guide and accompanying curriculum kit introduces students and teachers to the types and sources of pollution that degrade the water quality and natural habitats of Narragansett Bay. A major theme is the impact of pollution on the plants and animals that make the Bay their home. The kit is intended to provide a stimulating, innovative introduction to the work of local, regional, and national scientists and the role their research plays in the development of environmental policies and regulations. The BALICAS curriculum materials include a curriculum kit containing museum quality manipulative models, scientific simulations, preserved specimens, maps, charts, audio visual materials, educational games, student handbooks, and a teachers guide. The teachers guide includes background information on coastal processes, habitats, and coastal pollution. Classroom activities, lesson plans, and guidelines for using the kit’s various materials are also included. And there are suggestions for local field trips to supplement the classroom activities.

In BALICAS, students will emulate the actual steps followed in scientific investigations by marine researchers. The Bay Scientist Simulation provides a hands on experience for students to “play the role of a scientist,” from identifying problems, formulating questions (hypotheses), developing experiments, collecting/analyzing data, and drawing conclusions based on experimental results. To achieve this objective, and go even further by learning how to communicate scientific information to an audience, BALICAS is organized into three parts as shown below:

### Bay Scientist Simulation

- The class is divided into scientific teams
- Each team is given a topic to investigate
- Five teams investigate different issues

*Yellow Team: How can metals entering the Bay harm plants and animals living in the Bay?*

*Green Team: How can Bay plants and animals be affected by pollutants carried into the Bay by runoff from the land and other sources on non-point source pollution?*

*Orange Team: How can some of the pollutants entering the Bay through wastewaters affect the plants and animals living in the Bay?*

*Red Team: What types of pollutants enter the Bay through rivers and how can these pollutants harm the plants and animals living in the Bay?*

*Blue Team: How can the activities of boaters and marinas affect the health of plants and animals living in the Bay?*

The research team’s task is to define the problem, conduct their research, gather data, analyze the data and develop a report.

### **Part I: Pollution in The Bay**

Lesson 1: What is an Estuary?

Lesson 2: The Narragansett Bay Watershed

Lesson 3: Where does Pollution Come From?

Lesson 4: How does Pollution Move through the Watershed?

Lesson 5: How do Scientists Study the Bay?

### **Part II: Investigating Pollution in the Bay and its Impacts on the Animals**

Lesson 1: Bay Scientist Simulation

### **Part III: Bringing it all Together**

Lesson 1: Bay Scientist’s Symposium

Lesson 2: What You Can do to Protect the Bay

*For further information on how to bring BALICAS*

*to your classroom please contact:*

*Ms. Eugenia Marks*

*Director of Policy and Publications*

*Audubon Society of Rhode Island*

*Phone: 401-231- 6444*



The chill of winter will soon give way to the warmth of spring. And it's not too soon to begin planning for the boating season. Harbormasters are important contacts for information on recreational boating and many other harbor management issues. To learn more contact your local harbormaster listed below.

## Rhode Island Harbor Masters

Listings effective March, 2001

All phone numbers are in the 401 area code

<u>Municipality</u>	<u>Harbormaster</u>	<u>Phone Number</u>	<u>Police Department<sup>1</sup></u>
Barrington	John Lazzaro	437-3930	
Bristol	Joe Cabral	253-1700	253-6900
Charlestown	Len Cabral	364-6810	364-1212
Cranston	Carl Hjerpe	785-2329	942-2211
East Greenwich	Jim Cullen	447-1348	886-6840
East Providence	Ron Nathers	433-3166	435-7600
Jamestown	Sam Paterson	423-7262	423-1212
Little Compton	Ronald Coffey	635-2311	
Middletown	Jay Perry	846-1144	
Narragansett	Luther Freethy	789-7653	789-1091
New Shoreham	Larry Constantine	466-3204	466-3220
Newport	Timothy Mills	848-6492	847-1212
North Kingstown	Mark Knapp	294-3316 (x 255)	294-3311
Pawtucket	.....Pawtucket does not have a harbormaster.....		
Portsmouth	Scott Travis	683-0300	
Providence	Steve Barraducci	272-3121 (x 2410)	
South Kingstown	Barry Ennis	783-3321	
Tiverton	Phil Lapointe	624-3796	624-9611
Warren	Chris DeCosta	245-6341	245-1311
Warwick	Bob Carr	738-2000 (x 6819)	737-2244
Westerly	Larry Stedman	596-2022	



<sup>1</sup> In several municipalities the harbormaster's phone number is also the local police department phone number. In cases where a separate harbormaster office and phone number is maintained, police department phone numbers are also listed to provide 24-hour emergency response.



COASTAL RESOURCES MANAGEMENT COUNCIL

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*"Our policy is to preserve, protect, develop, and where possible, restore the coastal resources of the state, for this and succeeding generations"*



Photo: Tracy Dudek, CRM Council

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