

Coastal Features

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Providence River Dredging Underway

The Providence River and Harbor dredging project is underway after a more than twenty-year wait. The \$43 million project is expected to last 18 months, remove over 6 million cubic yards of sediment, and restore a 7-mile corridor in the Providence River Shipping Channel to its federally authorized dimensions of 40 feet deep by 600 feet wide. The State of Rhode Island will contribute approximately \$7.4 million to the cost of the project, which has been awarded to the Great Lakes Dredge and Dock Company.

The first load of sediment was scooped from the bottom of the channel on April 11 at the Rumstick Neck reach of the channel near the Town of Barrington. Now that the dredging has begun, it will continue around the clock until the entire project is finished. Working by that schedule, approximately 67,000 cubic

yards of material had been dredged from the Rumstick Neck site by April 24, for offshore disposal at a site in Rhode Island Sound that has been designated "69b." This was possible because the sediment at the Rumstick Neck site has been tested and found to be suitable for offshore disposal without causing significant environmental damage at site 69B, which is located in the separation zone between the two shipping channels



A gaping clam shell bucket is lowered to the bottom of the Providence River to scoop out a load of sediment as part of the Providence River and Harbor Dredging Project. The project will restore the seven-mile long Providence River Shipping Channel to its federally mandated 40 foot depth and 600 foot width.

(See Dredge on page 2)

(Dredge continued from page 1)

leading into Narragansett Bay.

A major consideration driving the dredging schedule is the possible effect of dredging on winter flounder, an important recreational and commercial finfish species which follows seasonal migration patterns in Narragansett Bay. The winter flounder also uses various parts of the bay as breeding and nursery grounds. Dredging operations were suspended at Rumstick Neck on May 7 and moved north to the Fox Point reach of the channel in Providence Harbor when a "dredging window" opened at this site due to the absence of winter flounder.

Dredging in the Fox Point reach early on in the project is critical as it will be the permanent burial site for the most contaminated sediments that will be dredged during the course of the project. A series of contained aquatic disposal cells (CAD) will be dug from the bottom at this location, and be filled with contaminated sediments from the federal navigation project (the Providence River Shipping Channel) as well as contaminated sediments from several private marinas and port facilities. These private entities will be allowed to use the CADs with the stipulation that they pay a fee to cover the cost of creating the storage capacity required to dispose of the additional sediment. An estimated 1.5 million cubic yards of sediment will be disposed of in the CAD cells, which will be capped with clean sediment in order to bury the contaminated dredged materials.

In addition, approximately 215,000 cubic yards of sediment dredged from the CAD cell sites will have a "beneficial use" as clean fill to accommodate a development project by Johnson and Wales University on property it owns at Fields Point in Providence.

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CRMC Chairman Mike Tikoian (l) and Executive Director Grover Fugate are dwarfed by a clam shell bucket on board the dredge barge.

Rhode Island Habitat Restoration Portal is Here

Access the RI Habitat Restoration Portal at www.edc.uri.edu/restoration/

The Rhode Island Habitat Restoration Portal is a digital source of restoration information, management and educational resources, and spatial data for Rhode Island's coastal habitats. In addition to presenting case studies of completed habitat restoration projects and information on Rhode Island's coastal habitats and restoration planning, the Web site includes the following:

- an on-line database of almost 200 restoration projects, involving access to site descriptions, aerial photography, contacts, and cost information;
- an Internet map server for overlaying restoration sites on a variety of geographic information system (GIS) coverages relevant to habitat restoration decision making;
- other GIS resources, including downloadable spatial data, over 200 printable maps, and site-selection tools for restoration planning;
- educational resources, such as a species gallery, restoration directory, and searchable bibliography;
- links to funding resources, permitting information, and agency contacts.

Purpose of the Habitat Restoration Portal

The purpose of this web site is to provide data and information about habitat restoration in Rhode Island to the public, federal and state agencies, and nonprofit groups. The focus is on seagrass, riverine (fish runs), and salt marsh habitats. The objective is to create an information system that can be used to apply for grants, select potential projects, educate the public, and assist the state in restoration planning.

The Rhode Island Habitat Restoration Portal is the result of a partnership between RI Coastal Resources Management Council (CRMC), the RI Department of Environmental Management Narragansett Bay Estuary Program (NBEP) and Save The Bay, Inc., working with the Rhode Island Habitat Restoration Team (RIHRT)



and the University of Rhode Island Environmental Data Center (URI EDC). The project is funded through the National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center.

The Rhode Island Habitat Restoration Portal has also been produced in a CD-ROM format. The CD-ROM provides a preview of

the information, maps, and resources available from the *Rhode Island Habitat Restoration Portal* Web site. The interactive features of the Web site were not reproducible on the CD-ROM. These include the Project Inventory searchable database, the searchable Restoration Bibliography, and the Restoration Atlas interactive mapping application. Static versions of these features are included on this CD-ROM for viewing only. Additionally, the CD-ROM provides only a subset of the maps and species information available on the Web site.



Tidegates at the Galilee Salt Marsh restoration site open to flood a restored salt marsh that had been destroyed after a road was built and blocked the twice-daily tides from reaching the marsh.



