

# **Rhode Island Nonpoint Source Pollution Management Program**

## **Report of Activities October 1, 2009 – September 30, 2010 (FY2010)**



Installation of stormwater infiltration trench system in the Edgewater neighborhood of Narragansett, RI, Summer 2010.

Rhode Island Department of Environmental Management  
Office of Water Resources  
Report Compiled January 2011

## **Introduction**

Protecting and restoring the waters of the state – surface water, groundwater and wetlands – from pollution due to nonpoint sources continues to be an important focus of state water pollution control programs in Rhode Island. Managing nonpoint sources (NPS) of pollution, such as stormwater runoff and failing septic systems, is challenging. Available monitoring data reveals nonpoint pollution as a widespread problem affecting every watershed in the state. Nonpoint sources are suspected of contributing to the impairments in a majority of the surface waters included on the state's impaired waters list, also known as the 303(d) list.

To prevent and combat NPS pollution, the Rhode Island Department of Environmental Management (DEM) Nonpoint Source Pollution Management program encourages various actions by state and local governments, businesses, watershed groups and individual landowners. The DEM NPS program activities are guided by the RI Nonpoint Source Pollution Management Plan (1995) as well as federal Environmental Protection Agency (EPA) requirements governing Clean Water Act (CWA) Section 319 funds. The following report describes the accomplishments of DEM and its partners, with respect to nonpoint source pollution for fiscal year 2010 (October 1, 2009 – September 30, 2010). This includes activities supported by CWA Section 319 funds awarded via the Performance Partnership Agreement with EPA, as well as related activities supported by other funding sources.

Along with point source pollution controls, the NPS program is an essential part of RI's overall effort to restore and protect water quality. DEM remains focused on the state's major sources of NPS pollution: stormwater runoff and septic systems. While efforts to enhance state programs are pursued, it will be equally important for the state to continue to assist municipalities in their efforts to actively implement local wastewater and stormwater management programs including complying with new mandates to utilize low impact development (LID) techniques for stormwater management.

## **Local Grants for NPS Pollution Management**

A primary on-going activity of the DEM NPS Program is the distribution and management of grants from federal Clean Water Act Section 319 funds to local entities. These funds are awarded on a competitive basis via a Request for Proposals (RFP). A list of Section 319 grants managed during the 2010 fiscal year is provided in Attachment 1.

DEM issued a Request for Proposals in December 2009 combining funds from fiscal years 2009 and 2010. DEM received 36 grant proposals requesting approximately \$4.8 million in funding. Six water quality improvement projects were awarded for a total of \$745,700. Priority in grant selection was given to construction and design projects that either: a) Control or abate nonpoint source pollution impairments that have been characterized by a completed water quality restoration plan, or b) Control nonpoint source pollution sources contributing to known impairments in the state's surface waters. Priorities were given to watersheds in which significant public investment has been made, but which require additional investment to meet restoration goals.

For this RFP, DEM established an early submission date specifically for shovel-ready projects. Projects in Burrillville for porous pavement and in Warwick for removal of a failed onsite wastewater treatment system were selected for early award, and both have been completed.

Additional grants have been awarded to the towns of Bristol, Middletown and North Kingstown and to the RI Department of Transportation for projects to control and treat stormwater. These grants will fund construction of stormwater treatment structures in Bristol, Middletown and North Kingstown, and a feasibility study to identify the best approach for reducing phosphorus pollution in a watershed in Middletown. The six projects awarded grants with the FY 2009/2010 funds are briefly described below:

**Bristol: Town Beach Stormwater Pipe Retrofit Construction Project -- \$158,000**

This project is for construction of a gravel wet vegetated treatment system that was designed with funds from a previous nonpoint source grant. Stormwater from a large residential neighborhood currently flows untreated into a small coastal wetland adjacent to the town beach. The project is part of a large suite of low impact design retrofit projects the town is undertaking throughout the adjacent recreation area. The goal is to reduce and treat stormwater runoff at Bristol Town Beach in an effort to reduce the number of beach closure days caused by excessive bacteria.

**Burrillville: Stillwater Mill Porous Pavement Auxiliary Parking Lot Project - \$66,030**

This grant provided funding to assist the Town of Burrillville in constructing a porous pavement system at the auxiliary parking lot at the Town's new library, which is adjacent to the Clear River. The pavement was successfully installed in November 2010, and signage will soon be in place to educate the public about porous pavement systems. The site will serve as a municipal demonstration project for the newest porous pavement design processes.

**Middletown: Feasibility Study for the Attenuation of Phosphorus in Stormwater in the North Easton Pond Watershed - \$31,000**

This project will assess the sources of phosphorus and other pollutants in the stormwater contributing to North Easton's Pond and develop a feasibility study to determine best management practices (both structural and non-structural) that can be used to reduce the phosphorus pollution.

**North Kingstown: Sawmill Pond Watershed Restoration Project - \$200,000**

The Town of North Kingstown has recently completed the development of a watershed plan for the Sawmill Pond Watershed. This project will fund the construction of three stormwater treatment systems in the watershed and the implementation of a public education and outreach program that will include 10 demonstration rain gardens.

**RI Department of Transportation: Reconstruction of Two Mile Corner - \$265,000**

This project is for the design and construction of a gravel wet vegetated treatment system to treat stormwater from Two Mile Corner in Middletown. This is an urbanized intersection in the Bailey Brook Watershed where West Main Road (Route 114), East Main Road (Route 138) and Coddington Highway converge. Runoff from this area currently flows untreated directly into Bailey Brook, which leads to Easton's Pond, a public water supply reservoir.

Warwick: Connection of Warwick Fire Station #5 to Municipal Sewer System - \$25,711

This grant provided funding for the City of Warwick to connect Fire Station #5 to the public sewer system and to disconnect from their failed onsite wastewater treatment system. This failed system threatened groundwater that feeds the Maskerchugg River, which flows to Greenwich Bay. The project was successfully completed in July 2010.

