

# Coastal Features

INFORMATION  
ABOUT THE  
RHODE ISLAND  
COASTAL  
RESOURCES  
MANAGEMENT  
PROGRAM

WINTER 1997

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## Priority Enhancement Areas Identified

The CRMC has revised its assessment of Rhode Island's priority coastal management needs in accordance with federal requirements contained in section 309 of the Coastal Zone Protection Act of 1996 (the reauthorized version of the federal Coastal Zone Management Act of 1972).

As reported in the last issue of *Coastal Features*, section 309 establishes a voluntary coastal zone enhancements program to encourage states and territories to develop program changes in one or more coastal enhancement areas. These areas include: wetlands; public access; ocean resources; government and energy facilities siting; coastal hazards; marine

debris; special area management (SAM) planning; cumulative and secondary impacts; and, new this year, aquaculture.

Rhode Island's last assessment, completed in 1992 and revised in 1993, identified wetlands, public access, SAM planning and cumulative and secondary impacts as the State's priority enhancement areas. Based on this assessment, the Council developed and has been implementing a strategy to address those areas as well as other needs identified in the assessment. For example, the Council has developed coastal wetland mitigation policies, a comprehensive public access program, and revised federal consistency and harbor management planning guidance documents. In the areas of cumulative and secondary impacts and SAM planning, the Council is currently in the process of updating the Narrow River and Salt Ponds SAM plans based on new cumulative and secondary impacts research.

A survey of Council members, staff, and participants in the

Council's previous assessment served as a starting point for re-evaluating priority needs. The survey was then followed by a detailed review of the status of coastal management in each of the nine enhancement areas in relation to the specific programmatic goals established in statute. Consideration was also given to mandates contained in recent legislation including the Marine Infrastructure Maintenance Act and amendments to the Council's enabling legislation (R.I.G.L. 46-23) adopted as part of the Aquaculture Act. A ranking of high, medium, or low in each of the nine enhancement areas based on Rhode Island's program needs was then developed.

High priorities for program enhancement identified include ocean resources (dredging), aquaculture and wetlands. Not coincidentally, the General Assembly also identified these issues as priorities by passing legislation in the last session which assigned the Council new management responsibilities and tasks in these areas. The Council's

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# Rhode Island Home\*A\*Syst Program

The Rhode Island Home\*A\*Syst program is a voluntary pollution prevention program which instructs homeowners on how to protect their family's health and the environment in and around the home. Part of a national initiative, the Rhode Island Home\*A\*Syst program is sponsored by the URI Cooperative Extension Program in partnership with a number of federal, state, and local agencies and organizations, including the CRMC.

During 1997, the program will focus its efforts on several coastal areas throughout the state, including neighborhoods around Green Hill Pond in South Kingstown and Charlestown, the Hamilton and Mount View neighborhoods in North Kingstown, the Stafford Pond area in Tiverton, and areas within the Maskerchugg watershed in East Greenwich. Working with residents in these areas, the URI Cooperative Extension will offer local work-

shops and demonstrations in the Home\*A\*Syst method.

Beginning in March, volunteers with the program will receive approximately 20 hours of training in a multi-session program from specialists in the fields of septic system maintenance, lawn and garden care, drinking water well protection, indoor air quality, water conservation, and household waste management. In return, volunteers will work 20 hours with the Home\*A\*Syst program helping to conduct workshops with program staff, assisting with the Cooperative Extension hotline, and assisting in other aspects of program development and delivery. By working with homeowners to help them understand how their actions can impact environmental quality in and around the home, volunteers serve as a valuable link between resource agencies, such as URI's Cooperative Extension, and local residents. **POLLUTION PREVENTION IS THE GOAL OF THE PROGRAM.**

If you are concerned with the quality of the environment, being a Home\*A\*Syst volunteer gives you the opportunity and skills to make a very real difference for your community and the environment. For more information on the program or to become a Rhode Island Home\*A\*Syst volunteer, contact Alyson McCann at the University of Rhode Island, Cooperative Extension Water Quality Program, (401)874-5398.



