

Coastal Features



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The Newsletter of the Rhode Island Coastal Resources Management Council

CRMC approves 10 restoration projects

Trust Fund in seventh year of project funding

The RI Coastal Resources Management Council (CRMC) has awarded funding for 10 habitat restoration projects through

its RI Coastal and Estuarine Habitat Restoration Trust Fund.

The Council approved the funding at the March 9 semi-monthly meeting in Providence.

Projects approved for funding include two marsh restoration projects, five fish passage restoration projects, a

shellfish restoration project and one upland restoration and invasive species management project. The remainder of the fund-

agement (DEM), which will be made available for use in habitat restoration projects statewide.

“The CRMC

continues to see a variety of restoration project proposals come in annually, including a shellfish restoration project this year,” said CRMC Chairman Michael M. Tikoian. “In



Photo courtesy of: Jamestown Conservation Commission

Round Marsh in Jamestown, shown prior to restoration. The invasive plant Phragmites australis is prevalent in the foreground.

ing will be used to purchase low ground pressure equipment for the R.I. Department of Environmental Man-

agement (DEM), which will be made available for use in habitat restoration projects statewide.

“The CRMC continues to see a variety of restoration project proposals come in annually, including a shellfish restoration project this year,” said CRMC Chairman Michael M. Tikoian. “In

Invasive crab visits Olympics

A larger-than-life-size Chinese Mitten Crab, an aquatic invasive species in the U.S., spent time in Vancouver during the 2010 Winter Olympics.

The mitten crab, another creation by Big Nazo, a Providence-based international performance group, traveled to Vancouver, British Columbia, Canada to perform at the Olympics and while there, educate the public about aquatic invasive species.

The Rhode Island Coastal Resources Management Council (CRMC) commissioned Big Nazo to create a mascot under the Rhode Island Aquatic

(Continued on Page 5)

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Name the Chinese Mitten Crab puppet

A larger-than-life-size Chinese Mitten Crab puppet, created by Big Nazo, needs a name.

The CRMC is looking for a name that describes the crab and its status as an invasive species. Creativity is encouraged.

The Chinese Mitten Crab is an aquatic invasive species in the U.S. The Rhode Island Coastal Resources Management Council (CRMC) commissioned Big Nazo, a Providence-based international performance group, to create a mascot under the Rhode Island Aquatic Invasive Species Management Plan. The plan was approved by the federal Aquatic Nuisance Species Task Force in 2007.

The mitten crab was inspired by the R.I. Resource Recovery's Max Man puppet, which serves as a mascot to educate the public on recycling. The crab's purpose will similarly be to educate the public on the problems of aquatic invasive species and will appear at public events and through school programs.

The puppet crab – created with a special foam and latex fabrication process by Big Nazo – is a taxonomically accurate male, complete with its telltale mitten claws. The Chinese Mitten Crab (*Eriocheir sinensis*) was first discovered on the East Coast in Chesapeake Bay in 2005 and since then has continued its migration up the coast.

For more information on the Chinese Mitten Crab or the R.I. Aquatic Invasive Species Management Plan, go to the CRMC web site at <http://www.crmc.ri.gov/invasives.html>.

Please submit all name ideas via email to lricketson@crm.ri.gov or in writing to:

Coastal Resources Management Council
Attn: Laura Ricketson-Dwyer
Stedman Government Center - Suite 3
4808 Tower Hill Road
Wakefield, RI 02879-1900

The crab's new name will be unveiled at a special ceremony in the spring. Check the CRMC web site, www.crmc.ri.gov, for event information.

Events Calendar

MAY 2010

Ocean SAMP Stakeholder Meeting

When: Tuesday, May 4, 2010. 6-9 p.m.

Where: URI Bay Campus, Coastal Institute, Hazard Rooms A & B

About: A forum to engage key constituencies and the public in the development of the Ocean SAMP. This stakeholder meeting will focus on the Ocean SAMP Fisheries Chapter and the Ocean SAMP Renewable Energy Chapter.

Ocean SAMP Subcommittee Meeting

When: Thursday, May 6, 2010. 4 p.m.