### Grant Project Online Mapping

As an enhancement to providing public information about 319 funds distributed for projects, data on the majority of 319 grant-funded projects since the early 1990s was incorporated into an interactive online map. Pins mark the location of each project, linking to text boxes that provide the project names, grantees, project descriptions and photos (if applicable). The pins are color-coded to indicate Construction Projects, Design and Feasibility Projects, Planning Projects or Studies. The map is available on the RI DEM NPS website as a Google Map link. As new projects arise or old ones change, NPS Program Staff can easily update this map through a dedicated Google account and changes will automatically be saved to the live link. This online map tool will provide an accessible resource for anyone seeking more detailed information about the NPS Program's activity.

### **Ambient Monitoring – Identifying NPS Pollution in Surface Waters**

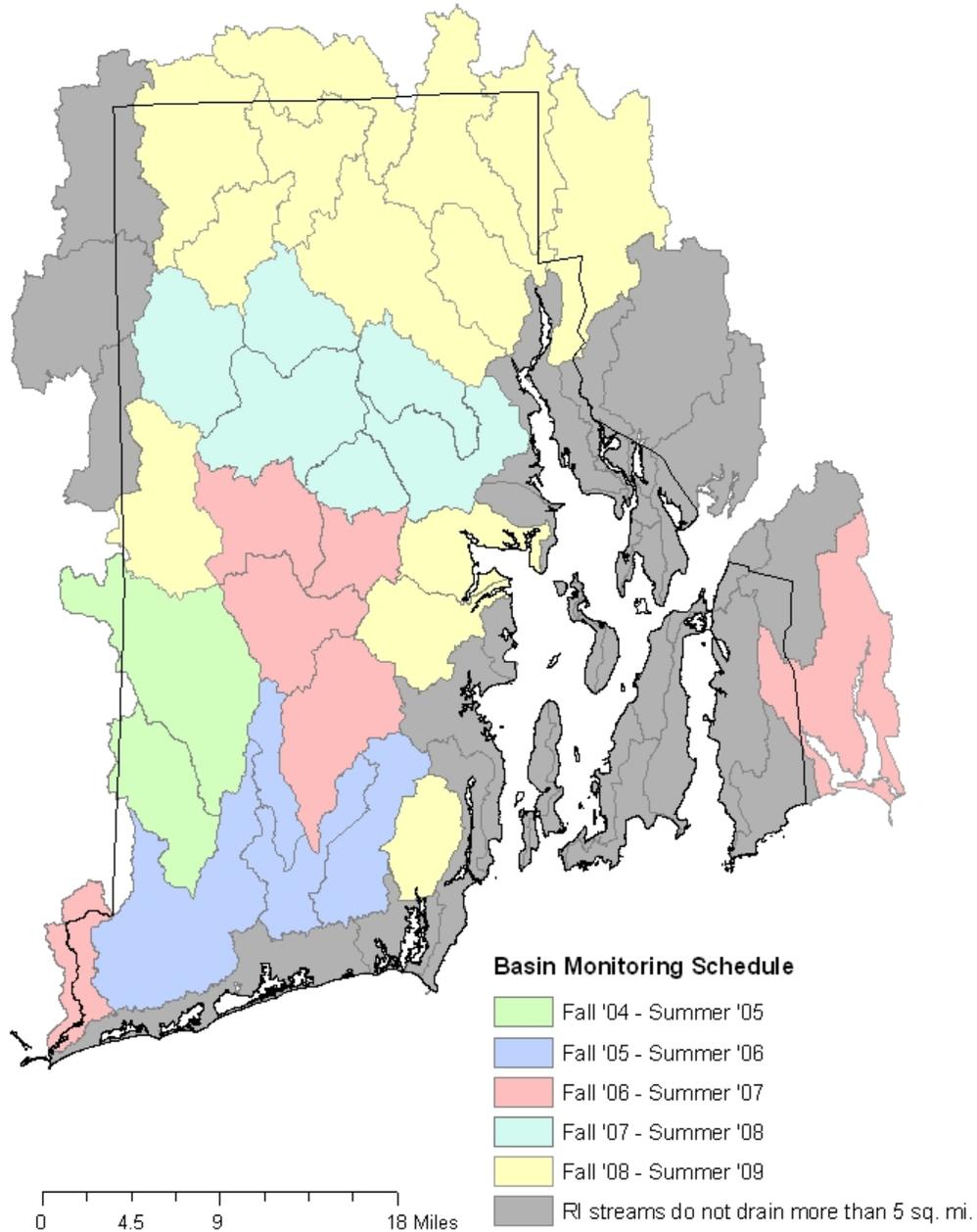
To help assess the effects of NPS pollution, the DEM NPS program continues to contribute to the implementation of the statewide RI Water Monitoring Strategy by providing funding that supports volunteer-based monitoring of lakes and biological monitoring in rivers and streams. Both programs are essential to assessing whether the state's freshwaters support healthy aquatic communities.

DEM's partnership with the URI Watershed Watch Program from 1999-present increased the number of lakes monitored seasonally by volunteers and has provided the primary source of data that allowed DEM to assess and report on 78% of lake acres in the 2008 Integrated Water Quality Monitoring and Assessment Report. The data is used to identify water quality impairments. As there are no point discharges of sanitary wastewater authorized for lakes in the state, water quality problems in lakes are largely attributable to nonpoint source pollution sources.

Biological monitoring of rivers and streams is currently accomplished by sampling for macroinvertebrates. This biological community has proven to be a reliable indicator of water quality and habitat condition that reflects the cumulative effects of various stressors, including nonpoint source pollution. Sampling and taxonomic identification is performed by a contractor (currently ESS Group, Inc.) for DEM at 45 or more locations annually. The sampling has been targeted to support the implementation of the rotating basin approach for assessing rivers and streams since 2004. Almost 200 stations have been sampled via this program, providing a statewide dataset that supports a more complete assessment of water quality conditions in rivers and streams. The data are used to identify biodiversity impairments in rivers and streams. DEM has found such impairments to be widely distributed in the state and often associated with nonpoint sources of pollution. Figure 1 reflects which watersheds have been sampled under this monitoring strategy to date. In late 2010, DEM initiated planning for a second cycle of monitoring via the rotating basin approach that will start in 2011.