Annual Aquaculture Report 2002 is Available

The CRMC's "Aquaculture in Rhode Island - 2002 Yearly Status Report" shows that the past year was a good one for the aquaculture industry in the state. But the nearly 60% increase in the value of product harvested compared to the previous year does not tell the entire Rhode Island aquaculture story. The Status Report outlines a many faceted aquaculture industry that makes significant contributions to various economic sectors. The following outline highlights some of those contributions.

Farm Production

- farm gate value is estimated to be \$478,160.00 (up from \$299,998.00 in 2001)
- the American Oyster was the dominant species produced with 908,000 pieces sold
- the number of shellfish farms remained stable at 18

Aquaculture Related Industries

There are a number of small privately held companies in the state that fit into this category. These companies do a gross total of \$4,300,000 in business in the state, an increase of 10.2% from the 2001 numbers. They are the largest contributors of the aquaculture industry sector to the state's economic bottom line. Examples of some of these small companies include:

- aquaculture product distributors (fish and shellfish)
- aquaculture gear manufacturers

Twenty-four full time workers are employed by these type of companies in the state, a 50% increase over last year. This increase is especially impressive considering that one aquaculture related company that contributed to this report two years ago has since declined to do so. However, the companies that did report have made substantial investments in facilities and employees in the recent past. An estimated \$3,000,000.00 has been invested during the current economic downturn to ensure the future competitiveness of these companies. The principals involved are betting that the aquaculture related support and sales industry has a viable future in Rhode Island.

The Rhode Island Aquaculture Initiative

Through the efforts of Senator Jack Reed (D-R.I.), the U.S. has appropriated \$1,500,000.00 for the planning and advancement of aquaculture in Rhode Island. The project has been entitled the "Rhode Island Aquaculture Initiative." A Memorandum of Understanding was signed by Rhode Island Sea Grant, Roger Williams University, and the University of Rhode Island in 2002 to oversee the day-to-day management of the grant. A multi-institutional executive committee comprised of state government, university, industry, and other aquaculture leaders was formed to determine priorities for projects to be funded through the grant. The grant is managed by the National Oceanic and Atmospheric Administration's Office of Oceanic and Atmospheric Research, and disbursed to the Rhode Island Sea Grant College Program at the University of Rhode Island.

You can obtain a PDF copy of the complete Aquaculture Status Report for the year 2002 by going on-line at <http://www.crmc.state.ri.us/pubs/pdfs/aquareport02.pdf>. If you prefer to obtain a hard copy directly from the CRMC please call at (401) 783-3370 or write to us at:

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Wakefield, RI 02879

Spring 2003 Eelgrass Transplanting Activities

Coastal habitat restoration efforts in Rhode Island continue to increase, and Save The Bay's eelgrass transplanting activities are no exception. As a result, Save The Bay has increased the number of eelgrass harvest and transplant days scheduled for Spring 2003. Don't hesitate to sign up to volunteer for any of the dates below, as space on the *M/V Alletta Morris* is limited. The workday will be from 9am to 5pm and lunch will be provided. A full day commitment is necessary for transplants but not for harvests.

Harvest volunteer opportunities include: diving, sorting, and kayaking

Transplant volunteer opportunities include: tying eelgrass to frames

The transplant and harvest schedule is:

Thursday, May 29 Harvest at Kings Beach, Newport

Friday, May 30 Harvest at Kings Beach, Newport

Saturday, May 31 Transplant at Fogland Point (Tiverton)¹

Sunday, June 1 Transplant at Fogland Point (Tiverton)¹

Thursday, June 12 Harvest at Fort Getty, Jamestown

Friday, June 13 Harvest at Fort Getty, Jamestown

Saturday, June 14 Transplant at Prudence Island²

Sunday, June 15 Transplant at Prudence Island²

Tuesday, June 24 Harvest at Kings Beach, Newport

Wednesday, June 25 Harvest at Fort Getty, Jamestown

Thursday, June 26 Transplant at Poplar Point (N. Kingstown)

Friday, June 27 Transplant at Poplar Point (N. Kingstown)



¹ Meet at the Tiverton Town Dock located next to Grinnell Beach

² Meet in N. Kingstown at the dock at the end of W. Main Street (next to Champlin's Seafood Market)

If you are interested in signing up for dates, please contact Wendy Norden at wnorden@savebay.org or call Save The Bay at 401.272.3540 ext 117

Rhode Island Rivers Month Events

June is being celebrated as Rhode Island Rivers Month, and many local watershed councils are celebrating the rivers they love by hosting a variety of events. The following list shows where you can go to join in the fun.