Where: URI Bay Campus, Coastal Institute, Hazard Rooms A and B

Ocean SAMP Chapter Public Workshop

When: Thursday, May 20, 2010. 1 p.m.

Where: URI Bay Campus, Corless Auditorium

About: Three draft chapters of the Ocean SAMP will be discussed: Ecology; Existing Statutes, Regulations and Policies; and Global Climate Change

Ocean SAMP Subcommittee Meeting

When: Thursday, May 20, 2010. 4 p.m.

Where: URI Bay Campus, Coastal Institute, Large Conference Room

JUNE 2010

Ocean SAMP Stakeholder Meeting

When: Tuesday, June 1, 2010. 6-9 p.m.

Where: URI Bay Campus, Coastal Institute Hazard Rooms A & B

JULY 2010

Ocean SAMP Stakeholder Meeting

When: Wednesday, July 7, 2010. 6-9 p.m.

Where: URI Bay Campus, Coastal Institute Hazard Rooms A & B

Mitten Crab, *continued from Page 1*

Invasive Species Management Plan, which was approved by the federal Aquatic Nuisance Species Task Force in 2007.

The mitten crab was inspired by the R.I. Resource Recovery's Max Man puppet, which serves as a mascot to educate the public on recycling. The crab's purpose will similarly be to educate the public on the problems of aquatic invasive species and will appear at public events and through school programs.

The puppet crab – created with a special foam and latex fabrication process by Big Nazo – is a taxonomically accurate male, complete with its telltale mitten claws. The Chinese Mitten Crab (*Eriocheir sinensis*) was first discovered on the East Coast in Chesapeake Bay in 2005. As of 2007, they had been discovered in the Hudson River estuary in New York, clearly indicating a northward expansion of this species toward Rhode Island. The recent capture of a female crab bearing eggs indicated that reproductive populations have been established in New York.

The crab is native to East Asia, and invasive populations have already been established in Europe and on the West Coast of the U.S. The

crab is listed as Injurious Wildlife under the Federal Lacey Act, which makes it illegal in the United States to import, export, or conduct interstate commerce of Mitten Crabs without a permit. The crab is a catadromous species, reproducing in salt water and continuing its lifecycle in coastal rivers. Young crabs spend 2-5 years in freshwater



The Chinese Mitten Crab puppet is larger-than-life.

tributaries and can travel miles upstream of bays and estuaries. Mature male and female crabs migrate downstream to spawn in saltwater estuaries. Chinese Mitten Crabs burrow into banks and levees along estuaries and are able to leave the water to walk around obstacles while migrating. The crabs' burrowing can also cause habitat destruction through river-

bank collapse; they also compete for food and habitat with native, commercially valuable species like the blue crab.

Big Nazo – the creation of RISD instructor Erminio Pinque – is an international performance group of visual artists, puppet performers and masked musicians who create larger-than-life characters, environments and scenes. Some of their characters include

mountain trolls, blob-like Go-Go dancers, a lab rat and a giant man-eating chia pet. The group combines mask and puppetry techniques with stand-up comedy, Science Fiction, Go-Go dancing, stunts, soap opera humor and professional wrestling with live rock and funk music and audience-interactive improvisation. Big Nazo recently opened a downtown Providence storefront NAZO LAB at 25 Fulton St. across from Providence City Hall. The lab serves as an exhibition space, a creature-building workshop and community space.

For more information on Big Nazo, go to www.bignazo.com or to see photos of the crab in Vancouver, go to http://bignazo.tumblr.com/tagged/2010_Winter_Olympics. For more information on the crab or the R.I. Aquatic Invasive Species Management Plan, go to the CRMC web site at <http://www.crmc.ri.gov/invasives.html>.

CRMC releases annual ROW report

The Rhode Island Coastal Resources Management Council (CRMC) has released its 2008-2009 annual report on rights-of-way in the state, "Designation of Public Rights-of-Way to The Tidal Areas of The State." The report is available online at <http://www.crmc.ri.gov/publicaccess/row2009.pdf>.