# RIDEM Surface Water Monitoring Program Chemical and Biological Sampling 2004-2009 Rotating Basin Schedule



\*Although watershed basin lines extend beyond state borders, targeted sites were located within state boundaries.

Figure 1. River Basin Monitoring

## **Watershed Planning**

The Nonpoint Program further advanced Rhode Island's approach to developing watershed based plans during 2010. Discussion among several water-related management programs led to designation of 24 watershed planning areas in RI (see Figure 2). Watershed plans for each area will present in a clear, concise format a comprehensive overview of the watershed that the public and policy makers at all levels can use to identify key watershed characteristics and most importantly, actions that are necessary to restore and protect water quality. The plans will build on existing documents, particularly the TMDL reports. Recognizing the role of municipal government in managing nonpoint sources of pollution, the emphasis will be on identification of appropriate local actions in the areas of improving stormwater management, local land use regulations, and onsite wastewater management, as well as other watershed specific issues. As negotiated in the 2010 Performance Partnership Agreement, a technical assistance project was initiated utilizing EPA's consultant, FB Environmental, which began work with DEM on the development of 2 watershed plans as a pilot for this approach in the Barrington-Palmer-Warren watershed and the Bristol-Kickemuit watershed. This work will continue into FY 2011.

## **Developing Water Quality Restoration Plans (TMDLs)**

DEM utilizes Section 319 funding, in conjunction with other state and federal funds, to support development of water quality restoration plans, also known as Total Maximum Daily Load (TMDLs). The plans, required by the federal Clean Water Act, are developed after targeted monitoring and field investigation of a watershed area. The plans identify sources of pollution and determine the level of reduction in pollutant loadings required to meet water quality standards and criteria in specific waterbodies. To support implementation of water restoration actions, the NPS program collaborates with the TMDL program to identify needed NPS abatement projects; e.g. structural pollution controls, BMPs, and encouraging local entities to take advantage of financial assistance programs for such projects, including distribution of Section 319 funds by DEM.

In 2008, Rhode Island began use of the Integrated Report format to meet its CWA Section 305(b) and 303(d) list reporting requirements. The 2008 list of impaired waters (category 5 waters – those requiring a TMDL) includes 112 impaired waterbodies and 196 waterbody impairments, the majority of which are affected to varying degrees by stormwater and nonpoint sources of pollution. During FY 2010, TMDL Program staff assisted with baseline monitoring efforts (including deployment of continuous monitoring DO probes in two coastal ponds) and water quality assessments in preparation of the 2010 Integrated Report and 303(d) list.

Between October 2009 and September 2010, the DEM Office of Water Resources worked to develop water quality restoration plans for 13 waterbodies – addressing pathogen impairments on Mt Hope Bay/Kickemuit River estuary and Pawcatuck River estuary/Little Narragansett Bay; metals and pathogen impairments on the Blackstone River, Mill River, and Peters River, and nutrient impairments on Scott Pond; nutrient related impairments on Belleville Ponds; and metals, pathogen and nutrient impairments on the Ten Mile River and its three impoundments. TMDL Program staff also worked with EPA Region 1 and EPA contractor, FB Environmental to initiate development of a statewide bacteria