## Onsite Sewage Treatment Systems Conference

On November 25 and 26, a regional conference on Onsite Sewage Treatment Systems, organized by the Society of Soil Scientists of Southern New England and cosponsored by a number of organizations including the CRMC, was held in Sturbridge, Massachusetts. With approximately 270 attendees and 19 exhibitors, the conference brought together soil scientists, engineers, site evaluators, state regulators and wastewater industry professionals to discuss and learn about alternative onsite sewage disposal system technologies.

Many alternative technologies discussed at the conference are presently being demonstrated at the Onsite Wastewater Training Center located at Peckham Farm on the URI campus in Kingston. This facility provides classroom and field training experience on the design, siting, installation, operation, and maintenance of conventional and alternative onsite sewage disposal systems. Over the last two years, the facility has conducted numerous workshops for wastewater professionals, engineers, municipal officials and homeowners. For more information about the Training Center or the demonstration projects, contact George Loomis, Director, or Dave Dow, Program Manager, URI Onsite Wastewater Training Center, (401)874-5950.

## Coastal Features

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This issue of *Coastal Features* was edited by Laura Miguel. To comment on any article or to make address changes, write the CRMC at the Oliver Stedman Government Center, 4808 Tower Hill Road, Wakefield, RI 02879 or contact us on-line at 104041.2601@compuserve.com.

# DREDGING IN RHODE ISLAND

Jim Scott, CRMC Intern

Dredging has been an issue in Rhode Island for the past twenty-five years. During that time very little dredging occurred. In 1996 the State made a renewed effort to provide focused direction to the work to resolve this long-standing problem.

Governor Lincoln Almond created the Governor's Commission on Dredging by Executive Order 96-4 on March 13, 1996. This commission brought together many stakeholders concerned with the dredging issue while maintaining its focus on the need to resolve differences so that responsible action can occur in the near future. The reports of the Commission and its technical committee were completed in September.

During the course of the Commission's work, the "Marine Infrastructure Maintenance Act" (the Act) was enacted by the General Assembly. This important piece of legislation supports the recommendations of the

Commission and provides a basis for the resolution of the State's dredging problem. In order to provide leadership on the dredging issue, the Act designated CRMC as the State's lead agency for dredging. Along with this responsibility came the expectation of results; CRMC was mandated to "identify and establish one or more in-water disposal sites to be used for the purpose of disposal of dredge materials from marinas and yacht clubs" by January, 1997. By January, 1998, the Act requires the establishment of "one or more in-water disposal sites to be used for the purpose of disposal of dredge materials from all [other] sources."

CRMC, working with the technical advisory committee established under the Governor's Commission on Dredging and the newly formed Dredging Advisory Committee established pursuant to the Act, has examined a variety of in-water disposal options for marinas and yacht

clubs since July. A comprehensive list of disposal methods and sites was developed and narrowed down to a short list of options for more detailed scientific study. This resulted in a list of identified candidate sites which was approved by the Advisory Committee for consideration by the Council at its two regularly scheduled meetings in January. It should be noted, however, that Council approval of a candidate site(s) does not mean that the site(s) will be immediately available for the disposal of dredged materials from marinas and yacht clubs. Any designated site and disposal plan must also, at a minimum, receive the approval of the Army Corps of Engineers, the Environmental Protection Agency and the Rhode Island Department of Environmental Management. Nonetheless, identification of an appropriate candidate site(s) constitutes a major step towards addressing the dredging needs of Rhode Island's marinas and yacht clubs.