From July 2008 through June 2009, the CRMC continued its ongoing efforts to discover and designate public rights-of-way to the tidal areas of Rhode Island. The CRMC performs this function under its legislative mandate (RIGL 46-23-17), which beginning in 1978, tasked the Council with identifying and designating all public rights-of-way to the shore. To meet this charge, the CRMC created a Rights-of-Way Subcommittee. The report details actions of the subcommittee, as well as a number of legal cases that have stemmed from these activities and subsequent actions of the full Council.

One of these court cases was the continuation of *Riesman v. CRMC*, which had been in and out of the court system since the 1980s. The court case was resolved during the 2007-2008 time period, but was listed in this report because of its significance. The issue was whether or not the grantor intended to dedicate this right-of-way located off of Tuckerman Avenue (ROW Y-1) in Middletown for public access. The abutting property owners objected to the CRMC designation as a public right-of-way, arguing that the original grantor in the 1870s dedicated another ROW in the vicinity and used different dedicatory language, which they argued meant the grantor did not intend this parcel as a public ROW. In November 2005 the Superior Court affirmed the CRMC decision designating the parcel as a public ROW. A Petition for Certiorari to the R.I. Supreme Court was filed by the abutters and by the CRMC, and was denied in September 2006, upholding the CRMC's designation again and ending the opportunity for any further litigation. A petition for a writ of certiorari was subsequently filed to the RI Supreme Court; briefs and reply briefs were filed with the court in May 2006. The Court's denial of the petition exhausted the *Riesman's* legal challenges to the CRMC's designation of the right-of-way Y-1 at Tuckerman Avenue.

Another important case stemming from ROW designation is *Glassie v. CRMC*, which involves an appeal of a CRMC-designated ROW in Jamestown. An abutting property owner has been attempting to block the right-of-way with a swing set and has appealed CRMC's decision. The case is being litigated in the R.I. Superior Court. Because the plaintiff's brief was overdue during the 2007-2008 report period, the CRMC sought a court order compelling the applicant to file the brief, which was subsequently received by the court. No further action has been reported at this time, according to the report.

The ROW subcommittee's legal counsel was also asked to investigate news reports regarding threatened or pending litigation between the Town of Bristol and abutters to the CRMC designated ROW at Clipper Way (CRMC Designation S-25). No court actions regarding this matter have been reported. In addition, the report noted that an assent modification was in process to permanently designate Marine Avenue in Newport as a public ROW. The assent would be recorded in land evidence records.

Correspondence between the CRMC and the Town of Barrington solicitor also continues with regards to the ongoing dispute at the Daunis ROW in Barrington. Legal counsel also briefed the subcommittee on the notice of claim that was filed by the abutters to the CRMC ROW at Tuckerman Avenue (Y-1) in Middletown. The lawsuit will be monitored by CRMC legal counsel.

The CRMC continued to investigate an ongoing ROW violation in East Greenwich during the 2008-2009 report period. At this point no law suits have been filed but notices of violation were issued during the 2007-2008 report period, and discussions between the abutters and CRMC were held in an effort to resolve a ROW encroachment issue.

The subcommittee investigated a potential CRMC ROW on Overlook Drive in Warwick and recommended it to the full Council, which voted to adopt it. Any decision resulting in a public right-of-way designation by the Council is permanently recorded with the Secretary of State.

Trust Fund, *continued from Page 1*

process. Rhode Island's coastal and estuarine habitats – and all Rhode Islanders – continue to reap the benefits of this program.”

The Council awarded \$50,000 to the Wood-Pawcatuck Watershed Association for the continuation of the Lower Shannock Falls Fish Passage Restoration project in Richmond and Charlestown. This project includes removal of the Lower Shannock Falls Dam, which was funded in FY 2008. Completion of the project will open the Pawcatuck River system to nearly 1,300 acres of upstream spawning and rearing habitat for diadromous fish.

The Council also awarded \$50,000 to the Blackstone River Watershed Council/Friends of the Blackstone for the Blackstone River Fish Passage Project, Main Street and Slater Mill Dam. The project will restore diadromous fish passage across the first four dams on the lower Blackstone River and re-establish historic fishing runs. It will improve the riverine ecosystem and improve recreational uses of the river. The funds will be used toward construction of the first two dams on the lower portion of the river, Main Street Dam and Slater Mill Dam, both in Pawtucket. This proj-

ect received funding in FY 2008 from the Trust Fund.