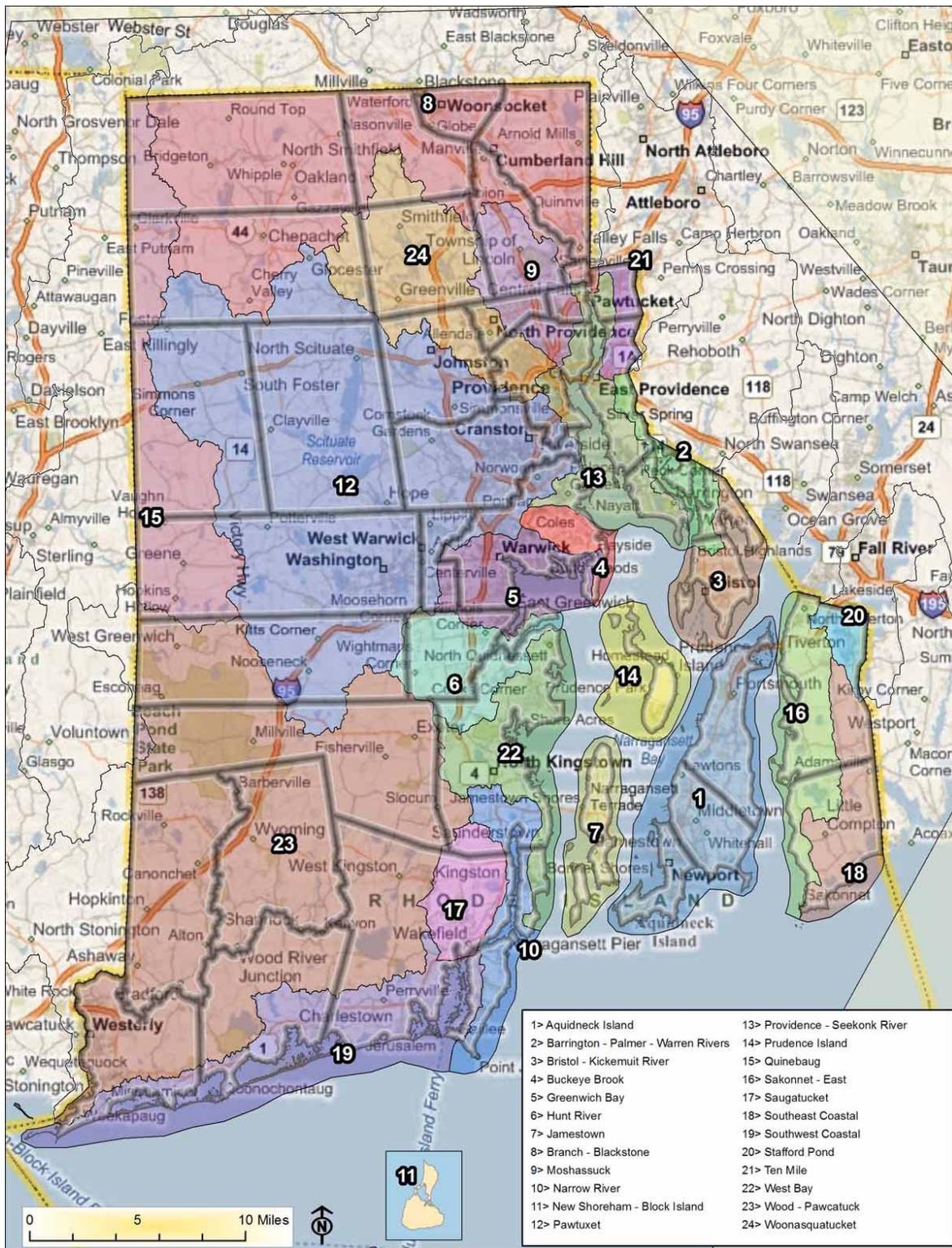


Figure 2. Watershed Planning Areas

TMDL addressing impairments to 60 waterbodies. A listing of all approved and draft TMDLs, their status and further information is found at <http://www.dem.ri.gov/programs/benviron/water/quality/rest/index.html>.

In related work, funded separately from the 319 NPS Program, DEM Office of Water Resources staff worked with seasonal employees to create a desktop methodology utilizing GIS to identify industrial facilities subject to the RIPDES industrial stormwater permit requirements (Multi-Sector General Permit) and other large scale impervious land uses (mostly commercial, institutional and industrial) that may require stormwater management plans to meet TMDL water quality targets. The project, supported with a competitive water quality management planning grant (Section 104(b)(3)), included pilot testing the methodology in the Blackstone River watershed and coordinating with RIPDES program staff to notify identified industrial properties of regulatory requirements resulting in improved compliance with the MSGP requirements. DEM staff also worked with the Blackstone River Coalition and municipalities to notify owners of large scale impervious sites of voluntary steps that can be taken to reduce volume and pollutant load of stormwater discharged from their site, and provided technical support to the Coalition staff by providing on-site technical advice to identified businesses.

In addition, Office of Water Resources staff participated in a number of meetings and workgroups identified below to encourage and assist in the implementation of actions to improve water quality.

- Attended meetings with Town of Charlestown staff and local committee members on implementation of the DEM Onsite Wastewater Treatment System Program denitrification requirements and other management actions to reduce nutrient (and bacteria) loading to address related impairments in Green Hill and Ninigret Ponds.
- Provided technical review and participated in meetings with various municipalities to: 1) implement stormwater retrofit BMP projects for which they had received state and/or federal grants (including projects in Warwick and Providence); 2) develop a TMDL implementation strategy (South Kingstown); and 3) coordinate with RIDEM's Office of Compliance and Inspection on Supplemental Environmental Projects implemented by the City of Woonsocket (Blackstone River) and by the Town of Middletown (Easton's Beach).
- Provided technical review and participated in meetings with RIDOT to evaluate alternatives for resolving beach closures caused by stormwater discharges at the Scarborough State Beach.
- Outreach – provided general outreach and public education (to students in secondary and elementary schools and the general public) to raise public awareness regarding stormwater and nonpoint source pollution problems and solutions including presentations at: the Community Action for a Renewed Environment Alliance meeting on Mashapaug Pond; public meeting in Middletown regarding proposed stormwater improvements to prevent Easton's Beach closures; a community organized Mashapaug Pond parade through the streets of South Providence in June 2010; and presentation on water quality issues facing RI to an environmental law class at Roger Williams University.
- Attended meetings organized by Natural Resources Conservation Service including the State Technical Team meetings and various sub-committee meetings to coordinate on implementation of Farm Bill programs (EQIP, WHIP) relative to TMDL and other state water quality priorities.

- Attended NEIWPC TMDL work group meetings and joint TMDL/Stormwater Workgroup meetings.
- Participated on various standing and ad-hoc groups providing technical and policy development support on: RIDEM's Wastewater Re-use project, Residual Designation Authority, review and interpretation of Rose Hill superfund site post remediation monitoring results, RI's Stormwater Design and Installation Manual, RIWRB's Water Allocation Committee, State Conservation Committee's Goose Control Management project, RIDEM's Water Quality and Wetland's Restoration Team.
- Working with Department of Health, developed and implemented monitoring program and protocol for enactment of public health advisory in response to blue green algae blooms on three ponds (Turner Reservoir, Almy Pond, and Melville Pond).

## **Stormwater Management**

Stormwater has been identified as one of the major sources of water quality degradation in RI. The Nonpoint Source Program Clean Water Act Section 319 grants to communities reflects the importance of stormwater management with 80% of the active and closed grants listed in Attachment 1 associated with stormwater related projects.

### **Stormwater Manual**

Reflecting a major achievement of the reporting period, DEM and the RI Coastal Resources Management Council (CRMC) successfully finalized the updated "RI Stormwater Design and Installation Standards Manual" (December 2010), which will dramatically impact the design of new development and redevelopment projects. The goal of the revised Manual is to integrate the concepts of low impact development (LID) in the planning and design of stormwater management as required by the RI "Smart Development for a Cleaner Bay Act of 2007" (RIGL 45-61.2) and to update the Manual with the latest research and technology.