## Governor's Commission on Dredging Issues Final Report

The Governor's Commission on Dredging was established by Executive Order on March 13, 1996 and charged with developing statewide procedures for the assessment of dredging requirements and disposal options. On September 12, 1996 the Commission, chaired by Thomas J. Skala of Fleet Bank, submitted its final report to Governor Almond. The extensive report provides descriptions of the various

approaches to dredging and dredged material disposal, a survey of dredging in other states, and the final findings and recommendations of the Commission. Also included are discussions on the economic and environmental impacts of dredging (or not dredging), recent changes in law affecting dredging, the financial aspects of dredging, and the status of the Army Corps of Engineers project for

the Providence Harbor shipping channel.

Among the nine recommendations made in the report, four were implemented during the course of the committee's work. The remaining five recommendations are: continued leadership from the Governor to assure that dredging remains a priority; prompt establishment of the Advisory Com-

mittee mandated by the Marine Infrastructure Maintenance Act of 1996; continued meetings of the Technical Working Group under the aegis of the CRMC; adequate professional, technical and program resources to support the State's dredging needs; and the inclusion of ports and marine facilities in state transportation plans. Pursuant to these outstanding recommendations, the CRMC has continued to sponsor meetings of the Technical Working Group, has established the required advisory committee, and continues to support adequate funding for the State's dredging program. In addition, the recent overwhelming support of a state bond referendum for infrastructure improvements to service the port of Quonset Point/Davisville demonstrates a state effort to integrate ports into the overall transportation network.

With the work of the Governor's Commission complete, the CRMC is now leading the State's dredging efforts in accordance with the Marine Infrastructure Maintenance Act of 1996. In these efforts, the excellent work of the Governor's Commission will serve as a strong foundation for the development of a long-term solution to Rhode Island's dredging problems.

Copies of the Report of the Governor's Commission on Dredging are available at the CRMC and may be obtained by calling its offices at (401)277-2476 during business hours (8:30-4:00, M-F).

## Frequently Asked Questions About Dredging

### Why is dredging necessary?

Marine commerce requires channels, harbors, ports, and other facilities with sufficient depths to provide for the safe operation of vessels. Waterways can be too shallow, too narrow, or insufficiently straight to be easily used. Furthermore, natural processes deposit and move material in the water, reducing depths and thereby rendering previously functional waterways unsafe for many of their intended uses.

Rhode Island's economy is very marine dependent. Shipping, recreational boating, commercial fishing, as well as other uses require the maintenance of the State's waterways.

### Why is dredging such an important issue today?

An effective dredging program is critical because the State has a large backlog of dredging needs. Very little dredging has occurred since the 1970s, when dredging became increasingly regulated by federal and state environmental programs and litigation closed the previously-used Brenton Reef disposal site. Since then, conflicts between federal, CRMC and DEM regulations, and with fishermen's organizations and environmental groups have brought about a stalemate on the issue. Meanwhile, substantial shoaling has occurred, significantly limiting the safe use of the State's ports, harbors and marine facilities, and bringing economic hardship on those dependent upon their maintenance.

### What are the potential problems associated with dredging?

First, the dredging process can have temporary adverse effects by stirring up sediments which may be contaminated, and by reducing levels of oxygen in the water.

Second, the placement of dredged material can be problematic. The composition and quality of sediment varies greatly depending on the environment from which it is dredged. The sediment may be composed of sand, silt, clay or rocks, and may be clean or contaminated. Depending on the type of dredged material, designating an appropriate use or disposal option is often the principal problem associated with dredging.

### How are these problems addressed?

Environmental scientists have been researching dredged material management for about thirty years, and effective methods for managing the wide range of dredged materials have been developed. Through technological advances in dredging equipment and techniques, as well as through improved management, environmental problems have been minimized. Whenever possible, dredged material is now viewed as a potential resource rather than disposal problem.