The Woonasquatucket River Watershed Council received \$9,000 in funding for the Manton Pond Dam Fish Passage project in Johnston. The project will restore fish passage to the entire length of



Photo courtesy of: WPWA

A view of the Lower Shannock Fall spillway, where dam obstructions will be removed to restore fish passage.

the lower Woonasquatucket River through Manton Pond, which is prime fish spawning habitat. Trust Fund monies will be combined with previous years' funds with the NRCS and USFWS match to plan a nature-like fishway at Manton Pond Dam. The fishway will allow diadromous and native freshwater species to move freely between the pond and the river.

The WRWC also received \$9,000 for the continued restoration of the Paragon Dam Fish Passage. The project, part of a larger restoration effort, will enhance depleted spawning populations of

river herring and possibly shad. Woonasquatucket River is currently obstructed by five abandoned mill dams; all five are located in the lower five miles of the river: Rising Sun, Paragon, Atlantic Mills, Dyerville and Manton Pond dams. This larger dam removal project has received Trust Fund monies in past years and the goal is for removal of all five dams.

The Council also approved \$ 6,891 in funds toward the Allins Cove Invasives Control and Upland Restoration project in Barrington. The Barrington Land Conservation Trust will restore 3.5 acres of land abutting Allin's Cove by replacing invasive

Phragmites australis and Japanese knotweed with native grasses, shrubs and trees in three locations adjacent to the cove. In 2005 the US Army Corps of Engineers con-

(Continued on Next Page)

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Trust Fund, *continued from Previous Page*

ducted a salt marsh restoration project by removing historic fill highly populated by Phragmites and depositing it upland. This area, subsequently became populated with the invasive species. Japanese knotweed also became established in the area along Byway Road, the site of the new entrance to the cove. The plant has also grown along the inner marsh's bank as a result of the mechanical grading during the restoration project.

The Buckeye Brook Coalition was awarded \$1,450 in funds toward the Buckeye Brook Brackish Marsh Restoration project in Warwick. The project will restore a native marsh in the upper brook by treating *Phragmites australis* that has become established and in recent years has been expanding. The Coalition will use the funds to treat the area with herbicide over a three-year period, after which an assessment will be completed to determine success. Buckeye Brook is one of the few tributaries to Narragansett Bay that was not dammed historically, and it also supports one of the state's remaining natural herring runs.

The Trust Fund also provided \$2,000 to the DEM for the maintenance of low-ground-pressure equipment that will be used to excavate and transport soil from salt marsh water restoration projects.

The Narragansett Bay Estuary Program was awarded partial funding in the amount of \$41,659 toward the Lower Pawtuxet River Ecosystem Restoration project. This project will restore migratory fish passage and river ecosystem functions to 7.5 river miles and wetlands by breaching Pawtuxet Falls Dam. This award will specifically be aimed at management of river sediments related to dam removal.

The Council awarded \$40,000 in partial funding to The Nature Conservancy for the restoration of hard clams in Rhode Island's salt ponds. The project seeks to improve ecosystem function in Ninigret Pond by restoring a self-sustaining hard clam population within a RI Department of Environmental Man-

agement-designated shellfish spawner sanctuary. The project will improve water clarity, increase juvenile hard clam recruitment throughout the pond, and create important bottom structure and improved benthic habitat for many other species.

The Council provided partial funding in the amount of \$15,000 to the Jamestown Conservation Commission for its Round Marsh Salt Marsh Restoration project. The project will reduce the spread of *Phragmites* in the eastern portion of the marsh and restore conditions conducive for native salt marsh vegetation by maintaining existing marsh channels and creating a new channel to restore tidal flow to the easternmost portion of the marsh.