The Manual had been in development for several years and has undergone extensive public review and comment. In FY2009 DEM and CRMC took the first steps to seek public input on a draft of the Manual, holding two public workshops and seeking comments from stakeholders. Additional workshops were held in FY2010 on a revised draft, culminating in the public notice/public hearing administrative procedures in September 2010 on the final draft. The Manual becomes effective January 1, 2011 and will be applied to most permit applications received on or after that date. Extensive training on the Manual and LID for designers, contractors and municipal officials is planned for FY2011.

What is LID? LID is quite different from conventional stormwater management, which is often described as "pipe-to-pond" stormwater management. It is a comprehensive approach to managing stormwater that is integrated into a project design to minimize the hydrologic impacts of development. In the past, the landscape was altered significantly to fit the style of development; whereas the LID process is reversed -- development is shaped to fit into the landscape. The primary goal of LID is to reduce runoff and mimic the predevelopment site hydrology by using site planning and design strategies

to store, infiltrate, evaporate, and detain runoff as close as possible to the point where precipitation reaches the ground. Stormwater is managed in smaller, cost-effective treatment practices located throughout the development site rather than being conveyed to and managed in one or more centralized facilities located at the bottom of drainage areas.

The most significant changes in the 2010 RI Stormwater Manual are:

- Low impact development is required to the maximum extent practicable;
- Design precipitation rates were revised based on latest rainfall data;
- Recharge criterion was added to require infiltration of a portion of runoff from impervious surfaces;
- Raised water quality pollutant removal targets for stormwater management practices;
- BMP options for water quality treatment have been revised based on documented poor performance of previously accepted practices (extended detention and wet basins no longer acceptable as stand-alone practices);
- Extended detention of the one-year storm is now required;
- Special design requirements for discharges in cold-water fisheries;
- Special requirements for land uses with higher potential pollutant loadings; and
- New approach and criteria for stormwater management for redevelopment projects.

#### University of New Hampshire Stormwater Center Field Trip for RI Municipal Officials

The DEM NPS Program provided a free educational field trip for state and municipal officials to the University of New Hampshire Stormwater Center (UNHSC) in Durham, NH to view several of the stormwater BMPs discussed in the new RI Stormwater Design and Installation Standards Manual. Similar to the field trip in June 2008, DEM provided bus transportation from Providence for public officials from 7 municipalities, as well as several DEM staff from the Office of Water Resources. UNH staff explained each of the BMPs being tested and then gave presentations on their work monitoring the effectiveness of the BMPs. Questionnaires completed by the participants indicated that it was a very valuable field trip for them.

### **Improving Onsite Wastewater Management**

Onsite wastewater treatment systems (OWTSs) are another major source of nonpoint pollution in RI. DEM estimates that there are approximately 157,000 OWTSs in the state, serving roughly 30% of the state's population.

#### Encouraging Local Wastewater Management Programs

DEM has long supported local actions to manage onsite wastewater treatment systems. The development of an onsite wastewater management plan is the first step recommended by DEM for local management. Figure 3 shows the status of the development of Onsite Wastewater Management Plans in RI. Once a community has a DEM approved Onsite Wastewater Management Plan, the community is eligible to participate in the state's Community Septic System Loan Program (CSSLP). Communities

participating in the CSSLP can access funds from the state’s Clean Water Revolving Loan Fund, which can then be loaned to homeowners at a 2% rate for 10 years. The total loan amounts awarded to communities in FY 2010 is provided below.

CSSLP Loan Amounts: October 1, 2009 and September 30, 2010

<b>Town</b>	<b>Loan Date</b>	<b>Amount</b>
North Kingstown #5	11/4/2009	\$100,000
North Kingstown #6	5/24/2010	\$300,000
Total for the period		\$400,000

Note: the number after the town represents the number of loans awarded the community. For example, “North Kingstown #5” – this is the fifth award to North Kingstown.

Denitrification in Coastal Salt Ponds

DEM has been meeting with representatives from the Town of Charlestown at the Town’s request in response to DEM’s new OWTS Rules allowing consideration of alternate wastewater management strategies for reducing nitrogen loading to groundwater and, ultimately, the coastal salt ponds. Specifically, towns may request less stringent nitrogen removal requirements for septic system repairs if it can be shown that other methods will reduce nitrogen loading to the groundwater as well or better than DEM’s OWTS Rules. For example, a town might require more stringent treatment standards on new systems or alterations to existing systems to compensate for less stringent nitrogen removal standards on repairs. DEM and Charlestown have been considering different scenarios involving combinations of different treatment requirements, system upgrade triggers, and monitoring programs. DEM is evaluating existing research on the treatment performance of various OWTS technologies as compared to “conventional” gravel trench leachfields. DEM is also studying research from the University of Rhode Island and elsewhere on the transport and fate of nitrogen in groundwater as it moves across different landscape features such as freshwater ponds, streams, and hydric soils.