# Sandy Point Channel Dredging Completed

From late November until the year's end, a four-man crew from Local Towing, Inc. of East Norwalk, Connecticut worked twelve-hour shifts to complete the dredging of Sandy Point before winter flounder spawning season officially began on January 1st. The dredging project, which was identified as an issue of concern in the 1992 Pawcatuck River and Little Narragansett Bay Interstate Management Plan, moved 53,000 cubic yards of bottom material from the northwest tip of Sandy Point in order to restore the channel linking Watch Hill harbor and the Pawcatuck River to Fishers and Block Island Sounds. Much of the credit for promoting the project and obtaining necessary federal support goes to Sen. Dennis Algiere of Westerly, a CRMC member.

The dredging project required a high level of cooperation and coordination between Rhode Island, Connecticut and the federal government, which, through the Army Corps of Engineers, was



*Dredged material is used to build up the beach at Sandy Point.*

responsible for the project. While Sandy Point, a 35-acre island owned by the private Avalonia Land Trust, is located in Rhode Island, most of the dredging took place in Connecticut waters. Dredged material was used to nourish the beach on Sandy Point, a popular destination for recreational boaters.

As a direct federal activity, that is, one conducted by or for an agency of the federal government, the project was not subject to the normal CRMC permit process. Instead, the requirements of

federal consistency contained in section 307 of the 1972 Coastal Zone Management Act had to be met (see related story on page 7). Since the CRMC was involved early in the project and because the sediment is clean and appropriate beach nourishment material, there were no objections to the Corps' determination of consistency, and delays were minimized. As a result, recreational boaters will find a new and improved Sandy Point to visit and better access to Watch Hill Harbor and the Pawcatuck River this summer.

## Dredging Advisory Committee Established

In accordance with the Marine Infrastructure and Maintenance Act of 1996, the Council recently announced the appointment of the Coastal Resources Advisory Committee. The committee's primary responsibility is to advise the Council on environmental issues related to dredging and the permitting of dredging and dredged material disposal.

In addition to Dr. Sandra Whitehouse, CRMC Chair, the committee includes: Kenneth Hinga, Assistant Dean, URI Graduate School of Oceanography; Virginia Lee, Rhode Island Sea Grant; Carl Boutilier and Mark Habel, Army Corps of Engineers; Norm Rubenstein, Director, Environmental Protection Agency, Narragansett laboratory; Tim Keeney, Director, RIDEM; June Conradi, President, Rhode Island Marine Trades Association; and Curt Spalding, Director, Save the Bay.

# Beneficial Use of Dredged Material

One of the keys to an effective dredged material management program is the recognition of dredged material as a potential resource rather than a disposal problem. The CRMC supports the beneficial use of dredged material whenever possible and believes that such an approach is a necessary component of a successful comprehensive dredged material management program.

The following are examples of some of the potential beneficial uses of dredged material, some of which have been successfully used, and some of which remain experimental.

## **Beach nourishment**

Beach nourishment is the placement of clean dredged sand on to a beach for the purpose of restoration. Not only is a single beach restored, but the whole shoreline is healthier because the sand remains in the littoral system. These operations can temporarily alter a shoreline community, but the habitat is rapidly recolonized.

## **Dispersive open water disposal**

Dispersive open water disposal is the placement of relatively clean sands in places where currents will disperse much of the material. Similar in concept to beach nourishment, the sand remains in the littoral system rather than being placed elsewhere. The substrate can be temporarily disturbed, but is usually rapidly recolonized. When using dispersive open water disposal, the dredged material can sometimes be placed in moderately degraded areas with resulting increased benthic quality and diversity when sands are recolonized.

## **Wetland creation**

Wetland creation is usually the restoration of a previously degraded area into an ecologically beneficial wetland habitat. Wetland creation attempts to reverse this trend by placing dredged materials in shallow open water areas to create substrate elevations conducive to the development of wetland habitat.

## **Island creation**

Dredged material can be used for two different types of island creation projects: restoration of islands that have been reduced in size due to erosion or loss of sand from the littoral system; and renovation of islands that have been created or degraded by previous human activity. Island creation can also be accomplished in combination with wetland creation.