Habitat restoration projects are funded through the RI Coastal and Estuarine Habitat Restoration Trust Fund and are selected from recommendations by the RI Habitat Restoration Team, established by CRMC, Save The Bay and the Narragansett Bay Estuary Program in 1998. Members of the team serve as a technical advisory committee for the CRMC as required by law. Funds for the program come from the state's Oil Spill Prevention Administration and Response Act (OSPAR), established by the legislature following the 1996 North Cape oil spill. Each year, the Trust Fund and CRMC receive \$225,000 from the OSPAR account to fund habitat restoration projects in the state.

To date and including this year, the Trust Fund has awarded \$1.65 million for 58 projects, which have leveraged more than \$16 million in matching funds. This year's funding leveraged more than \$4 million, at a leverage ratio of 18 to 1.

The full 2009-2010 Coastal and Estuarine Habitat Restoration Trust Fund report will be available on CRMC's web site at <http://www.crmc.ri.gov/habitatrestoration.html>. Photos of the projects are available upon request.

CRMC rewards RI students for winning science fair projects

The RI Coastal Resources Management Council has awarded savings bonds to six Rhode Island junior, middle and high school students for their winning projects in the 2010 Amgen Rhode Island Science and Engineering Fair.

This year's science and engineering fair took place on March 27 at the Community College of Rhode Island's Knight Campus in Warwick, and showcased engineering, science and environmental projects from 65 schools and more than 450 students from grades 6 through 12. This year students showed a total of 423 projects, and the CRMC awarded bonds for projects ranging from trash, impacts of pollution on marine life, and water quality to popular topics such as airport de-icing methods and wind turbine blade design.

The six students were winners of the individual science fairs at their schools; teachers are allowed to send as many as 15 winners per school. The CRMC awarded prizes in the special awards category, which allows organizations and groups to set their own criteria and choose their own winners.

In the Senior Division, for students in grades 9-12, the first place prize of a \$100 savings bond from the CRMC was awarded to Nathan Andrews of Bishop Hendricken High School for his project, "Does the Airport's De-Icing Affect Water Quality?" Robert Checani of La Salle Academy was awarded the second place prize of a \$50 savings bond for his project, "How are Bodies of Water in Southern New England Affected by Eutrophication in Proximity to Sewage Treatment Plans?" Third place and a \$50 savings bond went to Elysha Grant of Mount Hope High School for her project, "Daphnia and Pollution."

The CRMC also awarded three savings bonds in the Junior Division for students in grades 6-8. The winner of the first place \$100 savings bond was Rachel Simoneau from Saint Mary Academy Bay View for her project, "Trash Air-Anator." The second place savings bond for \$50 went to Mallory Johnson from La Salle Academy-PEGASUS 7/8 for her project, "The Effect of Depth on Dissolved Oxygen, Salinity and Temperature in the Narrow River." Alex Murdock, J.P. McGrath and Matthew Walker, all of Curtis Corner Middle School, received third place and a \$50 savings bond for their project, "What is the Optimal Wind Turbine Blade Design?"

The students received congratulatory letters and certificates from the CRMC, and will receive their savings bonds at the end of May. The Council has been giving out special awards for the science fair for more than 10 years.

"The CRMC is honored to continue in judging the projects at the Amgen Science and Engineering Fair," said CRMC Chairman Michael M. Tikoian. "It is so important to provide education for the next generation to get excited about science and related fields, and to learn about their environment and how to manage it responsibly. Each year the students entering the fair astound us with their understanding of Rhode Island and national environmental and engineering issues and concepts."

This is the 62nd year of the science fair, and the fourth year that Amgen has served as the title sponsor. Special awards were established as a way for local businesses and organizations to promote what they do and get students interested in science and engineering-related research.

The RI Science and Engineering Fair – which is affiliated with the Intel International Science and Engineering Fair – offers 15 science and engineering-related topics for students to choose from. The top two winners of the Rhode Island fair's general awards category go on to compete in the international science fair, this year in San Jose, California.



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Photo courtesy of: Jamestown Conservation Commission

Round Marsh in Jamestown received funding from the Habitat Restoration Trust Fund. The eastern portion of the marsh is plagued by Phragmites and will be restored to look like this healthy portion of the marsh.

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