# Onsite Wastewater Management Plans Status as of October 1, 2010

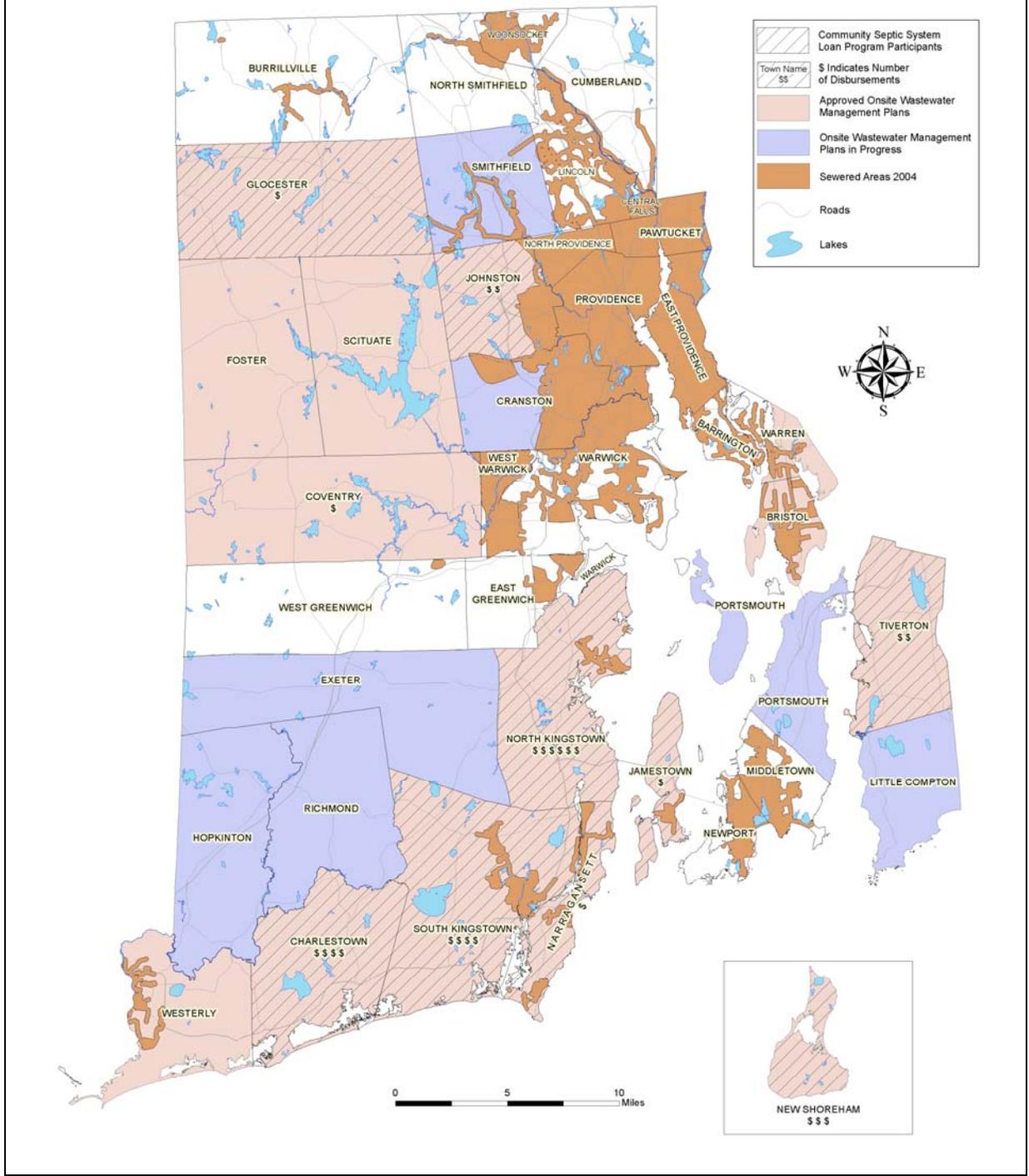


Figure 3. Status of Onsite Wastewater Management Plans in RI (October 1, 2010)

## Rhode Island Cesspool Act of 2007: Implementation Phase

The RI Cesspool Act of 2007 (RIGL 23-19.15) requires the replacement of cesspools that are within 200 feet of coastal waterbodies, within 200 feet of drinking water reservoirs, or within 200 feet of public wells. Cesspools within these areas are to be inspected by the end of 2011 and replaced by the end of 2012. (See Figure 4 for an example of a cesspool that will be captured by this law.) DEM added language to the Onsite Wastewater Treatment System Rules to implement the Cesspool Act; and these rule changes went into effect on August 4, 2010.

DEM has continued working on outreach efforts in support of the Cesspool Act. The Department conducted two workshops to help educate municipal public officials and members of the general public on the requirements of the Act. The Department also reorganized and updated the Onsite Wastewater Program web site to include a separate page dedicated to the Cesspool Act. This site provides a single location where interested parties can find information on the cesspool phase-out requirements and who to contact with additional questions.

A major focus of DEM's efforts has been compiling the list of property owners to be notified about the cesspool replacement requirements. DEM has created a short presentation (viewable on the web page) detailing the site selection methodology used to identify which properties are potentially subject to the Act. The process includes a GIS analysis based on the 200 foot zones described above to identify potential properties that is then combined with a review of the DEM permits and municipal sewer records to determine properties that are known not to have cesspools. Approximately 4,500 property owners have been identified. Notification letters and response forms for property owners potentially subject to the Act will be mailed out in early 2011.

### Other Onsite Wastewater Activities:

- DEM's Onsite Program is represented on the NEIWPCC Onsite Wastewater Workgroup, which is a forum for information exchange among state regulators working with onsite wastewater issues.
- DEM continued to work with the state's Technical Review Committee in evaluating new OWTS technologies – approving 4 technologies in FY2010.