## **Construction material**

It may be possible to use moderately contaminated materials as raw materials in the asphalt, concrete, or brick construction process. The production of quality construction materials is relatively new in the field of dredged material disposal, but holds a great deal of promise for the disposal of some materials currently considered problematic.

## **Landfill cover**

Dredged materials might be used as landfill cover for daily, intermediate, or final capping purposes. The need for landfill cover is great in many regions of this country, so this is an option that may receive significant study. However, the very nature of most dredged material and its fine silty/clay properties may greatly limit its usefulness for cover applications.

## **Agricultural use**

Dredged materials may be washed or otherwise remediated and blended with other materials to create soil products. These soil products may be used to rehabilitate barren areas or by nurseries. However, technological advances will be necessary before this is a viable option.

## **Capping material at open water sites**

One traditional disposal method for dredged material is at non-dispersive open water sites. These sites are at depths where no significant currents or wave action occurs. If any of the dredged material is contaminated, it is capped with a layer of clean material to buffer contaminants from the environment. While this option is part of a disposal method that is largely non-beneficial, the capping process is a beneficial use for relatively clean material.

# Newport Harbor Management Plan to be Developed

The City of Newport has initiated the development of a new harbor management plan. Among key issues to be addressed, the plan will focus on the growing demands on limited harbor areas, user conflicts and water quality concerns. To assist in this effort, Council staff made a presentation to harbor commission members on December 4, 1996.



*The Newport waterfront in mid-winter.*

Prior to holding its first public workshop in February, the commission will meet with other state and federal representatives, including the Army Corps of Engineers, the RIDEM, and the Coast Guard to ensure that the various legal authorities with an interest in harbor management and their respective areas of concern are accurately and adequately taken into account as the plan is developed. Council staff will provide technical assistance throughout the development of the plan which is expected to take approximately one year.

## Council Staff Attends Regional Workshop on Federal Consistency

On December 12th, Council staff attended a regional workshop on the federal consistency process. The workshop was held in Boston and attended by representatives from the northeast coastal programs and federal agencies. Part of a series conducted by NOAA's Office of Oceans and Coastal Resource Management, the purpose of the workshop was to assist participants in understanding and complying with the Coastal Zone Management Act's federal consistency requirement.

Federal consistency is the requirement that federal actions that are reasonably likely to affect any land or water use or natural resource

of the coastal zone be consistent with the enforceable policies of a coastal state's or territory's federally approved coastal management program. In Rhode Island, this means that federal actions must be consistent with the Rhode Island Coastal Resources Management Program. Federal actions subject to the consistency requirement include: direct actions, such as Army Corps beach nourishment projects, fisheries management plans by the National Marine Fisheries Service, and Naval exercises; activities requiring a federal license or permit, such as projects requiring Army Corps section 404 permits; and federal financial assistance to states and territories

and local governments.

With almost 60 participants, the workshop was successful in bringing everyone up to a basic level of understanding of the consistency requirement. With that, the expectation is that the full benefits of the consistency process will be realized by states and that potential conflicts between state coastal programs and federal agencies will be minimized. In addition, a revised manual on the federal consistency process in Rhode Island is expected to aid in better consultation and coordination, and minimize conflicts between the CRMC and federal agencies conducting activities in or affecting Rhode Island's coastal zone.

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recent section 312 evaluation recognized these areas as priorities as well.

Following consultation with and agreement from NOAA's Office of Oceans and Coastal Resource Management (OCRM), the Council will be soliciting public comments on the Assessment. Once all comments have been received and addressed, a strategy for addressing priority needs will be finalized. The single Assessment and Strategy document will then be submitted for approval to OCRM. Provided OCRM approves the document, the Council will become eligible for as much as \$120,000 in grants for program enhancement in high priority areas for 1997.

Comments and/or questions on the Council's Assessment are welcomed and may be made by calling or writing:  
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