May 10, 2003. Kickemuit River Watershed Council

Volunteers welcomed and encouraged. This Cleanup is in cooperation with the Bristol and Warren Harbormasters and John Massed of the Warren Department of Public Works and the Kickemuit River Council in celebration of R.I. Rivers' Month. We are doing it in May to clean up winter accumulation so that The Kickemuit River will be all set for summer!! The time is 8:30 a.m. to 10:30 a.m. You may sign up for a particular area or be assigned an area. Plastic bags will be provided. Wear gloves. If you have a rake, you might need it. Volunteers will meet at the Hugh Cole Pavilion on Hugh Cole Street, Warren, R.I. 02885. (Turn south right after the Kickemuit Middle School onto Hugh Cole Street until Pavillion on left at 8:30 a.m. for assignments—if not received or specified previously. You may sign up by calling Matt Calouro, Harbormaster, at 401-253-1700, or 401-245-6341 or Ann Morrill, Kickemuit River Council, at 401-274-6927 from April 24th to May 9th. At 10:30 a.m. when finished cleaning, do return to the Pavillion for a drink, a hot dog, a certificate and thanks. You may find more information at Save the Bay's website at savebay.org and then go to Volunteer Opportunities. Honor your Mother by cleaning up the world as she always encouraged you to do.

Wood-Pawcatuck Watershed Council

May 31, June 7, 14, 21, & 28 — Pawcatuck River Source to Sea Paddle Canoe or kayak the entire length of the Pawcatuck River from its source at Worden's Pond to its outlet in Little Narragansett Bay over 5 Saturdays in May/June. Put-in time is 9 am. \$10 per person; \$7 for WPA, RICKA, or AMC members.

June 7 Friends of the Pawtuxet

National Trails Day Walk. Meet at 10 am at the Rhodes on the Pawtuxet for a walk along the Pawtuxet Loop Trail. This easy three-mile walk goes through red maple forest, grassy savanna and riverbank areas restored by Friends of the Pawtuxet. For more information, contact Joe Jackson at 467-8271.

Annual Spring Canoe Trip. Enjoy the arrival of spring while canoeing the Lower Pawtuxet. From 10 am to 2 pm, canoes will be available at Rhodes on the Pawtuxet for one-hour trips. \$3 for adults and \$1 for kids. Paddles and life preservers will be provided. Make your reservation after May 12 by calling Steve Stycos at 461-2618.

June 21 Blackstone River Watershed Council

Project ZAP 30th Anniversary: Blackstone River Resurgence Festival - an all day festival at the Kelly House in Lincoln, Rhode Island. The festival will include an eco-pavillion with on-going educational exhibits and activities from organizations focused on history and the environment, a cultural center where dramatic presentations related to watershed history will be performed throughout the day, and a large central stage with a variety of entertainers will perform throughout the day.

June 21 Wood-Pawcatuck Watershed Council

RI Rivers Day No charge for the Source to Sea Paddle that day: 7.5 miles from Bradford to Potter Hill Mill along the Hopkinton/Westerly border.

June 27 Wood-Pawcatuck Watershed Council

River of Words Friday, time to be announced. WPA Artist in Residence, Ana Flores, will share the projects she produced during her six month residency. It will include community response to request for musing about the river as well as poetry written by local school children.

NOAA Grant Gives High Tech Boost to Coastal Habitat Restoration in Rhode Island

Through a grant made possible by the National Oceanic and Atmospheric Administration's Coastal Services Center, funding has been available to purchase equipment for habitat restoration projects throughout Rhode Island. The RI Habitat Restoration Team, comprised of members of federal and state agencies, non-governmental organizations, and universities, has overseen the purchasing process. Collectively, the Team determined the types of equipment needed for existing, as well as future, habitat restoration projects. The equipment is shared by all members of the Team.

Perhaps the most exciting purchase (and largest!) was the underwater video camera. The camera, equipped with both a wide angle and zoom lens, is capable of recording underwater activity up to a depth of one hundred feet. The camera also has the capability of connecting to a TV/VCR unit to enable real time viewing and recording. A DGPS stamp has been added to the TV/VCR unit for more accurate positioning.

Video editing software and hardware have made the task of editing the hours of underwater video recordings not only possible but also rewarding. For example, staff at Save The Bay and URI's Graduate School of Oceanography have recorded impressive footage of eelgrass habitat in Narragansett Bay and subsequently presented the footage at the Restore America's Estuaries Conference recently held in Baltimore, Maryland.

Water quality data at restoration sites can now be monitored by using sondes, a torpedo-shaped water quality monitoring device that is placed in the water to gather water quality data. Sondes may have multiple probes, with one or more sensors that read water quality data. Such accessories to the device that have been purchased include a 6600-M multiparameter water quality logger (with a conductivity/temperature probe kit), a 600XL-B-M multiparameter water quality logger (featuring rapid pulse D.O. technology), and a 6562 DO field replaceable 6-series probe kit. An additional component to the environmental monitoring system is the 650 multiparameter display system which is a powerful hand held micro-

computer based instrument that allows the user to display sonde readings, configure sondes, store and recall data, upload data from sondes and transfer data to computers for analysis and plotting.

Other equipment purchased through the grant consists of: two Garmin Global Positioning System V hand held units, four Beckson Model #9A pumps, three laser pointers (underwater light kits-waterproof to 50m), eight WL 15 Global Water Level Loggers, and two hand held salinity refractometers with auto temperature compensation.

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***Looking to the future** - CRMC Chairman Mike Tikoian heads to the Great Lakes Dredge and Dock company's dredging barge as it works to restore navigation for commercial shipping in the Providence River Shipping Channel*

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