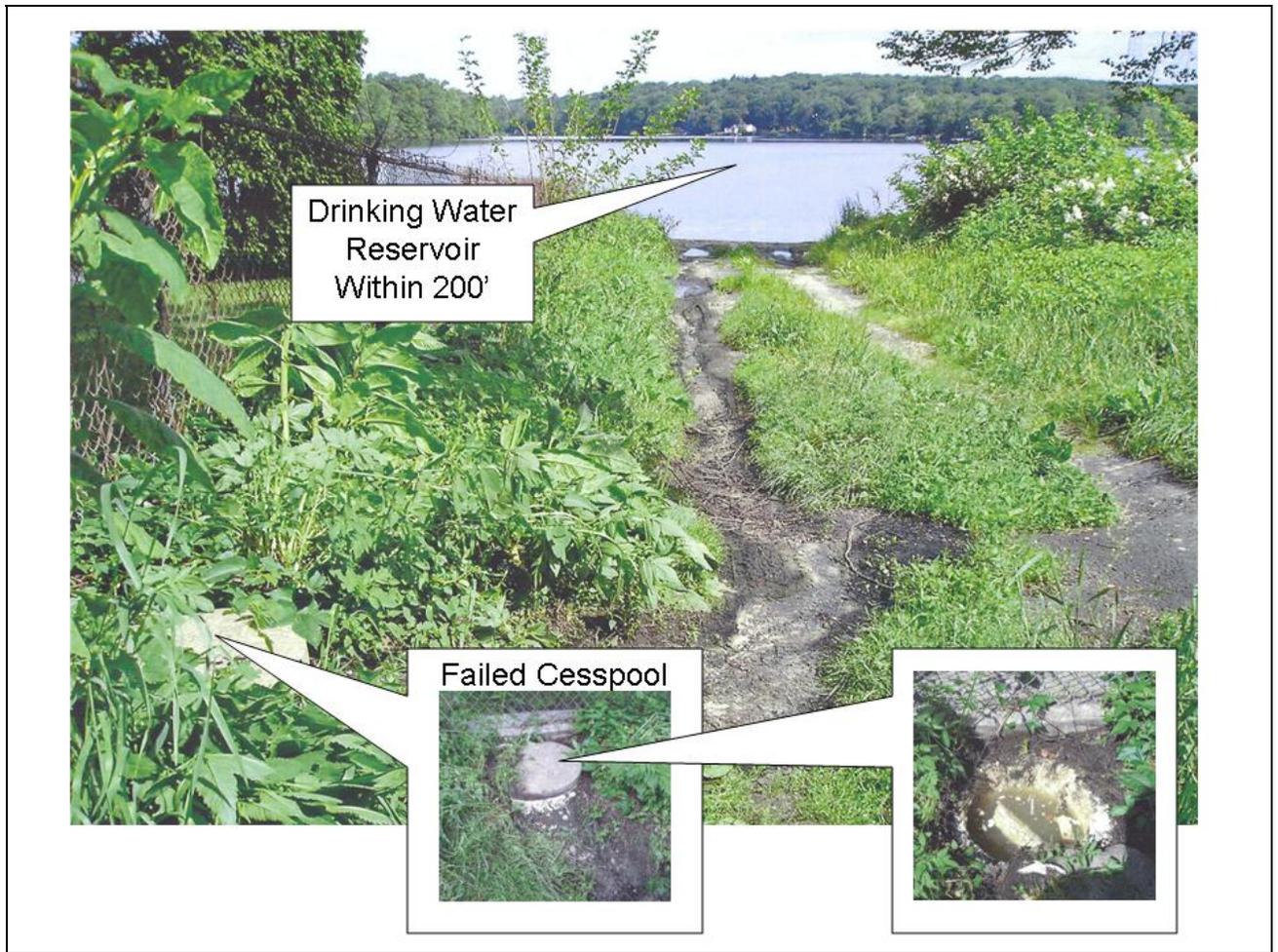


Figure 4. Failed Cesspool Near a Drinking Water Reservoir.

### **Other NPS Program Activities**

Blackstone River Decentralized Wastewater Demonstration Project: DEM's Nonpoint and Onsite Programs have taken responsibility for the RI portion of this EPA funded project for a \$621,000 grant to the Town of Glocester to address water quality concerns in the village of Chepachet. Chepachet has had chronic septic system failures for many years that are a threat to the Chepachet River and the groundwater that is the source for all of the drinking water in the village. In addition, untreated stormwater discharges to the Chepachet River occur in several locations and drainage problems have led to localized flooding. The Town has chosen to narrow its focus to give priority to the stormwater issues in the village. The project has provided opportunities to coordinate with the R.I. Department of Transportation (currently designing an upgraded drainage system for State Route 44), the DEM Office of Waste Management, and the Rhode Island Historical Preservation Commission. The result of this coordination will be the construction of a wet vegetated treatment system near the River for stormwater

management, a newly created town park on a remediated Brownfields site, and a conceptual design for a wastewater collection system which will be completed when further funding can be obtained.

State Integrated Planning Initiative: DEM NPS staff participate on the working group to integrate the primary elements of several statewide water quality related plans (including the RI Nonpoint Source Pollution Management Plan) into one “Integrated Plan” to be incorporated into the State Guide Plan administered by the RI Department of Administration. This planning effort is being led by the staff of the Narragansett Bay Estuary Program, and it is designed to fulfill the planning mandates of the Narragansett Bay Estuary Program and the RI Bays, Rivers, and Watersheds Coordination Team.

Water Softener Backwash Discharge BMPs: DEM developed a guidance document to encourage the adoption of best management practices for the discharge of water softener backwash brine. This backwash brine can impact surface water and groundwater quality and can adversely effect the proper functioning of onsite wastewater treatment systems. These problems are caused by high levels of chloride and other ions in the backwash brine from water softener regeneration. The guidance is intended for homeowners and non-residential uses with small volume backwash discharges.

Aquatic Herbicide Applications – Groundwater Impact: During review of aquatic herbicide applications submitted to the DEM, NPS program staff determined that there may be a concern regarding potential impacts to drinking water wells, particularly shallow wells that are close to the water’s edge and may be withdrawing lake water into the groundwater system. After review of readily available data on toxicity and environmental fate of the commonly applied chemicals, the herbicide 2,4-Dichlorophenoxyacetic acid (2,4-D) was identified as having the potential to impact groundwater. An initial screening of other state regulations identified two states, Massachusetts and Michigan, that have setbacks from private wells for aquatic application of 2,4 –D. This brief overview identified several issues of potential concern that may warrant further investigation by the Department.

Phosphorus in Dishwashing Detergent: Several New England States recently adopted laws limiting the amount of phosphorus in dishwashing detergent to trace levels or to be phosphorus free. RI is not one of those states. RI law from 1995 limits phosphorus to 8.7% by weight for dishwashing machines. RI NPS staff surveyed dishwashing products sold in several major retail stores in RI for phosphorus content in September 2010. This survey revealed that all but 2 products contained “no phosphates,” and the phosphorus in the remaining 2 was at “trace amounts.” RI has apparently benefited from other state initiatives to limit phosphorus in the New England/New York market.

NEIWPC: DEM NPS staff participate in the NEIWPC Nonpoint Source Pollution Workgroup. The Workgroup provides a forum for state nonpoint source coordinators (and primary staff) in EPA Region 1 and New York to share ideas on NPS issues and CWA Section 319 grants, to apply for grant funding for research to assist the region with NPS issues, and to host an annual 3-day regional NPS conference.

GRTS: DEM NPS staff attended the national training session on the EPA required Grant Reporting and Tracking System (GRTS) in Phoenix in December 2009.

**Attachment 1. Section 319 Nonpoint Grants Managed During FY 2010  
(Status of September 30, 2010)**

<b>Grantee</b>	<b>Grant Project Title</b>	<b>Affected Watershed</b>	<b>Grant Amount or Final Payment</b>	<b>Status** (As of 9/30/2010)</b>
Barrington	Allin's Cove Paper Street and Bay Spring Avenue Design and Construction	Providence River	\$116,709 (\$116,709 BWRP)*	Active
Barrington	Allin's Cove – Feasibility and Design for 3 <sup>rd</sup> Street Outfall Catchment	Providence River	\$10,100	Active
Bristol	Town Beach Stormwater Pipe Retrofit Design and Permitting	Narragansett Bay	\$36,620	Work Complete – Grant Not Yet Closed
Burrillville	Stillwater Mill Porous Pavement Lot	Clear River	\$66,030	Active
Charlestown	Green Hill Pond TMDL Implementation, Feasibility and Design	Coastal Ponds	\$21,944	Closed
Coventry	Sandy Bottom Road Wetland Restoration	Branch River	\$60,000	Active
Coventry	East Shore Drive Stormwater Improvements	Branch River	\$39,000	Active
East Greenwich	Hill and Harbor Stormwater Infiltration	Greenwich Bay	\$29,000 (\$67,000 BWRP)*	Active
East Greenwich	Sun Valley Stormwater Infiltration	Hunt River	\$147,000 (\$173,000 BWRP)*	Work Complete – Grant Not Yet Closed
East Providence	Bold Point Park Buffer Restoration Project	Seekonk and Providence Rivers	\$20,000	Active
Foster	Municipal Salt Storage Structure	Scituate Reservoir	\$51,203	Active
Jamestown	Municipal Salt Storage Structure	Local groundwater	\$120,000	Active
Lincoln	Lincoln Municipal Rain Gardens	Blackstone River	\$13,340	Active
Middletown	Gaudet Middle School Stormwater Retrofit	Bailey Brook	\$41,811	Active
Middletown	Slate Hill Farm Stormwater Retrofit	Bailey Brook	\$33,598	Closed
Middletown	Maidford River Bank Stabilization	Maidford River	\$34,197	Active
Middletown	Newport Avenue Bioretention Stormwater Retrofit Design and Implementation	Easton's Bay	\$42,696	Active
Narragansett	Narrow River Stormwater Abatement at Pettaquamscutt and Edgewater	Narrow River	\$450,455 (\$660,520 BWRP)*	Active
North Smithfield	Branch Village Constructed Wetland	Branch River	\$174,810	Active

Providence Water Supply Board	Rockland Pipe Stream Riparian Restoration	Scituate Reservoir	\$15,000	Active
RIDEM Planning and Development	Burlingame Picnic Area Cesspool Replacement	Watchaug Pond	\$100,000	Active
RIDEM Office of Water Resources	RIDEM Facility UIC Closures	Statewide	\$100,000	Active
Smithfield	Stillwater Reservoir Pollution Abatement	Woonasquatucket River	\$109,918	Active
Warren	Onsite Wastewater Management Implementation	Touisset Point groundwater	\$13,200	Active
Warren	Conceptual Design Study at Warren Town Beach and Belcher Cove	Warren River	\$40,000	Closed
Warren	Warren Town Beach Stormwater Treatment Feasibility and Design	Warren River	\$19,615	Work Complete – Grant Not Yet Closed
Warren	Municipal Salt Storage Structure	Kickemuit River	\$100,000	Active
Warwick	Brush Neck Cove Infiltration	Greenwich Bay (Brush Neck Cove)	\$300,000	Active
Warwick	Tuscatucket Brook Stormwater Abatement Feasibility Study	Greenwich Bay (Tuscatucket Brook/Brush Neck Cove)	\$58,000	Active
Warwick	Fire Station No.5 Connection to Sewer	Greenwich Bay (Apponaug Cove)	\$25,711	Work Complete – Grant Not Yet Closed
West Warwick	Former West Warwick Town Landfill Closure	Pawtuxet River	\$40,000	Active
Westerly	Municipal Salt Storage Structure	Pawcatuck River	\$174,000	Active
Westerly	Bradford Streetscape Subsurface Gravel Wetland Design	Pawcatuck River	\$60,000	Active

Projects cancelled in FY2010 with no payments made:

- East Providence, Bold Point Park Stormwater Abatement
- Narragansett, Narrow River Pet Waste Management Stations
- Providence, Nonpoint Source Pollution Abatement of the Sluiceway at Lincoln Luce and Braid Brownfields Site
- Warren, Kickemuit Reservoir Stormwater Abatement Final Design and Implementation Project (Serpentine Rd)

\* Project jointly funded by the federal Clean Water Act and the state Bay and Watershed Restoration Bond Fund (BWRF).

\*\*Status:

Active: Work on grant development and/or grant implementation proceeding.

Closed: All work on grant has been completed, including final payment and reporting.

Work Complete – Grant Not Yet Closed: Work is done on primary deliverables, but payment and final reporting have not been completed. Therefore, the grant remains active.